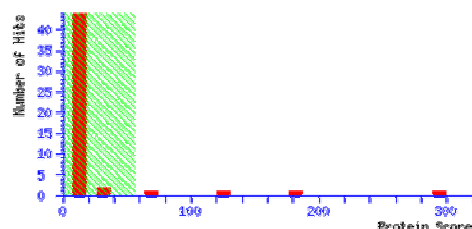


# MASCOT SEARCH RESULTS

User : lc\_(G1@11273\_12Mar2012)  
 Email : proteomics@ipatimup.pt  
 Search title : Project: Proteomica, Spot Set: Proteomica\12Jan2012, Label: G1, Spot Id: 221888, Peak List Id: 435349, MS Job Run Id: 303  
 MS data file : C:\Documents and Settings\Administrator\Desktop\xu\xu\xu\Proteomica\12Jan2012\ppw\_G1\_146796935503.txt  
 Database : OrganismSpecie Bos\_taurus\_Reference\_Proteome\_2016\_06 (24214 sequences; 12839866 residues)  
 Timestamp : 8 Jul 2016 at 10:08:25 GMT  
 Warning : **A Peptide summary report will usually give a much clearer picture of MS/MS search results.**  
 Top Score : 294 for **E1BI98**, Uncharacterized protein OS=Bos taurus GN=COL6A1 PE=1 SV=1

## Mascot Score Histogram

Protein score is  $-10 \cdot \log(P)$ , where P is the probability that the observed match is a random event.  
 Protein scores greater than 56 are significant ( $p < 0.05$ ).  
 Protein scores are derived from ions scores as a non-probabilistic basis for ranking protein hits.



## Protein Summary Report

Format As  [Help](#)

Significance threshold  $p < 0.05$  Max. number of hits

Preferred taxonomy

## Index

Accession	Mass	Score	Description
1. <a href="#">E1BI98</a>	109744	294	Uncharacterized protein OS=Bos taurus GN=COL6A1 PE=1 SV=1
2. <a href="#">F1MKG2</a>	110451	179	Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=1 SV=2
3. <a href="#">Q1JQB0</a>	98215	122	Collagen, type VI, alpha 2 OS=Bos taurus GN=COL6A2 PE=1 SV=1
4. <a href="#">G3MKU3</a>	25162	68	Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=4 SV=1
5. <a href="#">G3MYC4</a>	19371	24	Zinc finger protein 143 OS=Bos taurus GN=ZNF143 PE=4 SV=1
6. <a href="#">F1MHI2</a>	73699	23	Uncharacterized protein OS=Bos taurus GN=ARHGAP24 PE=4 SV=2
7. <a href="#">E1BJM6</a>	69143	19	Uncharacterized protein OS=Bos taurus GN=ZBTB7C PE=4 SV=2
8. <a href="#">K7DXW4</a>	10241	18	Uncharacterized protein OS=Bos taurus PE=3 SV=1
9. <a href="#">Q2NKR1</a>	10554	18	Mitochondrial import inner membrane translocase subunit Tim10 OS=Bos taurus GN=TIMM10 PE=3 SV=1
10. <a href="#">F1MTS2</a>	9764	18	Uncharacterized protein OS=Bos taurus PE=3 SV=2
11. <a href="#">E1BC56</a>	10970	18	Uncharacterized protein OS=Bos taurus GN=LOC785479 PE=4 SV=1
12. <a href="#">F1MJH0</a>	128067	17	Uncharacterized protein OS=Bos taurus GN=SPINK5 PE=4 SV=2
13. <a href="#">F1MYI2</a>	58389	17	Uncharacterized protein OS=Bos taurus GN=HNRNPM PE=1 SV=2
14. <a href="#">P02698</a>	8709	17	Guanine nucleotide-binding protein G(T) subunit gamma-T1 OS=Bos taurus GN=GNGT1 PE=1 SV=2
15. <a href="#">Q3MHX9</a>	23497	16	Nudix (Nucleoside diphosphate linked moiety X)-type motif 16-like 1 OS=Bos taurus GN=NUDT16L1 PE=2 SV=1
16. <a href="#">F1MSW3</a>	36190	16	Uncharacterized protein OS=Bos taurus GN=MAGIX PE=4 SV=2
17. <a href="#">Q32PB8</a>	9220	15	40S ribosomal protein S21 OS=Bos taurus GN=RPS21 PE=3 SV=1
18. <a href="#">F1NTK9</a>	123826	15	Uncharacterized protein OS=Bos taurus GN=TBC1D8 PE=4 SV=2
19. <a href="#">Q05717</a>	31377	15	Insulin-like growth factor-binding protein 5 OS=Bos taurus GN=IGFBP5 PE=2 SV=2
20. <a href="#">F1MW00</a>	17662	15	Complexin-3 OS=Bos taurus GN=CPLX3 PE=4 SV=1
21. <a href="#">Q3ZBJ9</a>	13284	15	Protein BEX5 OS=Bos taurus GN=BEX5 PE=3 SV=1
22. <a href="#">Q08DP2</a>	22300	15	Loss of heterozygosity 12 chromosomal region 1 protein homolog OS=Bos taurus GN=LOH12CR1 PE=2 SV=1
23. <a href="#">Q3ZBC0</a>	7228	15	DNA-directed RNA polymerases I, II, and III subunit RPABC4 OS=Bos taurus GN=POLR2K PE=1 SV=1
24. <a href="#">P00129</a>	13468	15	Cytochrome b-c1 complex subunit 7 OS=Bos taurus GN=UQCRCB PE=1 SV=3
25. <a href="#">A4FV50</a>	40277	15	MGC142792 protein OS=Bos taurus GN=MGC142792 PE=2 SV=1
26. <a href="#">E1BKM8</a>	51997	14	Uncharacterized protein OS=Bos taurus GN=CYP24A1 PE=4 SV=2
27. <a href="#">E1BJL9</a>	65973	14	Uncharacterized protein OS=Bos taurus GN=CCDC173 PE=4 SV=2
28. <a href="#">Q0VCY3</a>	40674	14	Surfeit locus protein 6 OS=Bos taurus GN=SURF6 PE=2 SV=1
29. <a href="#">G3N3F0</a>	23102	14	Uncharacterized protein OS=Bos taurus PE=4 SV=1
30. <a href="#">Q3T2L0</a>	42579	14	Caspase-15 OS=Bos taurus GN=LOC515736 PE=2 SV=1
31. <a href="#">E1BDX9</a>	40138	14	Uncharacterized protein OS=Bos taurus GN=FAM50A PE=4 SV=1
32. <a href="#">P84081</a>	20790	14	ADP-ribosylation factor 2 OS=Bos taurus GN=ARF2 PE=2 SV=1
33. <a href="#">F1MNB0</a>	17016	14	Cystatin OS=Bos taurus GN=CST8 PE=3 SV=2
34. <a href="#">Q3SZ59</a>	12718	14	60S ribosomal protein L36a OS=Bos taurus GN=RPL36A PE=3 SV=3
35. <a href="#">G3MYU4</a>	73163	14	Centrosomal protein of 290 kDa OS=Bos taurus GN=CEP290 PE=4 SV=1
36. <a href="#">P84088</a>	15499	14	Complexin-2 OS=Bos taurus GN=CPLX2 PE=1 SV=1
37. <a href="#">Q2TBI9</a>	19064	14	M-phase phosphoprotein 6 OS=Bos taurus GN=MPHOSPH6 PE=2 SV=1
38. <a href="#">P80209</a>	42920	14	Cathepsin D OS=Bos taurus GN=CTSD PE=1 SV=2
39. <a href="#">F1MMR6</a>	45132	14	Cathepsin D OS=Bos taurus GN=CTSD PE=1 SV=1
40. <a href="#">E1BNB8</a>	12329	13	Uncharacterized protein OS=Bos taurus PE=4 SV=2
41. <a href="#">E1B9N9</a>	39688	13	Uncharacterized protein OS=Bos taurus GN=WISP3 PE=4 SV=1
42. <a href="#">Q5E9I6</a>	20645	13	ADP-ribosylation factor 3 OS=Bos taurus GN=ARF3 PE=2 SV=3
43. <a href="#">F1MIV1</a>	57360	13	Uncharacterized protein OS=Bos taurus GN=ZBTB34 PE=4 SV=2
44. <a href="#">F1MK70</a>	59648	13	Uncharacterized protein OS=Bos taurus GN=SPATS2 PE=4 SV=2
45. <a href="#">F1MY44</a>	77716	13	Uncharacterized protein OS=Bos taurus GN=HNRNPM PE=1 SV=2
46. <a href="#">E1BHM6</a>	206984	13	Uncharacterized protein OS=Bos taurus GN=SCN11A PE=4 SV=2
47. <a href="#">Q58DW6</a>	23636	13	Ras-related protein Rab-25 OS=Bos taurus GN=RAB25 PE=2 SV=1
48. <a href="#">Q08D88</a>	51575	13	Nuclear factor interleukin-3-regulated protein OS=Bos taurus GN=NFIL3 PE=2 SV=1

49. [O02691](#) 27294 13 3-hydroxyacyl-CoA dehydrogenase type-2 OS=Bos taurus GN=HSD17B10 PE=1 SV=3  
50. [F1MEV2](#) 44049 13 Uncharacterized protein OS=Bos taurus GN=KIAA0930 PE=4 SV=2

## Results List

1. [E1BI98](#) Mass: 109744 Score: 294 Expect: 9.6e-026 Matches: 48

Uncharacterized protein OS=Bos taurus GN=COL6A1 PE=1 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
801.4262	800.4189	800.4140	6.03	957	963	0	---	K.AVQEAQR.A
887.4245	886.4172	886.4145	3.10	864	871	0	---	R.TDPGQDVR.V
957.5774	956.5701	956.5655	4.85	723	731	0	---	R.IALVITDGR.S
978.5100	977.5027	977.5043	-1.58	976	983	0	46	R.QVNEPHVR.V
978.5146	977.5073	977.5043	3.11	976	983	0	---	R.QVNEPHVR.V
1006.5014	1005.4941	1005.4879	6.14	69	76	0	---	R.FIDNLNDR.Y
1021.5699	1020.5626	1020.5716	-8.80	714	722	0	---	R.LLPPTPNNR.I
1032.5238	1031.5165	1031.5070	9.27	106	114	1	---	R.MPSGRDELK.S
1046.6018	1045.5945	1045.5920	2.40	1005	1013	0	---	R.VPSYQALLR.G
1056.5515	1055.5442	1055.5400	3.99	1014	1022	0	---	R.GVFYQTVSR.K
1103.6257	1102.6184	1102.6386	-18.32	52	61	0	---	R.LKPYGALVDK.V
1134.3574	1133.3501	1133.3432	6.08	603	610	0	---	K.MCSCCECK.C
1162.6174	1161.6101	1161.5891	18.1	68	76	1	---	K.RFIDNLNDR.Y
1184.6412	1183.6339	1183.6350	-0.88	1014	1023	1	---	R.GVFYQTVSRK.V
1216.7081	1215.7008	1215.6976	2.68	964	975	0	---	R.AGVEIFAVVVG.R
1243.6161	1242.6088	1242.5993	7.70	925	935	1	---	R.FYREASSNAK.K
1255.5972	1254.5899	1254.5881	1.49	990	1000	0	---	K.AAEYDVVFER.H
1255.6000	1254.5927	1254.5881	3.72	990	1000	0	81	K.AAEYDVVFER.H
1264.7130	1263.7057	1263.7047	0.78	712	722	1	---	R.SRLPPTPNNR.I
1289.6875	1288.6802	1288.6775	2.09	200	210	0	---	R.LSIATDHTYR.R
1414.8191	1413.8118	1413.8191	-5.15	641	652	2	---	K.VIDRLSKDELVK.F
1445.7839	1444.7766	1444.7786	-1.40	200	211	1	---	R.LSIATDHTYRR.N
1475.7633	1474.7560	1474.7562	-0.12	102	114	2	---	R.GLTRMPSGRDELK.S + Oxidation (M)
1488.7194	1487.7121	1487.7157	-2.40	69	79	1	---	R.FIDNLNDYYR.C
1516.6807	1515.6734	1515.6954	-14.49	476	490	1	---	K.GYRGDEGPPGTEGPK.G
1526.7343	1525.7270	1525.7300	-1.96	790	802	0	---	K.ENYAEILLDDGLK.N
1540.7114	1539.7041	1539.7066	-1.62	257	271	1	---	R.GPPGPRGDPGYEGER.G
1580.8400	1579.8327	1579.8358	-1.98	186	199	0	81	K.VFSVAITPDHLEPR.L
1580.8423	1579.8350	1579.8358	-0.52	186	199	0	---	K.VFSVAITPDHLEPR.L
1644.7915	1643.7842	1643.8168	-19.82	68	79	2	---	K.RFIDNLNDYYR.C
1718.8790	1717.8717	1717.8669	2.83	106	121	2	---	R.MPSGRDELKSSVDK.V
1722.9375	1721.9302	1721.9312	-0.55	136	151	1	---	K.GLEELLVGGSHLKENK.Y
1774.9180	1773.9107	1773.9122	-0.83	872	887	0	---	R.VAVVQYSGTGQQRPER.A
1774.9200	1773.9127	1773.9122	0.29	872	887	0	68	R.VAVVQYSGTGQQRPER.A
1932.0050	1930.9977	1931.0000	-1.17	938	956	0	---	R.LLLFSDGNSQGATPAIEK.A
1997.8312	1996.8239	1996.8190	2.48	241	256	0	---	K.NNVEQVCCSFECQPAR.G
2015.9408	2014.9335	2014.9571	-11.70	694	711	0	---	K.LQWMMGGTFTGEALQYTR.S
2031.9606	2030.9533	2030.9520	0.64	694	711	0	---	K.LQWMMGGTFTGEALQYTR.S + Oxidation (M)
2088.1108	2087.1035	2087.1011	1.17	937	956	1	---	K.RLLLFSDGNSQGATPAIEK.A
2144.0718	2143.0645	2143.0521	5.81	693	711	1	---	K.KLQWMMGGTFTGEALQYTR.S
2160.0554	2159.0481	2159.0470	0.53	693	711	1	---	K.KLQWMMGGTFTGEALQYTR.S + Oxidation (M)
2198.1831	2197.1758	2197.1665	4.26	737	757	0	---	R.DTTPSLVLCGPDQVSVSGIK.D
2199.1499	2198.1426	2198.1120	13.9	83	101	0	---	R.NLVWNGALHYSDEVEIIR.G
2559.1470	2558.1397	2558.1213	7.20	241	262	1	---	K.NNVEQVCCSFECQPARGPGR.G
2754.2197	2753.2124	2753.2715	-21.47	479	508	1	---	R.GDEGPPGTEGPKGAPGAPGPPGDPGLMGER.G
3159.4985	3158.4912	3158.5230	-10.07	152	180	1	---	K.YLVVVVDGHPLEGYKEPCGGLEDVNEAK.H
3488.6545	3487.6472	3487.6440	0.93	653	682	1	---	K.FEPGQSHAGVVQYSHNQMHVDLRDPNIR.N
3504.6423	3503.6350	3503.6389	-1.11	653	682	1	---	K.FEPGQSHAGVVQYSHNQMHVDLRDPNIR.N + Oxidation (M)

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1253.6216, 1260.6227, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1429.3142, 1436.7889, 1444.7122, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1483.7141, 1488.5333, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1517.6437, 1518.7053, 1523.7611, 1528.6973, 1530.6893, 1536.8230, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1721.9192, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 2003.8595, 2008.9971, 2011.8464, 2019.8779, 2025.8735, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2149.8516, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2762, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2832.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985,

3489.6521, 3493.0195, 3494.5571, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

2. [F1MKG2](#) Mass: 110451 Score: 179 Expect: 3e-014 Matches: 50

Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
729.4749	728.4676	728.4657	2.68	870	875	1	---	R.RLTLLAR.K
829.4589	828.4516	828.4453	7.61	204	210	0	---	K.LNEQGGLR.D
830.4522	829.4449	829.4406	5.25	188	194	1	---	R.AREEGIR.L
860.4207	859.4134	859.4035	11.5	747	753	0	---	R.DDDLNLRL.A
865.4518	864.4445	864.4341	12.0	863	869	0	---	R.FVEEVSR.R
972.4899	971.4826	971.4825	0.13	852	859	0	---	R.LGEQNFHK.V
998.5911	997.5838	997.5960	-12.28	195	203	0	---	R.LFVAPPNLK.L
1024.5516	1023.5443	1023.5349	9.21	129	137	0	---	K.SLQSISSFR.R
1043.5178	1042.5105	1042.5043	5.95	876	884	1	---	R.KDDPLNAR.V
1057.6100	1056.6027	1056.6080	-5.01	885	894	0	56	R.VALLQFGGPR.E
1057.6107	1056.6034	1056.6080	-4.35	885	894	0	---	R.VALLQFGGPR.E
1074.6073	1073.6000	1073.5982	1.72	644	652	0	---	K.NFVINVVNR.L
1074.6100	1073.6027	1073.5982	4.24	644	652	0	50	K.NFVINVVNR.L
1076.6123	1075.6050	1075.6026	2.24	733	742	0	---	R.VFAVVITDGR.H
1122.5322	1121.5249	1121.5101	13.2	315	325	1	---	K.GEKGEGFADGR.K
1145.6348	1144.6275	1144.6241	3.03	996	1006	0	---	K.ISLGDPAAVFR.E
1156.4957	1155.4884	1155.4655	19.9	248	256	0	---	K.HEAYGECYK.V
1177.6410	1176.6337	1176.6363	-2.22	862	870	2	---	R.RFVEEVSR.L
1180.6428	1179.6355	1179.6360	-0.41	129	138	1	---	K.SLQSISSFR.R
1234.6414	1233.6341	1233.6102	19.4	548	559	2	---	R.GDFGSKGEPGRK.G
1318.6750	1317.6677	1317.6902	-17.05	420	433	2	---	K.GGPGRGRPKGEPGR.R
1328.6600	1327.6527	1327.6520	0.52	211	221	0	49	R.DIANTPHELYR.N
1328.6620	1327.6547	1327.6520	2.02	211	221	0	---	R.DIANTPHELYR.N
1333.7644	1332.7571	1332.7514	4.29	731	742	1	---	K.TRVFAVVITDGR.H
1350.6853	1349.6780	1349.7013	-17.26	257	269	0	---	K.VSCLEIPGPPGPK.G
1365.6489	1364.6416	1364.6433	-1.21	743	753	1	---	R.HDRDDDLNLR.A
1383.7037	1382.6964	1382.6752	15.4	793	804	0	---	R.NMTLFSDLVAEK.F + Oxidation (M)
1474.5243	1473.5170	1473.5105	4.42	608	618	1	---	R.ETCCGCCCEKR.C
1514.6849	1513.6776	1513.6693	5.47	245	256	1	---	K.VMKHEAYGECYK.V
1530.6893	1529.6820	1529.6787	2.19	1009	1021	0	---	K.DYDSLQAGFFDR.F
1743.8966	1742.8893	1742.8992	-5.64	701	716	0	---	K.NLEWIAGGTWTPSALK.F
1769.8287	1768.8214	1768.8526	-17.63	273	290	2	---	R.GQKGAKGNMGEPGQK.G
1774.9180	1773.9107	1773.8983	7.02	381	398	2	---	K.GDPGRGRRGPPGENGAK.G
1774.9200	1773.9127	1773.8983	8.15	381	398	2	---	K.GDPGRGRRGPPGENGAK.G
1787.8239	1786.8166	1786.8162	0.22	1007	1021	1	---	R.EKDYDSLQAGFFDR.F
1809.0499	1808.0426	1808.0308	6.53	195	210	1	---	R.LFVAPPNLKLNEQGLR.D
1810.0303	1809.0230	1809.0261	-1.68	188	203	2	---	R.AREEGIRLFAVPPNLK.L
1932.0050	1930.9977	1930.9973	0.20	474	493	2	---	K.GDRGLPGRPGQTVGEPGK.Q
2019.8779	2018.8706	2018.8930	-11.08	360	380	1	---	R.GPDGYVGEAGSPGERGDQGSK.G
2139.0991	2138.0918	2138.0868	2.34	204	221	1	---	K.LNEQGLRDIANTPHELYR.N
2174.0378	2173.0305	2173.0222	3.84	775	792	0	---	K.HESENLYSIACDPKQQVR.N
2179.0574	2178.0501	2178.0382	5.47	104	123	0	---	R.YGGLHFSDLVEVFSPPGSDR.A
2270.2183	2269.2110	2269.2166	-2.45	974	995	1	---	R.QQNVVPTVAVGSDVDIVLSK.I
2284.1841	2283.1768	2283.1682	3.77	160	182	0	---	K.GVVNFVAVVITDGHVTGSPCGIK.L
2354.0767	2353.0694	2353.0604	3.82	222	241	0	---	R.NNYATMRPDSTEIDQDTINR.I
2392.1462	2391.1389	2391.1343	1.94	668	688	0	---	R.VGVVQYSHEGTFAIQLDDR.I
2423.2439	2422.2366	2422.2353	0.53	733	753	2	---	R.VFAVVITDGRHDPDRDDDLNLR.A
2755.2358	2754.2285	2754.2266	0.71	581	607	0	---	R.GAPGPEGEPGPPGDPGLTECDVMTYVR.E
2771.2437	2770.2364	2770.2215	5.39	581	607	0	---	R.GAPGPEGEPGPPGDPGLTECDVMTYVR.E + Oxidation (M)
2862.2927	2861.2854	2861.3550	-24.32	245	269	2	---	K.VMKHEAYGECYKVSCLIEPFPK.G + Oxidation (M)
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 839.3830, 842.5110, 857.4382, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1045.5568, 1046.6018, 1056.5515, 1061.6168, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1149.6057, 1153.6460, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1319.6589, 1331.7888, 1336.0798, 1336.6155, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1374.7588, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1657.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1770.3949, 1772.8273, 1773.8792, 1786.8268, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2178.0471, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2272.1736, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2759.2573, 2769.2219, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571,								

3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

3. [Q1JQB0](#) Mass: 98215 Score: 122 Expect: 1.5e-008 Matches: 42

Collagen, type VI, alpha 2 OS=Bos taurus GN=COL6A2 PE=1 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
829.4589	828.4516	828.4453	7.61	195	201	0	---	K.LNEQGGLR.D
830.4522	829.4449	829.4406	5.25	179	185	1	---	R.AREEGIR.L
860.4207	859.4134	859.4035	11.5	738	744	0	---	R.DDDLNLRL.A
993.5046	992.4973	992.5039	-6.67	880	888	1	---	R.AKFATGNER.Q
998.5911	997.5838	997.5960	-12.28	186	194	0	---	R.LFAVPPNLK.L
1024.5516	1023.5443	1023.5349	9.21	120	128	0	---	K.SLQSISSFR.R
1074.6073	1073.6000	1073.5982	1.72	635	643	0	---	K.NFVINVVNR.L
1074.6100	1073.6027	1073.5982	4.24	635	643	0	50	K.NFVINVVNR.L
1076.6123	1075.6050	1075.6026	2.24	724	733	0	---	R.VFAVVITDGR.H
1122.5322	1121.5249	1121.5101	13.2	306	316	1	---	K.GEKGEGFADGR.K
1156.4957	1155.4884	1155.4655	19.9	239	247	0	---	K.HEAYGECYK.V
1180.6428	1179.6355	1179.6360	-0.41	120	129	1	---	K.SLQSISSFR.R
1234.6414	1233.6341	1233.6102	19.4	539	550	2	---	R.GDFGSKGEPGRK.G
1318.6750	1317.6677	1317.6902	-17.05	411	424	2	---	K.GGPGPRGPKGEPGR.R
1328.6600	1327.6527	1327.6520	0.52	202	212	0	49	R.DIANTPHELYR.N
1328.6620	1327.6547	1327.6520	2.02	202	212	0	---	R.DIANTPHELYR.N
1333.7644	1332.7571	1332.7514	4.29	722	733	1	---	K.TRVFAVVITDGR.H
1350.6853	1349.6780	1349.7013	-17.26	248	260	0	---	K.VSCLEIPGPPGPK.G
1365.6489	1364.6416	1364.6433	-1.21	734	744	1	---	R.HDPRDDDLNL.R.A
1383.7037	1382.6964	1382.6752	15.4	784	795	0	---	R.NMTLFSDDLVAEK.F + Oxidation (M)
1474.5243	1473.5170	1473.5105	4.42	599	609	1	---	R.ETCGCCDCEKR.C
1514.6849	1513.6776	1513.6693	5.47	236	247	1	---	K.VMKHEAYGECYK.V
1530.6893	1529.6820	1529.6643	11.6	236	247	1	---	K.VMKHEAYGECYK.V + Oxidation (M)
1558.7140	1557.7067	1557.7174	-6.84	889	900	0	---	R.QDWMDLFDITFK.L
1743.8966	1742.8893	1742.8992	-5.64	692	707	0	---	K.NLEWIAGGTWTPSALK.F
1769.8287	1768.8214	1768.8526	-17.63	264	281	2	---	R.GQKGAKNGMGEPGPGQK.G
1774.9180	1773.9107	1773.8983	7.02	372	389	2	---	K.GDPGRPGRRGPPGENGAK.G
1774.9200	1773.9127	1773.8983	8.15	372	389	2	---	K.GDPGRPGRRGPPGENGAK.G
1809.0499	1808.0426	1808.0308	6.53	186	201	1	---	R.LFAVPPNLKLNQGLR.D
1810.0303	1809.0230	1809.0261	-1.68	179	194	2	---	R.AREEGIRLFAVPPNLK.L
1932.0050	1930.9977	1930.9973	0.20	465	484	2	---	K.GDRGLPGRPGPGQTVGEPGK.Q
2019.8779	2018.8706	2018.8930	-11.08	351	371	1	---	R.GPDGYVGAGSPGERGDQGSK.G
2139.0991	2138.0918	2138.0868	2.34	195	212	1	---	K.LNEQGLRDIANTPHELYR.N
2174.0378	2173.0305	2173.0222	3.84	766	783	0	---	K.HESENLYSIACDKPQQR.N
2179.0574	2178.0501	2178.0382	5.47	95	114	0	---	R.YGGLHFSDDLVEVFPSPGSDR.A
2284.1841	2283.1768	2283.1682	3.77	151	173	0	---	K.GVVNFVAVVITDGHVITGSPCGGK.L
2354.0767	2353.0694	2353.0604	3.82	213	232	0	---	R.NNYATMRPDSSTEIDQDTINR.I
2392.1462	2391.1389	2391.1343	1.94	659	679	0	---	R.VGVVQYSHEGTFFEAQLDDR.I
2423.2439	2422.2366	2422.2353	0.53	724	744	2	---	R.VFAVVITDGRHDPDRDDDLNL.R.A
2755.2358	2754.2285	2754.2266	0.71	572	598	0	---	R.GAPGPEGEPGPPGDPGLTECDVMTYVR.E
2771.2437	2770.2364	2770.2215	5.39	572	598	0	---	R.GAPGPEGEPGPPGDPGLTECDVMTYVR.E + Oxidation (M)
2862.2927	2861.2854	2861.3550	-24.32	236	260	2	---	K.VMKHEAYGECYKVSCLIEIPGPPGPK.G + Oxidation (M)
No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 839.3830, 842.5110, 857.4382, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 995.4181, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1319.6589, 1331.7888, 1336.0798, 1336.6155, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1374.7588, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1770.3949, 1772.8273, 1773.8792, 1786.8268, 1787.8239, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9666, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2178.0471, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2759.2573, 2769.2219, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5886, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

4. [G3MXU3](#) Mass: 25162 Score: 68 Expect: 0.0034 Matches: 12

Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
729.4749	728.4676	728.4657	2.68	72	77	1	---	R.RLTILAR.K
865.4518	864.4445	864.4341	12.0	65	71	0	---	R.FVEEVSR.R
972.4899	971.4826	971.4825	0.13	54	61	0	---	R.LGEQNFHK.V

1043.5178	1042.5105	1042.5043	5.95	78	-	86	1	---	R.KDDPLNAR.V
1057.6100	1056.6027	1056.6080	-5.01	87	-	96	0	56	R.VALLQFGGPR.E
1057.6107	1056.6034	1056.6080	-4.35	87	-	96	0	---	R.VALLQFGGPR.E
1145.6348	1144.6275	1144.6241	3.03	198	-	208	0	---	K.ISLGDPAAVFR.E
1149.6057	1148.5984	1148.5900	7.36	21	-	30	0	---	K.QDFPLMIAAK.E + Oxidation (M)
1177.6410	1176.6337	1176.6363	-2.22	64	-	72	2	---	R.RFVEEVSRR.L
1530.6893	1529.6820	1529.6787	2.19	211	-	223	0	---	K.DYDSLQPGFFDR.F
1787.8239	1786.8166	1786.8162	0.22	209	-	223	1	---	R.EKDYDSLQPGFFDR.F
2270.2183	2269.2110	2269.2166	-2.45	176	-	197	1	---	R.QKNVPTVVAVGSDVDTDVLSK.I
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1045.5568, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696									

5. [G3MYC4](#) Mass: 19371 Score: 24 Expect: 86 Matches: 11

Zinc finger protein 143 OS=Bos taurus GN=ZNF143 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
925.4620	924.4548	924.4665	-12.69	122	-	129	0 ---	R.SFTTSNIR.K
927.4981	926.4908	926.4862	4.98	62	-	70	0 ---	K.AFATGYGLK.S
972.4899	971.4826	971.4712	11.7	152	-	160	0 ---	R.AFASATNYK.N
1137.5463	1136.5390	1136.5574	-16.18	14	-	23	1 ---	K.SQSGEKAFR.C
1162.6174	1161.6101	1161.5990	9.62	10	-	20	1 ---	R.VTAKSQSGEK.A
1393.7992	1392.7919	1392.8201	-20.25	1	-	13	1 ---	-.IVLQGHATRVTA.K.S
1536.8230	1535.8157	1535.8056	6.60	10	-	23	2 ---	R.VTAKSQSGEKAFR.C
2355.0564	2354.0491	2354.1048	-23.67	21	-	40	2 ---	K.AFRCGYDGCGLYTTAHLK.V
2546.1746	2545.1673	2545.1703	-1.17	131	-	151	1 ---	K.VHIRHTGERPYYCTEPCGGR.A
2562.1765	2561.1692	2561.1499	7.53	71	-	91	2 ---	K.SHVTRHTGKPYRCSEDNCTK.S
3347.4761	3346.4688	3346.5473	-23.44	45	-	74	2 ---	R.SHTGDRPYQCEHAGCGKAFATGYGLKSHVR.T
No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 364								



2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

6. [F1MH12](#) Mass: 73699 Score: 23 Expect: 1.3e+002 Matches: 25

Uncharacterized protein OS=Bos taurus GN=ARHGAP24 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
912.5132	911.5060	911.4977	9.04	230	236	1	---	K.HDRLEFPK.D
975.5167	974.5094	974.5079	1.55	607	614	2	---	K.MRNAERAK.E
1037.5405	1036.5332	1036.5553	-21.27	566	573	1	---	K.IEYESRIK.S
1153.6460	1152.6387	1152.6576	-16.41	598	606	2	---	R.KKFTMIEIK.M + Oxidation (M)
1184.6412	1183.6339	1183.6093	20.8	600	608	1	---	K.FTMIEIKMR.N + Oxidation (M)
1243.6161	1242.6088	1242.6317	-18.37	355	366	0	---	K.AQTTPNGSLQAR.R
1260.6227	1259.6154	1259.6105	3.88	609	619	2	---	R.NAERAKEDAEK.R
1286.6099	1285.6026	1285.6197	-13.31	378	389	0	---	K.MGTHSVQNGTVR.M
1523.7611	1522.7538	1522.7602	-4.20	406	418	0	---	R.SMSWLPNGVYTLR.D
1852.0399	1851.0326	1851.0076	13.5	160	174	1	---	K.SLPVVNYYLLKYICR.F
2062.9578	2061.9505	2061.9354	7.35	627	643	0	---	K.EMEQQFFSTFGELTVEPR.R + Oxidation (M)
2203.0386	2202.0313	2202.0415	-4.64	627	644	1	---	K.EMEQQFFSTFGELTVEPRR.T
2243.1243	2242.1170	2242.0760	18.3	259	278	1	---	K.ALGMQLQNKNNNTNDSPVR.R
2583.1218	2582.1145	2582.1417	-10.53	2	23	0	---	M.TANHESYLLMASTQNDMEDWVK.S
2714.2156	2713.2083	2713.1822	9.63	1	23	0	---	-.MTANHESYLLMASTQNDMEDWVK.S
2776.2644	2775.2571	2775.2884	-11.27	621	643	1	---	R.NDMLQKEMEQQFFSTFGELTVEPR.R
2786.2617	2785.2544	2785.2586	-1.51	268	290	2	---	K.ENNNNTNDSPVRRCSWDKPESPQR.S
2819.2236	2818.2163	2818.2650	-17.28	280	305	1	---	R.CSWDKPESQRSSMDNGSPTALPGSK.T
2955.3005	2954.2932	2954.3538	-20.51	2	26	1	---	M.TANHESYLLMASTQNDMEDWVKSR.R + Oxidation (M)
2975.4084	2974.4011	2974.3661	11.8	279	305	2	---	R.RCSWDKPESPQRSSMDNGSPTALPGSK.T
3086.4507	3085.4434	3085.3943	15.9	1	26	1	---	-.MTANHESYLLMASTQNDMEDWVKSR.R + Oxidation (M)
3174.5486	3173.5413	3173.5332	2.55	572	597	2	---	R.IKSLEQRNLTLETETMMSLHDELDQER.K + Oxidation (M)
3390.4675	3389.4602	3389.5365	-22.49	280	310	2	---	R.CSWDKPESQRSSMDNGSPTALPGSKTNSPR.N + Oxidation (M)
3664.7500	3663.7427	3663.6608	22.4	422	453	2	---	K.QKEQAGESGQHNRSLTYDNVHQQFSAMSLDDK.Q + Oxidation (M)
4010.8696	4009.8623	4009.8923	-7.48	529	565	2	---	R.ATSSSDNSETFVSNNTSNHSAHLSLVSSLKQEMTKQK.I + Oxidation (M)
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1253.6216, 1255.5972, 1255.6000, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9397, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8385, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2198.0547, 2198.1831, 2199.1499, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2785.2388, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2974.4124, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308								

7. [E1BJM6](#) Mass: 69143 Score: 19 Expect: 3.3e+002 Matches: 8

Uncharacterized protein OS=Bos taurus GN=ZBTB7C PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1057.6100	1056.6027	1056.6114	-8.19	365	374	1	19	K.VIMGAGKLPR.H + Oxidation (M)
1057.6107	1056.6034	1056.6114	-7.52	365	374	1	---	K.VIMGAGKLPR.H + Oxidation (M)
1184.6412	1183.6339	1183.6495	-13.19	397	405	2	---	R.QDKLKIHM.R + Oxidation (M)
1255.6000	1254.5927	1254.6218	-23.15	449	458	1	---	K.SFTRSDHLHR.H
1273.6556	1272.6483	1272.6536	-4.17	50	60	1	---	R.SVLAACSKYFK.K
1289.6875	1288.6802	1288.6888	-6.62	551	561	1	---	K.LFGRAGLAEAR.N
1513.7441	1512.7368	1512.7395	-1.76	543	554	1	---	R.QFEETQMKLFGR.A
2786.2617	2785.2544	2785.2734	-6.83	378	399	2	---	R.THTGEKPYMCNICEVRFTRQDK.L + Oxidation (M)
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724,								

1129.5924,	1134.3574,	1137.5463,	1145.6348,	1149.6057,	1153.6460,	1156.4957,	1161.6295,	1162.6174,	1164.1815,	1170.5497,	1172.6156,
1177.6410,	1180.6428,	1188.5603,	1193.6041,	1206.5107,	1209.5889,	1211.6099,	1212.6160,	1215.6743,	1216.7081,	1219.6886,	1227.6234,
1229.7098,	1234.6414,	1240.5974,	1242.6003,	1243.6161,	1253.6216,	1255.5972,	1260.6227,	1264.7130,	1265.7064,	1269.6498,	1270.6575,
1277.6305,	1286.6099,	1293.6401,	1303.6455,	1304.6677,	1307.6788,	1309.6780,	1318.6750,	1319.6589,	1328.6600,	1328.6620,	1331.7888,
1333.7644,	1336.0798,	1336.6155,	1350.6853,	1351.7202,	1356.5811,	1359.1302,	1359.6246,	1365.6489,	1374.7588,	1383.7037,	1390.6974,
1393.7992,	1400.6683,	1401.6989,	1414.8191,	1429.3142,	1436.7889,	1444.7122,	1445.7839,	1450.7223,	1456.7717,	1462.6630,	1467.7329,
1470.7394,	1471.2693,	1471.7250,	1472.2531,	1474.5243,	1475.7633,	1483.7141,	1488.5333,	1488.7194,	1493.7366,	1502.5601,	1514.6849,
1516.6807,	1517.6437,	1518.7053,	1523.7611,	1526.7343,	1528.6973,	1530.6893,	1536.8230,	1540.7114,	1551.7063,	1553.7252,	1554.7474,
1557.6992,	1558.7140,	1563.6658,	1564.3619,	1565.7223,	1566.7162,	1572.7062,	1580.8400,	1580.8423,	1586.8090,	1597.7913,	1599.8337,
1601.8030,	1614.8046,	1616.7968,	1628.7136,	1630.8103,	1635.7697,	1642.7682,	1643.7688,	1644.7915,	1646.8154,	1651.7681,	1657.7932,
1663.8466,	1664.8557,	1666.7545,	1695.8208,	1707.8933,	1718.8790,	1721.9192,	1722.9375,	1728.8976,	1730.9116,	1732.2391,	1734.1844,
1739.7894,	1743.8966,	1755.2666,	1757.7703,	1757.4702,	1757.9089,	1758.4524,	1758.8987,	1761.9023,	1765.7578,	1768.8339,	1769.8287,
1770.3949,	1772.8273,	1773.8792,	1774.9180,	1774.9200,	1786.8268,	1787.8239,	1809.0499,	1810.0303,	1829.8895,	1830.8380,	1833.3470,
1833.8501,	1851.8885,	1852.0399,	1862.9515,	1881.7703,	1895.9634,	1906.8195,	1908.8512,	1920.7972,	1932.0050,	1936.9479,	1939.8563,
1940.8103,	1943.8293,	1954.8351,	1956.8574,	1958.8956,	1965.7998,	1967.9565,	1969.9998,	1979.8927,	1981.3531,	1982.8179,	1995.8232,
1997.8312,	2003.8595,	2008.9971,	2011.8464,	2015.9408,	2019.8779,	2025.8735,	2031.9606,	2047.9397,	2062.9578,	2067.0020,	2076.8943,
2081.9827,	2082.9966,	2087.0103,	2088.1108,	2089.1162,	2096.0430,	2097.0200,	2108.9771,	2110.0061,	2139.0991,	2140.0918,	2143.1006,
2144.0718,	2149.8516,	2160.0554,	2174.0378,	2178.0471,	2179.0574,	2188.0547,	2191.0457,	2198.1831,	2199.1499,	2203.0386,	2211.1052,
2223.1582,	2225.1470,	2227.1042,	2228.0725,	2238.1086,	2239.1538,	2243.1243,	2244.0684,	2254.0896,	2255.1482,	2260.0779,	2270.2183,
2272.1736,	2284.1841,	2287.1108,	2307.0549,	2309.0659,	2310.0798,	2310.5271,	2311.0454,	2319.0945,	2337.6050,	2341.5510,	2353.0518,
2354.0767,	2355.0564,	2371.0581,	2383.9592,	2388.0437,	2392.1462,	2404.0471,	2412.0872,	2419.5879,	2420.0864,	2420.5930,	2423.2439,
2426.5667,	2427.1211,	2438.1724,	2455.1553,	2458.1648,	2459.1794,	2478.1587,	2516.1133,	2533.1262,	2542.1650,	2546.1746,	2549.1316,
2550.1252,	2559.1470,	2561.1729,	2562.1765,	2567.1514,	2572.1523,	2574.2678,	2576.1628,	2583.1218,	2587.2722,	2604.1682,	2612.1438,
2653.7173,	2655.1897,	2671.1787,	2687.1833,	2701.2820,	2706.2766,	2712.2104,	2714.2156,	2716.1953,	2717.2725,	2725.2354,	2729.1675,
2739.2351,	2743.2642,	2745.2900,	2754.2197,	2755.2358,	2759.2573,	2769.2219,	2771.2437,	2776.2644,	2785.2388,	2787.2400,	2793.2439,
2801.2378,	2803.2302,	2809.2549,	2815.2153,	2817.2322,	2819.2236,	2830.2788,	2833.2280,	2836.2397,	2862.2927,	2873.2961,	2889.2024,
2894.3218,	2927.2520,	2931.3428,	2955.3005,	2974.4124,	2975.4084,	2990.3921,	3006.3206,	3011.2810,	3020.3557,	3021.2412,	3035.3281,
3053.3447,	3062.2456,	3086.4507,	3091.2622,	3103.3140,	3110.7285,	3113.8591,	3130.3557,	3140.4265,	3144.3657,	3159.4985,	3173.5386,
3174.5486,	3185.4236,	3218.3301,	3259.3625,	3312.3267,	3313.3278,	3347.4761,	3363.4788,	3390.4675,	3431.4570,	3447.4666,	3463.4895,
3485.6985,	3488.6545,	3489.6521,	3493.0195,	3494.5571,	3504.6423,	3509.5613,	3525.6025,	3538.4521,	3553.6230,	3579.5403,	3648.1956,
3655.4729,	3664.7500,	3695.6177,	3712.5720,	3738.5837,	3816.7043,	3937.8308,	4010.8696				

8. [K7DXW4](#) Mass: 10241 Score: 18 Expect: 3.4e+002 Matches: 6

Uncharacterized protein OS=Bos taurus PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1128.5724	1127.5651	1127.5611	3.56	2	-	10	1	--- M.GKITYFYEDR.G
1488.7194	1487.7121	1487.7157	-2.42	4	-	15	1	--- K.ITYFYEDRGFQGR.R
1644.7915	1643.7842	1643.8168	-19.84	4	-	16	2	--- K.ITYFYEDRGFQGR.R.Y
2776.2644	2775.2571	2775.2242	11.9	16	-	37	2	--- R.RYECSSDHSNLQPFYFSCNSIR.V
2819.2236	2818.2163	2818.2744	-20.61	38	-	59	0	--- R.VDSGCWMLYERPNYQGHQYFLR.R
2975.4084	2974.4011	2974.3755	8.61	38	-	60	1	--- R.VDSGCWMLYERPNYQGHQYFLRR.G
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6108, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3313.3278, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

9. [Q2NKR1](#) Mass: 10554 Score: 18 Expect: 3.6e+002 Matches: 6

Mitochondrial import inner membrane translocase subunit Timl0 OS=Bos taurus GN=TIMM10 PE=3 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1028.5397	1027.5324	1027.5273	4.97	32	-	39	1 ---	R.KCVPPHYK.E
1277.6305	1276.6232	1276.6234	-0.12	58	-	67	1 ---	K.YLDIHERMGK.K + Oxidation (M)
1566.7162	1565.7089	1565.7317	-14.52	69	-	81	0 ---	K.LTELSMQDEELMK.R
2067.0020	2065.9947	2065.9772	8.47	40	-	57	2 ---	K.EAELSKGESVCLDRCSVSK.Y
2873.2961	2872.2888	2872.2863	0.87	1	-	24	1 ---	-.MDPLRAQQLAAELEVEVMMADMYNR.M + 3 Oxidation (M)
3553.6230	3552.6157	3552.6040	3.31	2	-	31	2 ---	M.DPLRAQQLAAELEVEVMMADMYNRMTSACHR.K + Oxidation (M)
No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107,								

1061.6168,	1074.6073,	1074.6100,	1076.6123,	1102.6007,	1103.6257,	1105.6136,	1107.1058,	1113.5486,	1120.5498,	1122.5322,	1123.5986,
1128.5724,	1129.5924,	1134.3574,	1137.5463,	1145.6348,	1149.6057,	1153.6460,	1156.4957,	1161.6295,	1162.6174,	1164.1815,	1170.5497,
1172.6156,	1177.6410,	1180.6428,	1184.6412,	1188.5603,	1193.6041,	1206.5107,	1209.5889,	1211.6099,	1212.6160,	1215.6743,	1216.7081,
1219.6886,	1227.6234,	1229.7098,	1234.6414,	1240.5974,	1242.6003,	1243.6161,	1253.6216,	1255.5972,	1255.6000,	1260.6227,	1264.7130,
1265.7064,	1269.6498,	1270.6575,	1273.6556,	1286.6099,	1289.6875,	1293.6401,	1303.6455,	1304.6677,	1307.6788,	1309.6780,	1318.6750,
1319.6589,	1328.6600,	1328.6620,	1331.7888,	1333.7644,	1336.0798,	1336.6155,	1350.6853,	1351.7202,	1356.5811,	1359.1302,	1359.6246,
1365.6489,	1374.7588,	1383.7037,	1390.6974,	1393.7992,	1400.6683,	1401.6989,	1414.8191,	1429.3142,	1436.7889,	1444.7122,	1445.7839,
1450.7223,	1456.7717,	1462.6630,	1467.7329,	1470.7394,	1471.2693,	1471.7250,	1472.2531,	1474.5243,	1475.7633,	1483.7141,	1488.5333,
1488.7194,	1493.7366,	1502.5601,	1513.7441,	1514.6849,	1516.6807,	1517.6437,	1518.7053,	1523.7611,	1526.7343,	1528.6973,	1530.6893,
1536.8230,	1540.7114,	1551.7063,	1553.7252,	1554.7474,	1557.6992,	1558.7140,	1563.6658,	1564.3619,	1565.7223,	1572.7062,	1580.8400,
1580.8423,	1586.8090,	1597.7913,	1599.8337,	1601.8030,	1614.8046,	1616.7968,	1628.7136,	1630.8103,	1635.7697,	1642.7682,	1643.7688,
1644.7915,	1646.8154,	1651.7681,	1657.7932,	1663.8466,	1664.8557,	1666.7545,	1695.8208,	1707.8933,	1718.8790,	1721.9192,	1722.9375,
1728.8976,	1730.9116,	1732.2391,	1734.1844,	1739.7894,	1743.8966,	1755.2666,	1755.7703,	1757.4702,	1757.9089,	1758.4524,	1758.8987,
1761.9023,	1765.7578,	1768.8339,	1769.8287,	1770.3949,	1772.8273,	1773.8792,	1774.9180,	1774.9200,	1786.8268,	1787.8239,	1809.0499,
1810.0303,	1829.8895,	1830.8380,	1833.3470,	1833.8501,	1851.8885,	1852.0399,	1862.9515,	1881.7703,	1895.9634,	1906.8195,	1908.8512,
1920.7972,	1932.0050,	1936.9479,	1939.8563,	1940.8103,	1943.8293,	1954.8351,	1956.8574,	1958.8956,	1965.7998,	1967.9565,	1969.9998,
1979.8927,	1981.3531,	1982.8179,	1995.8232,	1997.8312,	2003.8595,	2008.9971,	2011.8464,	2015.9408,	2019.8779,	2025.8735,	2031.9606,
2047.9397,	2062.9578,	2076.8943,	2081.9827,	2082.9966,	2087.0103,	2088.1108,	2089.1162,	2096.0430,	2097.0200,	2108.9771,	2110.0061,
2139.0991,	2140.0918,	2143.1006,	2144.0718,	2149.8516,	2160.0554,	2174.0378,	2188.0471,	2179.0574,	2188.0547,	2191.0457,	2198.1831,
2199.1499,	2203.0386,	2211.1052,	2223.1582,	2225.1470,	2227.1042,	2228.0725,	2238.1086,	2239.1538,	2243.1243,	2244.0684,	2254.0896,
2255.1482,	2260.0779,	2270.2183,	2272.1736,	2284.1841,	2287.1108,	2307.0549,	2309.0659,	2310.0798,	2310.5271,	2311.0454,	2319.0945,
2337.6050,	2341.5510,	2353.0518,	2354.0767,	2355.0564,	2371.0581,	2383.9592,	2388.0437,	2392.1462,	2404.0471,	2412.0872,	2419.5879,
2420.0864,	2420.5930,	2423.2439,	2426.5667,	2427.1211,	2438.1724,	2455.1553,	2458.1648,	2459.1794,	2478.1587,	2516.1133,	2533.1262,
2542.1650,	2546.1746,	2549.1316,	2550.1252,	2559.1470,	2561.1729,	2562.1765,	2567.1514,	2572.1523,	2574.2678,	2576.1628,	2583.1218,
2587.2722,	2604.1682,	2612.1438,	2653.7173,	2655.1897,	2671.1787,	2687.1833,	2701.2820,	2706.2766,	2712.2104,	2714.2156,	2716.1953,
2717.2725,	2725.2354,	2729.1675,	2739.2351,	2743.2642,	2745.2900,	2754.2197,	2755.2358,	2759.2573,	2769.2219,	2771.2437,	2776.2644,
2785.2388,	2786.2617,	2787.2400,	2793.2439,	2801.2378,	2803.2302,	2809.2549,	2815.2153,	2817.2322,	2819.2236,	2830.2788,	2833.2280,
2836.2397,	2862.2927,	2889.2024,	2894.3218,	2927.2520,	2931.3428,	2955.3005,	2974.4124,	2975.4084,	2990.3921,	3006.3206,	3011.2810,
3020.3557,	3021.2412,	3035.3281,	3053.3447,	3062.2456,	3086.4507,	3091.2622,	3103.3140,	3110.7285,	3113.8591,	3130.3557,	3140.4265,
3144.3657,	3149.4985,	3173.5386,	3174.5486,	3185.4236,	3218.3301,	3259.3625,	3312.3267,	3331.4678,	3347.4761,	3363.4788,	3390.4675,
3431.4570,	3447.4666,	3463.4895,	3485.6985,	3488.6545,	3489.6521,	3493.0195,	3494.5571,	3504.6423,	3509.5613,	3525.6025,	3538.4521,
3579.5403,	3648.1956,	3655.4729,	3664.7500,	3695.6177,	3712.5720,	3738.5837,	3816.7043,	3937.8308,	4010.8696		

10. [F1MIS2](#) Mass: 9764 Score: 18 Expect: 3.8e+002 Matches: 6

Uncharacterized protein OS=Bos taurus PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
801.4262	800.4189	800.4028	20.0	78	85	0	---	R.VQQSSGSPV.-
993.5046	992.4973	992.4862	11.2	20	27	1	---	R.MTSAYHRK.C
2096.0430	2095.0357	2095.0051	14.6	1	19	2	---	-.TQGLAGRRAGVEMADMYNNR.M
2307.0549	2306.0476	2305.9990	21.1	8	26	2	---	R.RAGVEMADMYNNRMTSAYHRK + 3 Oxidation (M)
2572.1523	2571.1450	2571.1444	0.26	41	62	1	---	K.GESVCLDPYASKYLDIHECMGK.K
2716.1953	2715.1880	2715.2342	-17.02	41	63	2	---	K.GESVCLDPYASKYLDIHECMGKK.L + Oxidation (M)

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5547, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7545, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2327.0650, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

11. [E1BC56](#) Mass: 10970 Score: 18 Expect: 4.2e+002 Matches: 7

Uncharacterized protein OS=Bos taurus GN=LOC785479 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
814.4558	813.4485	813.4457	3.53	15	20	2	---	K.EEPPKRR.S
993.5046	992.4973	992.5138	-16.64	5	14	1	---	R.KVSSSTEGSAK.E
1020.5577	1019.5504	1019.5611	-10.48	46	54	2	---	K.SDDKKVQTK.G
1149.6057	1148.5984	1148.6149	-14.37	4	14	2	---	K.RKVSSSTEGSAK.E
1162.6174	1161.6101	1161.6063	3.27	33	43	1	---	K.VEIEAKMAAGK.V + Oxidation (M)
1852.0399	1851.0326	1851.0577	-13.57	21	38	2	---	R.SGRLSAKPAPAKVEIEAK.M
2931.3428	2930.3355	2930.2900	15.5	73	99	2	---	K.EDLPAAENGETKNEESPASDEAKENKAK



965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1153.6460, 1156.4957, 1161.6295, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.5779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.0510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

12. [F1MJHO](#) Mass: 128067 Score: 17 Expect: 4.4e+002 Matches: 41

Uncharacterized protein OS=Bos taurus GN=SPINK5 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
716.4763	715.4690	715.4704	-2.04	491	-	496	2 ---	R.SVKVKR.E
788.4571	787.4498	787.4552	-6.78	219	-	225	2 ---	R.KANEKAK.R
805.4606	804.4534	804.4527	0.76	35	-	41	1 ---	R.VLMKNGK.L + Oxidation (M)
830.4522	829.4449	829.4294	18.8	906	-	913	0 ---	R.AKPSNDADK.D
872.5054	871.4982	871.4875	12.2	989	-	995	1 ---	K.EALDRIR.L
934.5098	933.5026	933.4953	7.72	858	-	865	1 ---	R.DGKLICTK.E
960.5294	959.5221	959.5400	-18.63	560	-	567	2 ---	K.AETEKVKR.E
961.4949	960.4877	960.4811	6.83	381	-	388	0 ---	K.NQGLICTR.E
975.5167	974.5094	974.4893	20.7	353	-	360	2 ---	K.EGESRNKR.Q
977.5212	976.5139	976.5263	-12.67	68	-	75	1 ---	K.MILEKEAK.S + Oxidation (M)
1137.5463	1136.5390	1136.5462	-6.29	204	-	212	1 ---	K.QQFSEKNNK.A
1170.5497	1169.5424	1169.5200	19.1	591	-	601	0 ---	R.ENDPIEGPDGK.I
1188.5603	1187.5530	1187.5418	9.42	730	-	740	1 ---	R.ESDPVRDADGK.S
1206.5107	1205.5034	1205.5104	-5.75	808	-	817	1 ---	K.THGNKCAMCK.E
1211.6099	1210.6026	1210.5798	18.8	720	-	729	2 ---	K.MKDGLKSCTR.E + Oxidation (M)
1242.6003	1241.5930	1241.5719	17.0	671	-	680	1 ---	K.CAMCKAVFQK.E
1319.6589	1318.6516	1318.6299	16.4	725	-	735	1 ---	K.LSCTRESDPVR.D
1450.7223	1449.7150	1449.7432	-19.43	854	-	865	2 ---	R.NMVRDGKLICTK.E + Oxidation (M)
1475.7633	1474.7560	1474.7827	-18.09	307	-	318	2 ---	R.QFVRNGKLPCTR.E
1558.7140	1557.7067	1557.7140	-4.68	951	-	962	1 ---	R.QHVRNDELMCTR.E
1635.7697	1634.7624	1634.7367	15.7	977	-	988	2 ---	K.NKCYMCRSIFEK.E
1643.7688	1642.7615	1642.7551	3.94	63	-	75	2 ---	K.CAMCKMILEKEAK.S + 2 Oxidation (M)
1651.7681	1650.7608	1650.7316	17.7	977	-	988	2 ---	K.NKCYMCRSIFEK.E + Oxidation (M)
1768.8339	1767.8266	1767.8461	-11.03	227	-	240	2 ---	R.DTEKLCIEYQDRAK.N
1773.8792	1772.8719	1772.8587	7.43	906	-	920	2 ---	R.AKPSNDADQCREVR.N
2081.9827	2080.9754	2080.9660	-9.89	311	-	329	2 ---	R.NGKLPTCTRENDPVQPGDGK.M
2108.9771	2107.9698	2107.9424	13.0	454	-	472	2 ---	R.GPDGKMHGNCAMCASLFK.L
2143.1006	2142.0933	2142.0462	22.0	185	-	203	2 ---	R.GPDGRIHGNKCALCAEIFK.Q
2178.0471	2177.0398	2177.0059	15.6	361	-	377	2 ---	R.QTETTTSEELCREYRK.S
2188.0547	2187.0474	2187.0637	-7.44	436	-	453	2 ---	R.NQVRNGMLICTRENDPVR.G + Oxidation (M)
2243.1243	2242.1170	2242.0987	8.18	231	-	248	2 ---	K.LCIEYQDRAKNVLFCTR.E
2353.0518	2352.0445	2352.0847	-17.06	531	-	549	2 ---	K.MHVNKAMCASLFRLEEEK.K
2412.0872	2411.0799	2411.0741	2.40	459	-	478	2 ---	K.MHGNKAMCASLFLKEEEEK.K
2533.1262	2532.1189	2532.0905	11.2	260	-	280	1 ---	K.MHGNLCSMCLAFYQAEAEKK.K + Oxidation (M)
2549.1316	2548.1243	2548.0854	15.3	260	-	280	1 ---	K.MHGNLCSMCLAFYQAEAEKK.K + 2 Oxidation (M)
2567.1514	2566.1441	2566.1614	-6.72	125	-	146	2 ---	R.THGNKAMCAELFLKEAENAK.R + Oxidation (M)
2587.2722	2586.2649	2586.2609	1.56	643	-	665	2 ---	R.SLLQNGNLFTCTRENDPVRGPDGK.T
2745.2900	2744.2827	2744.2646	6.60	632	-	654	2 ---	R.EAEKDACSEFRSLQNGNLFTCTR.E
2754.2197	2753.2124	2753.2068	2.04	941	-	962	2 ---	R.ISADECSNFRQHVNRNDELMCTR.E + Oxidation (M)
2862.2927	2861.2854	2861.2643	7.39	568	-	590	2 ---	R.EAAQELCSYRNYMRNQLPCTR.E + Oxidation (M)
3553.6230	3552.6157	3552.5530	17.7	249	-	279	2 ---	R.ENDPVRGPDGKMHGNCMCLAFYQAEAEK.K
<b>No match to:</b> 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 801.4262, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 957.5774, 963.4734, 965.4692, 970.5181, 972.4899, 976.5063, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1193.6041, 1209.5889, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588,								

1383.7037,	1390.6974,	1393.7992,	1400.6683,	1401.6989,	1414.8191,	1429.3142,	1436.7889,	1444.7122,	1445.7839,	1456.7717,	1462.6630,
1467.7329,	1470.7394,	1471.2693,	1471.7250,	1472.2531,	1474.5243,	1483.7141,	1488.5333,	1488.7194,	1493.7366,	1502.5601,	1513.7441,
1514.6849,	1516.6807,	1517.6437,	1518.7053,	1523.7611,	1526.7343,	1528.6973,	1530.6893,	1536.8230,	1540.7114,	1551.7063,	1553.7252,
1554.7474,	1557.6992,	1563.6658,	1564.3619,	1565.7223,	1566.7162,	1572.7062,	1580.8400,	1580.8423,	1586.8090,	1597.7913,	1599.8337,
1601.8030,	1614.8046,	1616.7968,	1628.7136,	1630.8103,	1642.7682,	1644.7915,	1646.8154,	1657.7932,	1663.8466,	1664.8557,	1666.7545,
1695.8208,	1707.8933,	1718.8790,	1721.9192,	1722.9375,	1728.8976,	1730.9116,	1732.2391,	1734.1844,	1739.7894,	1743.8966,	1755.2666,
1755.7703,	1757.4702,	1757.9089,	1758.4524,	1758.8987,	1761.9023,	1765.7578,	1769.8287,	1770.3949,	1772.8273,	1774.9180,	1774.9200,
1786.8268,	1787.8239,	1809.0499,	1810.0303,	1829.8895,	1830.8380,	1833.3470,	1833.8501,	1851.8885,	1852.0399,	1862.9515,	1881.7703,
1895.9634,	1906.8195,	1908.8512,	1920.7972,	1932.0050,	1936.9479,	1939.8563,	1940.8103,	1943.8293,	1954.8351,	1956.8574,	1958.8956,
1965.7998,	1967.9565,	1969.9998,	1979.8927,	1981.3531,	1982.8179,	1995.8232,	1997.8312,	2003.8595,	2008.9971,	2011.8464,	2015.9408,
2019.8779,	2025.8735,	2031.9606,	2047.9397,	2062.9578,	2067.0020,	2076.8943,	2082.9966,	2087.0103,	2088.1108,	2089.1162,	2096.0430,
2097.0200,	2110.0061,	2139.0991,	2140.0918,	2144.0718,	2149.8516,	2160.0554,	2174.0378,	2179.0574,	2191.0457,	2198.1831,	2199.1499,
2203.0386,	2211.1052,	2223.1582,	2225.1470,	2227.1042,	2228.0725,	2238.1086,	2239.1538,	2244.0684,	2254.0896,	2255.1482,	2260.0779,
2270.2183,	2272.1736,	2284.1841,	2287.1108,	2307.0549,	2309.0659,	2310.0798,	2310.5271,	2311.0454,	2319.0945,	2337.6050,	2341.5510,
2354.0767,	2355.0564,	2371.0581,	2383.9592,	2388.0437,	2392.1462,	2404.0471,	2419.5879,	2420.0864,	2420.5930,	2423.2439,	2426.5667,
2427.1211,	2438.1724,	2455.1553,	2458.1648,	2459.1794,	2478.1587,	2516.1133,	2542.1650,	2546.1746,	2550.1252,	2559.1470,	2561.1729,
2562.1765,	2572.1523,	2574.2678,	2583.1218,	2604.1682,	2612.1438,	2653.7173,	2655.1897,	2671.1787,	2687.1833,	2701.2820,	
2706.2766,	2712.2104,	2714.2156,	2716.1953,	2717.2725,	2725.2354,	2729.1675,	2739.2351,	2743.2642,	2755.2358,	2759.2573,	2769.2219,
2771.2437,	2776.2644,	2785.2388,	2786.2617,	2787.2400,	2793.2439,	2801.2378,	2803.2302,	2809.2549,	2815.2153,	2817.2322,	2819.2236,
2830.2788,	2833.2280,	2836.2397,	2873.2961,	2889.2024,	2894.3218,	2927.2520,	2931.3428,	2955.3005,	2974.4124,	2975.4084,	2990.3921,
3006.3206,	3011.2810,	3020.3557,	3021.2412,	3035.3281,	3053.3447,	3062.2456,	3086.4507,	3091.2622,	3103.3140,	3110.7285,	3113.8591,
3130.3557,	3140.4265,	3144.3657,	3159.4985,	3173.5386,	3174.5486,	3185.4236,	3218.3301,	3259.3625,	3312.3267,	3331.4678,	3347.4761,
3363.4788,	3390.4675,	3431.4570,	3447.4666,	3463.4895,	3485.6985,	3488.6545,	3489.6521,	3493.0195,	3494.5571,	3504.6423,	3509.5613,
3525.6025,	3538.4521,	3579.5403,	3648.1956,	3655.4729,	3664.7500,	3695.6177,	3712.5720,	3738.5837,	3816.7043,	3937.8308,	4010.8696

13. [F1MYI2](#) Mass: 58389 Score: 17 Expect: 4.5e+002 Matches: 20

Uncharacterized protein OS=Bos taurus GN=HNRNPM PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
745.3838	744.3765	744.3589	23.7	223	-	229	0	--- R.MGPGIDR.I
872.5054	871.4982	871.5127	-16.67	3	-	10	1	--- K.KAAEVLNKH.H
975.5167	974.5094	974.4855	24.6	115	-	122	1	--- K.MDERALPK.G + Oxidation (M)
1000.5959	999.5886	999.6076	-19.02	2	-	10	2	--- M.KKAAEVLNKH.H
1021.5699	1020.5626	1020.5539	8.58	470	-	477	1	--- R.KACQIFVR.N
1188.5603	1187.5530	1187.5791	-21.95	351	-	362	0	--- R.MVPAGMGAGLER.M
1269.6498	1268.6425	1268.6473	-3.78	209	-	222	0	--- R.INGGGGSGVPFIER.M
1528.6973	1527.6900	1527.6844	3.70	256	-	268	1	--- R.MGLVMDRMGSVER.M + 3 Oxidation (M)
1565.7223	1564.7150	1564.7344	-12.39	492	-	504	0	--- K.FNECGHVLADIK.M
1566.7162	1565.7089	1565.7290	-12.82	291	-	304	1	--- R.MQGTMERIGSGVER.M + Oxidation (M)
1663.8466	1662.8393	1662.8036	21.5	512	-	526	1	--- K.GCGVVKFESPEVAER.A
1768.8339	1767.8266	1767.8430	-9.25	530	-	544	2	--- R.MMNGMKLSGREIDVR.I + 2 Oxidation (M)
2081.9827	2080.9754	2080.9816	-2.95	385	-	402	2	--- R.MGLERMGANSLERMGLER.M + 2 Oxidation (M)
2178.0471	2177.0398	2177.0432	-1.53	160	-	182	0	--- K.GIGMGNLGPAGMGMEGIGFGINK.M
2211.1052	2210.0979	2210.0428	24.9	256	-	275	2	--- R.MGLVMDRMGSVERMSGIER.M
2354.0767	2353.0694	2353.0936	-10.29	390	-	410	2	--- R.MGANSLERMGLERMGANSLER.M + 2 Oxidation (M)
2392.1462	2391.1389	2391.0981	17.1	269	-	290	1	--- R.MSGSIERMGLPLGLDHMAASIER.M + 3 Oxidation (M)
2706.2766	2705.2693	2705.2506	6.92	238	-	262	2	--- R.MGAGLGHGMDVRVSGEIERMGLVMDR.M + 2 Oxidation (M)
2717.2725	2716.2652	2716.3103	-16.60	337	-	362	2	--- R.MGPAIERMGLGMERMVPAAGMGAGLER.M
3553.6230	3552.6157	3552.6404	-6.94	411	-	446	2	--- R.MGPAMGPALGAGIERMGLAMGGGGGASFDRAIEMER.G + 2 Oxidation (M)

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6027, 1264.7130, 1265.7064, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2404.0471, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2712.2104, 2714.2156, 2716.1953, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

14. [P02698](#) Mass: 8709 Score: 17 Expect: 5.3e+002 Matches: 6

Guanine nucleotide-binding protein G(T) subunit gamma-T1 OS=Bos taurus GN=GNGT1 PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1006.5014	1005.4941	1005.5165	-22.22	17	-	24	1	--- K.MEVDQLKK.E + Oxidation (M)
1103.6257	1102.6184	1102.6056	11.6	15	-	23	1	--- K.LKMEVDQLK.K
1270.6575	1269.6502	1269.6816	-24.72	2	-	12	0	--- M.PVINIEDLTEK.D
1401.6989	1400.6916	1400.7221	-21.75	1	-	12	0	--- .MPVINIEDLTEK.D

1635.7697 1634.7624 1634.7788 -9.99 42 - 55 1 --- R.DYVEERSGEDPLVK.G  
 1969.9998 1968.9925 1969.0156 -11.74 48 - 65 2 --- R.SGEDPLVKGIPEDKNPFK.E

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2327.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

15. [Q3MHX9](#) Mass: 23497 Score: 16 Expect: 6.8e+002 Matches: 7  
 Nudix (Nucleoside diphosphate linked moiety X)-type motif 16-like 1 OS=Bos taurus GN=NUDT16L1 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
977.5212	976.6139	976.5124	1.57	12	-	19	1	--- R.ISRVEAMR.L + Oxidation (M)
1032.5238	1031.5165	1031.5321	-15.10	1	-	10	0	--- -.MSAAAVPELK.R + Oxidation (M)
1043.5178	1042.5105	1042.4940	15.9	48	-	55	0	--- R.FSVLGMQMR.F + 2 Oxidation (M)
1057.6100	1056.6027	1056.6114	-8.20	81	-	90	10	R.VLGLGLGCLR.L
1057.6107	1056.6034	1056.6114	-7.54	81	-	90	0	--- R.VLGLGLGCLR.L
1122.5322	1121.5249	1121.5097	13.6	179	-	187	0	--- K.VLNNMPEEK.L + 2 Oxidation (M)
2191.0457	2190.0384	2190.0911	-24.07	179	-	198	1	--- K.VLNNMPEEKLAALAAATEK.Q + 2 Oxidation (M)

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1045.5568, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2327.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

16. [F1MSW3](#) Mass: 36190 Score: 16 Expect: 6.8e+002 Matches: 11  
 Uncharacterized protein OS=Bos taurus GN=MAGIX PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
965.4692	964.4619	964.4760	-14.61	96	-	103	1	--- R.RSETMGIR.T + Oxidation (M)
1184.6412	1183.6339	1183.6058	23.8	4	-	15	1	--- R.RPGGGTDPRGSK.G

1243.6161 1242.6088 1242.5993 7.65 134 - 146 0 --- R.SSAGFGFTLSGGR.D  
 1255.5972 1254.5899 1254.5589 24.7 16 - 29 0 --- K.GGGGGPQPEDASAR.Q  
 1328.6600 1327.6527 1327.6415 8.45 1 - 12 1 7 -.MERRPPGGGTDPR.G  
 1328.6620 1327.6547 1327.6415 9.95 1 - 12 1 --- -.MERRPPGGGTDPR.G  
 1470.7394 1469.7321 1469.7184 9.33 237 - 249 1 --- R.IPDGPEPEMTKTR.S  
 1616.7968 1615.7895 1615.7849 2.87 1 - 15 2 --- -.MERRPPGGGTDPRGSK.G + Oxidation (M)  
 2143.1006 2142.0933 2142.0566 17.1 13 - 34 2 --- R.GSKGGGGGQPEDASARQFLAR.L  
 2238.1086 2237.1013 2237.0522 22.0 228 - 247 1 --- K.EDVLPSPDRIPDPGPEPEMTK.T + Oxidation (M)  
 3173.5386 3172.5313 3172.6048 -23.15 168 - 196 1 --- R.CGRLLQAGDLVLHNGESTQGLTHVEVD.R.I  
**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1253.6216, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1471.2693, 1472.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8154, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9988, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9666, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.0605, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3266, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

17. [Q32PB8](#) Mass: 9220 Score: 15 Expect: 7.1e+002 Matches: 6

40S ribosomal protein S21 OS=Bos taurus GN=RPS21 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1122.5322	1121.5249	1121.5023	20.2	62	71	0	----	R.MGESDDSIILR.L
1180.6428	1179.6355	1179.6182	14.7	52	61	1	----	K.TYACGAIR.R.M
1450.7223	1449.7150	1449.7133	1.18	62	74	1	----	R.MGESDDSIILRLAK.A + Oxidation (M)
1572.7062	1571.6989	1571.7250	-16.57	28	41	0	----	K.DHASIQMNVAEVDK.V + Oxidation (M)
1769.8287	1768.8214	1768.8090	7.00	1	15	0	----	-.MQNDAGEFVDLYVPR.K + Oxidation (M)
1969.9998	1968.9925	1968.9687	12.1	28	45	1	----	K.DHASIQMNVAEVDKVTGR.F

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1331.7888, 1332.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9988, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9666, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.0605, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3266, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

18. [F1N7K9](#) Mass: 123826 Score: 15 Expect: 7.1e+002 Matches: 18

Uncharacterized protein OS=Bos taurus GN=TBC1D8 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
829.4589	828.4516	828.4341	21.2	1060	-	1066	0	--- R.QSQPELK.L
887.4245	886.4172	886.4119	5.96	370	-	376	0	--- R.MHPEAFR.Q
897.5006	896.4933	896.4875	6.50	709	-	714	2	--- R.CRRHRIR.V
1219.6886	1218.6813	1218.6642	14.1	894	-	903	2	--- K.QMIKDLAKEK.D + Oxidation (M)
1304.6677	1303.6604	1303.6806	-15.46	164	-	174	0	--- K.IMEQLADVTILR.R + Oxidation (M)
1331.7888	1330.7815	1330.7642	13.0	891	-	901	2	--- K.QLKQMIKDLAK.E + Oxidation (M)
1456.7717	1455.7644	1455.7326	21.8	407	-	417	2	--- R.TVCMFRTKEIR.K + Oxidation (M)
1518.7053	1517.6980	1517.7011	-2.03	769	-	780	0	--- R.HDPSRPYAEQYR.I
1616.7968	1615.7895	1615.7916	-1.26	812	-	824	0	--- R.LLDENMDHLIEFK.A
1664.8557	1663.8484	1663.8893	-24.58	129	-	142	1	--- R.LERTSNVFLTDTIR.I
1774.9180	1773.9107	1773.9513	-22.85	554	-	569	0	--- R.VIGAQVDQSVFEELIK.E
1774.9200	1773.9127	1773.9513	-21.72	554	-	569	0	15 R.VIGAQVDQSVFEELIK.E
1829.8895	1828.8822	1828.8560	14.3	467	-	480	1	--- K.CCLVTEEIERDLHR.S
1833.8501	1832.8428	1832.8410	0.98	696	-	710	1	--- K.FGDQSVQAIEHMR.CR.H
2174.0378	2173.0305	2172.9971	15.4	370	-	389	1	--- R.MHPEAFRQSGSQSPDGLSR.E
2516.1133	2515.1060	2515.1010	1.98	72	-	90	1	--- R.FNFPEAEKLITYYSCCCWK.G
2729.1675	2728.1602	2728.2236	-23.24	72	-	92	2	--- R.FNFPEAEKLITYYSCCCWKGR.V
4010.8696	4009.8623	4009.9619	-24.83	924	-	958	0	--- K.TLYSMFHEDPEENDLYQAIATVTITLLQIGEVQGR.G + Oxidation (M)

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1666.7545, 1695.8208, 1707.8933, 1718.8793, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1830.8380, 1833.3470, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0818, 2149.8516, 2160.0554, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3149.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308

19. [Q05717](#) Mass: 31377 Score: 15 Expect: 7.3e+002 Matches: 7

Insulin-like growth factor-binding protein 5 OS=Bos taurus GN=IGFBP5 PE=2 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1255.5972	1254.5899	1254.6105	-16.43	164	-	175	0	--- K.FVGGAEHTAHPR.V
1255.6000	1254.5927	1254.6105	-14.20	164	-	175	0	15 K.FVGGAEHTAHPR.V
1516.6807	1515.6734	1515.6673	4.06	238	-	249	1	--- R.GICWCVDKYGKML.K
1718.8790	1717.8717	1717.8756	-2.25	208	-	221	2	--- R.MVPRAVYLPCNDRK.G
1758.8987	1757.8914	1757.8514	22.8	33	-	48	0	--- K.ALSMCPSPGLGCELVK.E
2096.0430	2095.0357	2095.0666	-14.75	194	-	211	2	--- R.HMEASLQELKASPRMVRP.A + Oxidation (M)
2139.0991	2138.0918	2138.0691	10.6	164	-	183	1	--- K.FVGGAEHTAHPRVISAPEMR.Q

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1758.4524, 1759.8927, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1788.4523, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531,



1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578,  
 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2097.0200, 2108.9771, 2110.0061, 2140.0918, 2143.1006,  
 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052,  
 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183,  
 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518,  
 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439,  
 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316,  
 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438,  
 2653.7173, 2655.1897, 2671.1877, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675,  
 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400,  
 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961,  
 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412,  
 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985,  
 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666,  
 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403,  
 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

20. [F1MWQ0](#) Mass: 17662 Score: 15 Expect: 7.7e+002 Matches: 10

Complexin-3 OS=Bos taurus GN=CPLX3 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
726.3622	725.3550	725.3604	-7.53	1	6	0	---	-MAFMVK.T
993.5046	992.4973	992.5039	-6.68	59	66	1	---	R.DAQFTQRK.A
1475.7633	1474.7560	1474.7627	-4.53	141	154	1	---	K.AQSTGLDLKQSAEK.C
1718.8790	1717.8717	1717.8846	-7.50	139	154	2	---	K.DKAQSTGLDLKQSAEK.C
1979.8927	1978.8854	1978.8677	8.98	104	119	1	---	R.ELAKMIEEDTEEEER.A
1995.8232	1994.8159	1994.8626	-23.39	104	119	1	---	R.ELAKMIEEDTEEEER.A + Oxidation (M)
2260.0779	2259.0706	2259.0365	15.1	42	58	2	---	R.EEYEEYKQKLVVEEKMER.D
2546.1746	2545.1673	2545.1966	-11.49	85	107	1	---	K.NETDESQIQMAGGDVLPRELAK.M + Oxidation (M)
2701.2820	2700.2747	2700.3285	-19.92	1	26	2	---	-MAFMVKTMVGGQLKNLTGSLGGGEDK.G + 2 Oxidation (M)
2717.2725	2716.2652	2716.3234	-21.43	1	26	2	---	-MAFMVKTMVGGQLKNLTGSLGGGEDK.G + 3 Oxidation (M)

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651,  
 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830,  
 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144,  
 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734,  
 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 995.4181, 998.5911, 1000.5959,  
 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238,  
 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168,  
 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724,  
 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156,  
 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886,  
 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064,  
 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6762,  
 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246,  
 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839,  
 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1483.7141, 1488.5333, 1488.7194,  
 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230,  
 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400,  
 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688,  
 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1721.9192, 1722.9375, 1728.8976,  
 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023,  
 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303,  
 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972,  
 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1981.3531,  
 1982.8179, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2070.0020,  
 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918,  
 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386,  
 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183,  
 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518,  
 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439,  
 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316,  
 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173,  
 2655.1897, 2671.1787, 2687.1833, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900,  
 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302,  
 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520,  
 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456,  
 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236,  
 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545,  
 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500,  
 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

21. [Q3ZBJ9](#) Mass: 13284 Score: 15 Expect: 7.8e+002 Matches: 6

Protein BEX5 OS=Bos taurus GN=BEX5 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1032.5238	1031.5165	1031.5069	9.29	1	8	2	---	-MEKDPKER.R
1177.6410	1176.6337	1176.6615	-23.58	85	93	1	---	R.ELQLRYSLR.I
1240.5974	1239.5901	1239.5740	13.0	72	80	1	---	R.FMPEENRLR.R
2561.1729	2560.1656	2560.1057	23.4	49	71	0	---	R.EDMPENGLVNNIDIIDGDADDMER.F
2612.1438	2611.1365	2611.1279	3.32	10	33	0	---	R.EEEQAPVQNEEACPMGGEGGPKPR.E + Oxidation (M)
3053.3447	3052.3374	3052.3726	-11.54	7	33	2	---	K.ERREEQAPVQNEEACPMGGEGGPKPR.E + Oxidation (M)

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791,  
 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522,  
 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898,  
 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949,  
 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181,  
 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397,  
 1030.5978, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107,  
 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986,  
 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497,  
 1172.6156, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886,  
 1227.6234, 1229.7098, 1234.6414, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498,  
 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589,  
 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489,  
 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223,  
 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194,  
 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230,  
 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400,

1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1786.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9666, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

22. [Q08DP2](#) Mass: 22300 Score: 15 Expect: 8e+002 Matches: 6

Loss of heterozygosity 12 chromosome region 1 protein homolog OS=Bos taurus GN=LOH12CR1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1273.6556	1272.6483	1272.6674	-14.97	68	80	0	---	K.GLLSGQTSPTNAK.L
1774.9180	1773.9107	1773.9043	3.61	29	45	1	---	R.AKMDDIVVVAQGSQASR.N
1774.9200	1773.9127	1773.9043	4.73	29	45	1	8	R.AKMDDIVVVAQGSQASR.N
2203.0386	2202.0313	2202.0701	-17.59	118	135	1	---	R.IKEMDLSVETLFSFMQER.Q
2255.1482	2254.1409	2254.1779	-16.41	139	157	2	---	R.YAKYAEQIQKVNEMSAILR.R
2459.1794	2458.1721	2458.2236	-20.94	118	137	2	---	R.IKEMDLSVETLFSFMQERQK.R

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1786.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9666, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

23. [Q3ZBC0](#) Mass: 7228 Score: 15 Expect: 8e+002 Matches: 5

DNA-directed RNA polymerases I, II, and III subunit RPABC4 OS=Bos taurus GN=POLR2K PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1286.6099	1285.6026	1285.6336	-24.12	1	11	1	---	-MDTQKDVQPPK.Q
1551.7063	1550.6990	1550.6792	12.8	36	46	2	---	R.CRECGYRIMYK.K + Oxidation (M)
2974.4124	2973.4051	2973.3895	5.26	12	35	2	---	K.QQPMIYICGECHEITENEIKSRDPIR.C
2990.3921	2989.3848	2989.3844	0.14	12	35	2	---	K.QQPMIYICGECHEITENEIKSRDPIR.C + Oxidation (M)
3173.5386	3172.5313	3172.4740	18.1	6	31	2	---	K.DVQPPKQQPMIYICGECHEITENEIKSR.D + Oxidation (M)

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062

1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2975.4084, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

24. [P00129](#) Mass: 13468 Score: 15 Expect: 8.2e+002 Matches: 7

Cytochrome b-c1 complex subunit 7 OS=Bos taurus GN=UQCRB PE=1 SV=3

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
977.5212	976.5139	976.5124	1.57	65	72	1	---	K.RALDLSMR.Q + Oxidation (M)
1012.5447	1011.5374	1011.5277	9.65	89	96	0	---	K.SYLEPYLK.E
1289.6875	1288.6802	1288.6524	21.6	50	59	1	---	R.RLPENLYNDR.V
1758.8987	1757.8914	1757.9172	-14.67	46	59	2	---	K.EAIRRLPENLYNDR.V
1769.8287	1768.8214	1768.8228	-0.75	35	49	1	---	R.DDTIHENDDDVKEAIR.R
1932.0050	1930.9977	1930.9876	5.26	19	34	2	---	R.KWYYNAAGFNKGLMR.D
2088.1108	2087.1035	2087.1058	-1.09	1	19	2	---	-MAGRPFAVSASRWLEGIRK.W + Oxidation (M)
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5045, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1761.9023, 1765.7578, 1768.8339, 1770.3949, 1772.8273, 1773.8792, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2980.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

25. [A4FV50](#) Mass: 40277 Score: 15 Expect: 8.4e+002 Matches: 14

MGC142792 protein OS=Bos taurus GN=MGC142792 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
716.4763	715.4690	715.4592	13.7	297	302	1	---	K.LTLTKN.K.F
1145.6348	1144.6275	1144.6088	16.4	179	188	1	---	K.ELTADARELK.G
1657.7932	1656.7859	1656.8004	-8.73	301	313	1	---	K.NKVFVEFMKPVCK.K + Oxidation (M)
2140.0918	2139.0845	2139.0506	15.8	216	233	1	---	R.VVNAMGKQWHVEHFVCAK.C
2355.0564	2354.0491	2354.0413	3.33	2	24	0	---	M.LGVASGMTNSNMANALANASCER.C + Oxidation (M)
2371.0581	2370.0508	2370.0362	6.17	2	24	0	---	M.LGVASGMTNSNMANALANASCER.C + 2 Oxidation (M)
2542.1650	2541.1577	2541.1749	-6.76	282	302	2	---	K.AWCVHCFACSTCSAKLTLKNK.F
2655.1897	2654.1824	2654.1781	1.62	2	26	1	---	M.LGVASGMTNSNMANALANASCERCRC.G
2671.1787	2670.1714	2670.1730	-0.60	2	26	1	---	M.LGVASGMTNSNMANALANASCERCRC.G + Oxidation (M)
2687.1833	2686.1760	2686.1680	3.00	2	26	1	---	M.LGVASGMTNSNMANALANASCERCRC.G + 2 Oxidation (M)
2786.2617	2785.2544	2785.2186	12.9	1	26	1	---	-MLGVASGMTNSNMANALANASCERCRC.G
2889.2024	2888.1951	2888.2581	-21.82	247	269	1	---	R.KGLAYCETHYNQLFGDVCFHCNR.V
3091.2622	3090.2549	3090.2704	-5.00	70	93	0	---	K.YCEHDFQMLFAPCCHQCCEFIIGR.V + Oxidation (M)
3431.4570	3430.4497	3430.5178	-19.85	70	96	1	---	K.YCEHDFQMLFAPCCHQCCEFIIGRVIK.A + Oxidation (M)
No match to: 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911,								

1000.5959,	1002.5007,	1006.5014,	1011.5474,	1012.5447,	1014.5485,	1020.5577,	1021.5699,	1024.5516,	1027.5438,	1028.5397,	1030.5978,
1032.5238,	1036.5260,	1037.5405,	1039.5641,	1040.5908,	1042.5388,	1043.5178,	1045.5568,	1046.6018,	1056.5515,	1057.6100,	1057.6107,
1061.6168,	1074.6073,	1074.6100,	1076.6123,	1102.6007,	1103.6257,	1105.6136,	1107.1058,	1113.5486,	1120.5498,	1122.5322,	1123.5986,
1128.5724,	1129.5924,	1134.3574,	1137.5463,	1149.6057,	1153.6460,	1156.4957,	1161.6295,	1162.6174,	1164.1815,	1170.5497,	1172.6156,
1177.6410,	1180.6428,	1184.6412,	1188.5603,	1193.6041,	1206.5107,	1209.5889,	1211.6099,	1212.6160,	1215.6743,	1216.7081,	1219.6886,
1227.6234,	1229.7098,	1234.6414,	1240.5974,	1242.6003,	1243.6167,	1253.6216,	1255.5972,	1255.6000,	1260.6227,	1264.7130,	1265.7064,
1269.6498,	1270.6575,	1273.6556,	1277.6305,	1286.6099,	1289.6875,	1293.6401,	1303.6455,	1304.6677,	1307.6788,	1309.6780,	1318.6750,
1319.6589,	1328.6600,	1328.6620,	1331.7888,	1333.7644,	1336.0798,	1336.6155,	1350.6853,	1351.7202,	1356.5811,	1359.1302,	1359.6246,
1365.6489,	1374.7588,	1383.7037,	1390.6974,	1393.7992,	1400.6683,	1401.6989,	1414.8191,	1429.3142,	1436.7889,	1444.7122,	1445.7839,
1450.7223,	1456.7717,	1462.6630,	1467.7329,	1470.7394,	1471.2693,	1471.7250,	1472.2531,	1474.5243,	1475.7633,	1483.7141,	1488.5333,
1488.7194,	1493.7366,	1502.5601,	1513.7441,	1514.6849,	1516.6807,	1517.6437,	1518.7053,	1523.7611,	1526.7343,	1528.6973,	1530.6893,
1536.8230,	1540.7114,	1551.7093,	1553.7252,	1554.7474,	1557.6992,	1558.7140,	1563.6658,	1564.3619,	1565.7223,	1566.7162,	1572.7062,
1580.8400,	1580.8423,	1586.8090,	1597.7913,	1599.8337,	1601.8030,	1614.8046,	1616.7968,	1628.7136,	1630.8103,	1635.7697,	1642.7682,
1643.7688,	1644.7915,	1646.8154,	1651.7681,	1663.8466,	1664.8557,	1666.7545,	1695.8208,	1707.8933,	1718.8790,	1721.9192,	1722.9375,
1728.8976,	1730.9116,	1732.2391,	1734.1844,	1739.7894,	1743.8966,	1755.2666,	1755.7703,	1757.4702,	1757.9089,	1758.4524,	1758.8987,
1761.9023,	1765.7578,	1768.8339,	1769.8287,	1770.3949,	1772.8273,	1773.8792,	1774.9180,	1774.9200,	1786.8268,	1787.8239,	1809.0499,
1810.0303,	1829.8895,	1830.8380,	1833.3470,	1833.8501,	1851.8885,	1852.0399,	1862.9515,	1881.7703,	1895.9634,	1906.8195,	1908.8512,
1920.7972,	1932.0050,	1936.9479,	1939.8563,	1940.8103,	1943.8293,	1954.8351,	1956.8574,	1958.8956,	1965.7998,	1967.9565,	1969.9998,
1979.8927,	1981.3531,	1982.8179,	1995.8232,	1997.8312,	2003.8595,	2008.9971,	2011.8464,	2015.9408,	2019.8779,	2025.8735,	2031.9606,
2047.9397,	2062.9578,	2067.0020,	2076.8943,	2081.9827,	2082.9966,	2087.0103,	2088.1108,	2089.1162,	2096.0430,	2097.0200,	2108.9771,
2110.0061,	2139.0991,	2143.1006,	2144.0718,	2149.8516,	2160.0554,	2174.0378,	2178.0471,	2179.0574,	2188.0547,	2191.0457,	2198.1831,
2199.1499,	2203.0386,	2211.1052,	2223.1582,	2225.1470,	2227.1042,	2228.0725,	2238.1086,	2239.1538,	2243.1243,	2244.0684,	2254.0896,
2255.1482,	2260.0779,	2270.2183,	2272.1736,	2284.1841,	2287.1108,	2307.0549,	2309.0659,	2310.0798,	2310.5271,	2311.0454,	2319.0945,
2337.6050,	2341.5510,	2353.0518,	2354.0767,	2383.9592,	2388.0437,	2392.1462,	2404.0471,	2412.0872,	2419.5879,	2420.0864,	2420.5930,
2423.2439,	2426.5667,	2427.1211,	2438.1724,	2455.1553,	2458.1648,	2459.1794,	2478.1587,	2516.1133,	2533.1262,	2546.1746,	2549.1316,
2550.1252,	2559.1470,	2561.1729,	2562.1765,	2567.1514,	2572.1523,	2574.2678,	2576.1628,	2583.1218,	2587.2722,	2604.1682,	2612.1438,
2653.7173,	2701.2820,	2706.2766,	2712.2104,	2714.2156,	2716.1953,	2717.2725,	2725.2354,	2729.1675,	2739.2351,	2743.2642,	2745.2900,
2754.2197,	2755.2358,	2759.2573,	2769.2219,	2771.2437,	2776.2644,	2785.2388,	2787.2400,	2793.2439,	2801.2378,	2803.2302,	2809.2549,
2815.2153,	2817.2322,	2819.2326,	2830.2788,	2833.2280,	2836.2397,	2862.2927,	2873.2961,	2894.3218,	2927.2520,	2931.3428,	2955.3005,
2974.4124,	2975.4084,	2990.3921,	3006.3206,	3011.2810,	3020.3557,	3021.2412,	3035.3281,	3053.3447,	3062.2456,	3086.4507,	3103.3140,
3110.7285,	3113.8591,	3130.3557,	3140.4265,	3144.3657,	3159.4985,	3173.5386,	3174.5486,	3185.4236,	3218.3301,	3259.3625,	3312.3267,
3331.4678,	3347.4761,	3363.4788,	3390.4675,	3447.4666,	3463.4895,	3485.6985,	3488.6545,	3489.6521,	3493.0195,	3494.5571,	3504.6423,
3509.5613,	3525.6025,	3538.4521,	3553.6230,	3579.5403,	3648.1956,	3655.4729,	3664.7500,	3695.6177,	3712.5720,	3738.5837,	3816.7043,
3937.8308,	4010.8696										

26. [E1BKM8](#) Mass: 51997 Score: 14 Expect: 8.8e+002 Matches: 19

Uncharacterized protein OS=Bos taurus GN=CYP24A1 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
913.5293	912.5220	912.5433	-23.27	129	-	135	0	--- R.LEIKFPWK.A
925.4620	924.4548	924.4413	14.5	121	-	128	0	--- R.TESAHPQR.L
992.4958	991.4885	991.5120	-23.73	1	-	9	1	--- -.MSSPISKSR.S
1120.5498	1119.5425	1119.5342	7.40	284	-	292	1	--- K.SCDVNRLEK.Y
1145.6348	1144.6275	1144.6241	3.02	387	-	396	0	--- R.LNPTVPFTTR.T
1212.6160	1211.6087	1211.6155	-5.58	252	-	261	0	--- K.MMVTVPVELHR.S
1216.7081	1215.7008	1215.7083	-6.13	165	-	174	1	--- K.KLMKFPVEIMK.L
1253.6216	1252.6143	1252.6308	-13.13	373	-	382	1	--- R.NMPYLKACLK.E + Oxidation (M)
1269.6498	1268.6425	1268.6149	21.7	82	-	91	0	--- K.QHDTLVEYHK.K
1450.7223	1449.7150	1449.7463	-21.59	198	-	209	1	--- R.GRIEDLYTELNK.W
1664.8557	1663.8484	1663.8352	7.95	383	-	396	1	--- K.ESMRNLNPTVPFTTR.T + Oxidation (M)
1758.8987	1757.8914	1757.8638	15.7	267	-	280	0	--- R.VWQAHTQAWDTIFR.S
1772.8273	1771.8200	1771.8419	-12.34	373	-	386	2	--- R.NMPYLKACLKESMR.L + 2 Oxidation (M)
1810.0303	1809.0230	1808.9892	18.7	160	-	174	2	--- R.SAFQKKLMKFPVEIMK.L + 2 Oxidation (M)
1829.8895	1828.8822	1828.9182	-19.65	210	-	223	1	--- K.WSFESICLVLYEKR.F
2174.0378	2173.0305	2172.9862	20.4	244	-	261	1	--- K.TMMSFMFGKMMVTPVELHR.S + 3 Oxidation (M)
2311.0454	2310.0381	2310.0620	-10.34	179	-	197	1	--- K.INEVLADFMGRIDELCDER.G + Oxidation (M)
2612.1438	2611.1365	2611.1471	-4.07	293	-	313	0	--- K.YSEQPSMDFLCDIYHHNQLSK.K
2745.2900	2744.2827	2744.2940	-4.12	244	-	266	2	--- K.TMMSFMFGKMMVTPVELHRSNLNR.V + 3 Oxidation (M)
No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1215.6743, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6809, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2653.7173, 2655.1897, 2671.1787, 2687.1839, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5846, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3447.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4695, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

27. [E1BJL9](#) Mass: 65973 Score: 14 Expect: 9.2e+002 Matches: 23

Uncharacterized protein OS=Bos taurus GN=CCDC173 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
716.4763	715.4690	715.4592	13.7	105	110	2	---	K.LEAKKK.R
805.4606	804.4534	804.4705	-21.30	177	183	2	---	K.SKIKSDK.K
813.4481	812.4408	812.4327	10.1	80	85	1	---	K.KEMHLR.S
934.5098	933.5026	933.4953	7.74	307	314	1	---	R.LTQMGKEK.E
977.5212	976.5139	976.5124	1.58	321	327	2	---	R.LMEERRK.R + Oxidation (M)
978.5100	977.5027	977.4818	21.4	169	176	0	---	R.DAQIEFQK.S
1028.5397	1027.5324	1027.5087	23.1	539	546	1	---	K.YNNFQKSK.G
1032.5238	1031.5165	1031.4995	16.5	263	270	1	---	K.EEINESRR.L
1036.5260	1035.5187	1035.5349	-15.59	196	203	2	---	K.AFKEEREK.A
1162.6174	1161.6101	1161.5818	24.3	271	279	0	---	R.LFFEHLNDK.H
1193.6041	1192.5968	1192.6088	-10.03	169	178	1	---	R.DAQIEFQKSK.I
1318.6750	1317.6677	1317.6830	-11.56	270	279	1	---	R.RLFFEHLNDK.H
1365.6489	1364.6416	1364.6671	-18.64	477	488	1	---	R.EVIESESESTKK.Y
1400.6683	1399.6610	1399.6514	6.90	315	325	1	---	K.EAETHRLMEER.R
1436.7889	1435.7816	1435.7606	14.7	1	13	1	---	-.AAGTLEMLVRFRG.R + Oxidation (M)
1475.7633	1474.7560	1474.7449	7.53	382	393	2	---	R.ALVMKNKEEER.Q
1657.7932	1656.7859	1656.7889	-1.80	313	325	2	---	K.EKEAETHRLMEER.R
1663.8466	1662.8393	1662.8802	-24.57	496	512	1	---	K.AVQEGPGGGRGVPLVDR.G
1810.0303	1809.0230	1809.0049	9.99	270	283	2	---	R.RLFFEHLNDKHIK.A
2096.0430	2095.0357	2095.0255	4.88	239	255	2	---	K.DAEETKRQNSLYEIMK.K
2140.0918	2139.0845	2139.0847	-0.10	459	476	2	---	R.LTEALVAEKEKEFQDYAR.E
2254.0896	2253.0823	2253.0947	-5.47	451	469	2	---	K.QAESEYCRLTEALVAEKEK.E
2576.1628	2575.1555	2575.2186	-24.47	20	41	1	---	K.ESAEMKNCEEDPVLPPLPTK.V + Oxidation (M)
No match to: 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1030.5978, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1401.6989, 1414.8191, 1429.3142, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

28. [Q0VCY3](#) Mass: 40674 Score: 14 Expect: 9.6e+002 Matches: 17

Surfeit locus protein 6 OS=Bos taurus GN=SURF6 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
814.4558	813.4485	813.4681	-24.10	292	297	2	---	R.RAQRQR.A
842.5110	841.5038	841.4882	18.5	235	241	1	---	R.LQAQRAR.L
957.5774	956.5701	956.5767	-6.86	59	66	2	---	R.ERKTAKPK.A
978.5100	977.5027	977.5182	-15.80	8	16	0	---	K.DAYLQGLAK.K
978.5146	977.5073	977.5182	-11.11	8	16	0	---	K.DAYLQGLAK.K
1123.5986	1122.5913	1122.6145	-20.66	116	124	1	---	R.LHEKIQEAR.G
1172.6156	1171.6083	1171.6210	-10.82	293	301	2	---	R.AQRQRAWK.R
1229.7098	1228.7025	1228.6775	20.4	62	73	1	---	K.TAKPKAQASAEK.S
1270.6575	1269.6502	1269.6612	-8.64	303	313	1	---	R.TAHVVGKMQQR.Q + Oxidation (M)
1400.6683	1399.6610	1399.6878	-19.11	18	29	1	---	K.ICSQPSAEPQKR.K
1444.7122	1443.7049	1443.7358	-21.36	182	194	0	---	R.EEAQAQPLGLFNK.V
1462.6630	1461.6557	1461.6882	-22.19	249	261	1	---	R.DAGQAQLEAKMR.W + Oxidation (M)
1599.8337	1598.8264	1598.7900	22.8	195	208	1	---	K.VEVTEEEPANKAQR.R
1695.8208	1694.8135	1694.8475	-20.05	166	181	0	---	K.ALEGAEATEPDLQVPR.E
1718.8790	1717.8717	1717.8482	13.7	78	93	1	---	R.KPEVAKEEKGATSSSTR.V
1722.9375	1721.9302	1721.9386	-4.84	1	16	1	---	-.MTSLLAKDAYLQGLAK.K
2223.1582	2222.1509	2222.1542	-1.48	161	181	2	---	K.EKAAKALEGAATEPDLQVPR.E
No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100,								



1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1445.7839, 1450.7223, 1456.7717, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6933, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8096, 1597.7913, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1707.8933, 1721.9192, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1757.4702, 1757.9089, 1758.4524, 1785.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9696, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2225.1470, 2227.1042, 2228.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3113.8591, 3130.3557, 3144.3657, 3159.4985, 3173.5386, 3174.4265, 3185.4378, 3174.5486, 3185.4230, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

29. [G3N3F0](#) Mass: 23102 Score: 14 Expect: 9.9e+002 Matches: 9

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calcd)	ppm	Start	End	Miss	Ions	Peptide
1234.6414	1233.6341	1233.6070	22.0	25	-	36	2	--- R.MAGAMPARGGKR.R + 2 Oxidation (M)
1666.7545	1665.7472	1665.7749	-16.62	98	-	112	2	--- R.MAVSHMKSRMTGTGNK.S + 2 Oxidation (M)
2287.1108	2286.1035	2286.0694	14.9	69	-	88	0	--- K.MTQYITELSDMVPTCSALAR.K
2319.0945	2318.0872	2318.0592	12.1	69	-	88	0	--- K.MTQYITELSDMVPTCSALAR.K + 2 Oxidation (M)
2561.1729	2560.1656	2560.1971	-12.31	67	-	88	1	--- R.NKMTQYITELSDMVPTCSALAR.K + 2 Oxidation (M)
2701.2820	2700.2747	2700.3033	-10.59	66	-	88	2	--- R.RNKMTQYITELSDMVPTCSALAR.K + Oxidation (M)
2717.2725	2716.2652	2716.2982	-12.15	66	-	88	2	--- R.RNKMTQYITELSDMVPTCSALAR.K + 2 Oxidation (M)
2745.2900	2744.2827	2744.3439	-22.30	105	-	129	2	--- K.SMRGTGNKSTDGAYKPSFLTEQELK.H
3489.6521	3488.6448	3488.6884	-12.50	1	-	35	2	--- -.EMASDIPGSVTLFVAPMAATGQVRMAGAMPARGGK.R + 4 Oxidation (M)
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8377, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9696, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2225.1470, 2227.1042, 2228.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2562.1725, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3113.8591, 3130.3557, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

30. [Q3T2L0](#) Mass: 42579 Score: 14 Expect: 9.9e+002 Matches: 15

Caspase-15 OS=Bos taurus GN=LOC515736 PE=2 SV=1

Observed	Mr(expt)	Mr(calcd)	ppm	Start	End	Miss	Ions	Peptide
860.4207	859.4134	859.4287	-17.73	195	-	201	0	--- R.DELNEIK.D
1012.5447	1011.5374	1011.5245	12.7	145	-	152	1	--- K.AFLMCVKK.N + Oxidation (M)
1020.5577	1019.5504	1019.5586	-8.03	251	-	258	0	--- K.IFIIQACR.G
1030.5978	1029.5905	1029.5719	18.0	47	-	54	2	--- R.SFRDHLKK.V
1234.6414	1233.6341	1233.6176	13.4	344	-	353	0	--- R.DFNLCNPKPVK.V
1260.6227	1259.6154	1259.6357	-16.12	22	-	32	0	--- K.ISPTTEELQSR.L
1526.7343	1525.7270	1525.7348	-5.07	108	-	120	0	--- R.WQSAPDTCPIVIPR.K
1599.8337	1598.8264	1598.8048	13.5	308	-	321	1	--- R.TGSMVIKEMTEVFK.Q
1967.9565	1966.9492	1966.9856	-18.50	305	-	321	2	--- R.DPRTGSMVIKEMTEVFK.Q

2087.0103 2086.0030 2085.9862 8.08 1 - 21 2 --- -.MEGSLGSGRRSGSDGQPAPPK.I + Oxidation (M)  
 2199.1499 2198.1426 2198.0976 20.5 155 - 172 2 --- R.LGAHQDVQLMKDWLKECK.F  
 2223.1582 2222.1509 2222.1021 22.0 322 - 339 1 --- K.QYGNKWHLADFFITVNNR.V  
 2423.2439 2422.2366 2422.2600 -9.65 344 - 364 1 --- R.DFNLCNKPVKVSLVMESTLT.K.F  
 2438.1724 2437.1651 2437.2197 -22.40 10 - 32 2 --- R.RSGSDGQPAPPKISPTTEELQSR.L  
 2572.1523 2571.1450 2571.1478 -1.07 202 - 223 1 --- K.DDIGCCLVTLMSHGEFGIKMK.D + 2 Oxidation (M)  
**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1014.5485, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8193, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.1831, 2191.0457, 2198.1831, 2203.0386, 2211.1052, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2426.5667, 2427.1211, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3188.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

31. [E1BDX9](#) Mass: 40138 Score: 14 Expect: 9.9e+002 Matches: 16

Uncharacterized protein OS=Bos taurus GN=FAM50A PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
734.4570	733.4497	733.4520	-3.16	214	- 219	2	---	R.TVKKMK.K
963.4734	962.4661	962.4742	-8.45	35	- 42	0	---	R.IAEENIMK.S + Oxidation (M)
975.5167	974.5094	974.5284	-19.46	290	- 298	0	---	R.LLSDATVEK.D
1000.5959	999.5886	999.5964	-7.78	96	- 103	1	---	K.ELQLKLEK.L
1014.5485	1013.5412	1013.5626	-21.11	14	- 21	2	---	R.AMHLMKKR.E
1102.6007	1101.5934	1101.6030	-8.65	92	- 100	1	---	K.EQSKLEQLK.L
1229.7098	1228.7025	1228.6775	20.4	77	- 86	2	---	K.QEALVKEREK.Q
1586.8090	1585.8017	1585.8212	-12.28	179	- 190	2	---	R.LREELRQEWAEK.Q
1597.7913	1596.7840	1596.8116	-17.27	217	- 229	2	---	K.MKKGNITMQFLQK.A + Oxidation (M)
1601.8030	1600.7957	1600.7804	9.55	173	- 184	2	---	R.EEENRLREELR.Q
1646.8154	1645.8081	1645.7696	23.4	159	- 172	1	---	K.NPVDVTSFLPRDRR.E
2067.0020	2065.9947	2065.9859	4.26	1	- 19	2	---	-.MAQYKGAASEAGRAMHLMK.K + Oxidation (M)
2082.9966	2081.9893	2081.9808	4.08	1	- 19	2	---	-.MAQYKGAASEAGRAMHLMK.K + 2 Oxidation (M)
2211.1052	2210.0979	2210.1160	-8.20	254	- 271	0	---	K.EDLIIPHHHSFYDFIVTK.A
2254.0896	2253.0823	2253.0702	5.39	194	- 212	1	---	K.IKSEEIEITFSYWDGSGHR.R
2574.2678	2573.2605	2573.2762	-6.09	276	- 298	1	---	K.SGPLNFNDVHDDVRLSLSDATVEK.D

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1599.8337, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2076.8943, 2081.9827, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953,

2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

### 32. [P84081](#) Mass: 20790 Score: 14 Expect: 1e+003 Matches: 9

ADP-ribosylation factor 2 OS=Bos taurus GN=ARF2 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
992.4958	991.4885	991.4644	24.3	110	-	117	0	R.MLADELRL.D + Oxidation (M)
1103.6257	1102.6184	1102.6056	11.6	20	-	30	0	R.ILMVGLDAAGK.T + Oxidation (M)
1212.6160	1211.6087	1211.6373	-23.55	1	-	10	1	-MGNVFEKLFK.S
1565.7223	1564.7150	1564.7522	-23.76	60	-	73	0	K.NISFTVWDVGGQDK.I
1630.8103	1629.8030	1629.7668	22.2	128	-	142	0	K.QDLPLNAMNAEITDK.L
1663.8466	1662.8393	1662.8797	-24.26	16	-	30	2	K.KEMRILMVGLDAAGK.T + 2 Oxidation (M)
2174.0378	2173.0305	2173.0797	-22.61	100	-	117	2	R.VNEAREELTRMLADELRL.D
2423.2439	2422.2366	2422.2274	3.80	128	-	149	1	K.QDLPLNAMNAEITDKLGLHSRL.Q + Oxidation (M)
2438.1724	2437.1651	2437.1775	-5.07	80	-	99	1	R.HYFQNTQGLIFVVDSDNDRER.V

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 977.5212, 978.5100, 978.5146, 983.6283, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1780.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0788, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2426.5667, 2427.1211, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

### 33. [F1MNBO](#) Mass: 17016 Score: 14 Expect: 1e+003 Matches: 7

Cystatin OS=Bos taurus GN=CST8 PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
976.5063	975.4990	975.4808	18.7	77	-	84	0	R.VQMQVTDRL.L
992.4958	991.4885	991.4757	12.9	77	-	84	0	R.VQMQVTDRL.L + Oxidation (M)
1401.6989	1400.6916	1400.7082	-11.82	100	-	111	1	R.KLPNSNENCVVK.N
2561.1729	2560.1656	2560.1888	-9.05	120	-	140	1	R.QMCTFCVGLPWHGYFTVMKK.Q
2717.2725	2716.2652	2716.2899	-9.09	119	-	140	2	K.RQMCTFCVGLPWHGYFTVMKK.Q
2975.4084	2974.4011	2974.4115	-3.48	116	-	139	2	K.LEKRQMCTFCVGLPWHGYFTVMKK.K + Oxidation (M)
3493.0195	3492.0122	3491.9868	7.28	2	-	33	2	M.TRLGWTYQLLLALLVALVGLGNTLVHKDTRK.V

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 977.5212, 978.5100, 978.5146, 983.6283, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6100, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2178.0471, 2179.0574, 2188.0547, 2191.0457,

2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6950, 3488.6545, 3489.6521, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

34. [Q3SZ59](#) Mass: 12718 Score: 14 Expect: 1e+003 Matches: 7

60S ribosomal protein L36a OS=Bos taurus GN=RPL36A PE=3 SV=3

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
737.4152	736.4079	736.3980	13.4	40	44	2	---	R.RYDRK.Q
747.4550	746.4477	746.4473	0.58	82	87	1	---	R.MLAIKR.C + Oxidation (M)
960.5294	959.5221	959.5222	-0.15	1	8	1	---	-M.VNVPKTR.R + Oxidation (M)
1037.5405	1036.5332	1036.5301	2.98	31	39	1	---	K.DSLYAQGKR.R
1265.7064	1264.6991	1264.6676	24.9	18	27	1	---	K.HQPHKVTQYK.K
1318.6750	1317.6677	1317.6499	13.5	88	98	2	---	R.CKHFLGGLGDKK.R
1393.7992	1392.7919	1392.7626	21.1	18	28	2	---	K.HQPHKVTQYKK.G
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 738.3791, 744.8651, 745.3838, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6950, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

35. [G3MYU4](#) Mass: 73163 Score: 14 Expect: 1e+003 Matches: 28

Centrosomal protein of 290 kDa OS=Bos taurus GN=CEP290 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
830.4522	829.4449	829.4545	-11.55	35	41	0	---	K.VEVNELK.S
1074.6073	1073.6000	1073.5968	2.99	432	440	1	---	K.DKELVETLK.R
1074.6100	1073.6027	1073.5968	5.50	432	440	1	---	K.DKELVETLK.R
1102.6007	1101.5934	1101.6030	-8.66	470	478	1	---	R.DREIEVLTK.E
1303.6455	1302.6382	1302.6415	-2.52	420	431	1	---	R.TAELEADAREK.D
1304.6677	1303.6604	1303.6554	3.86	225	234	1	---	K.IELQNQEMRK.N + Oxidation (M)
1331.7888	1330.7815	1330.7496	24.0	303	313	1	---	K.VEEWKLLISLK.D
1444.7122	1443.7049	1443.6850	13.8	583	594	2	---	R.MGERKSDFMSLK.N + Oxidation (M)
1493.7366	1492.7293	1492.7456	-10.93	390	402	1	---	K.GASTLTQRTHYMK.I
1516.6807	1515.6734	1515.6875	-9.28	289	302	0	---	K.NEEDDPIMAAVNAK.V
1540.7114	1539.7041	1539.7277	-15.33	191	203	2	---	R.RGEDSDYRSQSLK.K
1657.7932	1656.7859	1656.7525	20.1	94	108	0	---	K.LENELEMAQHSAGGR.D + Oxidation (M)
1730.9116	1729.9043	1729.9097	-3.12	535	548	2	---	K.EIESLEEERLDLKK.K
1761.9023	1760.8950	1760.8866	4.80	61	75	1	---	K.MKAQEVLELAEVEK.A + Oxidation (M)
1769.8287	1768.8214	1768.8376	-9.12	501	515	0	---	R.MGLEPTTMDLTETFR.N + Oxidation (M)
1932.0050	1930.9977	1931.0000	-1.15	483	498	1	---	K.LELKINDFLDENELR.E
2015.9408	2014.9335	2014.9526	-11.36	91	108	1	---	K.VMKLENELEMAQHSAGGR.D + Oxidation (M)
2031.9606	2030.9533	2030.9513	0.98	91	108	1	---	K.VMKLENELEMAQHSAGGR.D + 2 Oxidation (M)
2087.0103	2086.0030	2085.9926	4.99	144	161	1	---	K.VNEQALRLNEEAENENSK.L
2097.0200	2096.0127	2096.0282	-7.38	501	518	1	---	R.MGLEPTTMDLTETFRNTK.S
2188.0547	2187.0474	2187.0154	14.7	289	307	1	---	K.NEEDDPIMAAVNAKVEEWK.L
2458.1648	2457.1575	2457.1767	-7.80	354	373	2	---	R.DSQIKMLTEQVEYTKEMEK.N
2459.1794	2458.1721	2458.2260	-21.93	61	82	2	---	K.MKAQEVLELAEVEKAGEEQAK.F
2561.1729	2560.1656	2560.1798	-5.55	255	275	2	---	K.AVVHQTDSDMDQLKENDHYR.L + Oxidation (M)
2771.2437	2770.2364	2770.2547	-6.58	246	268	2	---	K.MTDEYNRMKAVVHQTDSDMDQLK.K
2787.2400	2786.2327	2786.2496	-6.05	246	268	2	---	K.MTDEYNRMKAVVHQTDSDMDQLK.K + Oxidation (M)

2803.2302 2802.2229 2802.2445 -7.70 246 - 268 2 --- K.MTDEYNRMKAVVHQTDSDMDQLK.K + 2 Oxidation (M)  
 2819.2236 2818.2163 2818.2394 -8.19 246 - 268 2 --- K.MTDEYNRMKAVVHQTDSDMDQLK.K + 3 Oxidation (M)

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1076.6123, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1502.5601, 1513.7441, 1514.6849, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1765.7578, 1768.8339, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2019.8779, 2025.8735, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2088.1108, 2089.1162, 2096.0430, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2179.0574, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2445.1553, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2776.2644, 2785.2388, 2786.2617, 2793.2438, 2801.2378, 2809.2549, 2815.2153, 2817.2322, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4728, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

36. [P84088](#) Mass: 15499 Score: 14 Expect: 1.1e+003 Matches: 7

Complexin-2 OS=Bos taurus GN=CPLX2 PE=1 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
723.4098	722.4025	722.3963	8.64	68	-	73	1 ---	R.DKYGLK.K
801.4262	800.4189	800.4028	20.1	27	-	33	1 ---	K.DPDAQKK.E
1436.7889	1435.7816	1435.7533	19.7	123	-	134	1 ---	K.YLPGPLQDMFFK.-
1958.8956	1957.8883	1957.9089	-10.50	34	-	48	2 ---	K.EEERQEAALRQQEEER.K
2081.9827	2080.9754	2080.9769	-0.70	7	-	26	2 ---	K.QALGGATKMDGMKMLGGEEK.D + 2 Oxidation (M)
2243.1243	2242.1170	2242.0899	12.1	79	-	98	1 ---	K.EAAEEKAALEQPCGSLTRPK.K
2533.1262	2532.1189	2532.1425	-9.30	100	-	122	0 ---	K.AIPAGCGDEEEEEESILDITVLK.Y

**No match to:** 716.4763, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2445.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2358, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

37. [Q2TB19](#) Mass: 19064 Score: 14 Expect: 1.1e+003 Matches: 9

M-phase phosphoprotein 6 OS=Bos taurus GN=MPHOSPH6 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
934.5098	933.5026	933.5065	-4.28	1	-	8	2 ---	-LMAAEKRTK.L
978.5100	977.5027	977.5038	-1.08	87	-	94	0 ---	K.LMLQMNTK.N
978.5146	977.5073	977.5038	3.61	87	-	94	0 ---	K.LMLQMNTK.N



1032.5238	1031.5165	1031.5135	2.97	30	-	37	1	---	K.QLEEEKK.I
2270.2183	2269.2110	2269.1994	5.14	37	-	54	2	---	K.KIISEEHWYLDLPPELKE.E
2550.1252	2549.1179	2549.1439	-10.17	95	-	116	1	---	K.NKAAEEVEEQVELDVSDDEEMAR.R
2706.2766	2705.2693	2705.2450	9.00	95	-	117	2	---	K.NKAAEEVEEQVELDVSDDEEMARR.Y
3509.5613	3508.5540	3508.6371	-23.67	87	-	116	2	---	K.LMLQMNKKNKAAEEVEEQVELDVSDDEEMAR.R
3525.6025	3524.5952	3524.6320	-10.44	87	-	116	2	---	K.LMLQMNKKNKAAEEVEEQVELDVSDDEEMAR.R + Oxidation (M)
No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2042.0864, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2327.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696									

38. [P80209](#) Mass: 42920 Score: 14 Expect: 1.1e+003 Matches: 6

Cathepsin D OS=Bos taurus GN=CTSD PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide	
963.4734	962.4661	962.4821	-16.64	35	-	43	0	---	K.YATGEPAPVR.Q
1255.5972	1254.5899	1254.6067	-13.36	173	-	183	0	---	K.FDGLGMYAPR.I + Oxidation (M)
1255.6000	1254.5927	1254.6067	-11.13	173	-	183	0	13	K.FDGLGMYAPR.I + Oxidation (M)
1445.7839	1444.7766	1444.7674	6.38	30	-	43	1	---	K.GPISKYATGEPAPVR.Q
1958.8956	1957.8883	1957.9204	-16.36	217	-	234	1	---	K.AQPGGELMLGGTDSKYYR.G + Oxidation (M)
2244.0684	2243.0611	2243.1083	-21.03	371	-	389	2	---	R.YYTVFDRDQNRVLAEAR.L

<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2042.0864, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2254.0896, 2255.1482, 2260.0779, 2272.1736, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2311.0454, 2311.0454, 2319.0945, 2327.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696
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39. [F1MMR6](#) Mass: 45132 Score: 14 Expect: 1.1e+003 Matches: 10

Cathepsin D OS=Bos taurus GN=CTSD PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
963.4734	962.4661	962.4821	-16.64	57	-	65	0 ---	K.YATGEPAVR.Q
1057.6100	1056.6027	1056.6179	-14.38	332	-	341	0 ---	K.VSSLPQVTVK.L
1057.6107	1056.6034	1056.6179	-13.72	332	-	341	0 ---	K.VSSLPQVTVK.L
1255.5972	1254.5899	1254.6067	-13.36	195	-	205	0 ---	K.FDGLGMAYPR.I + Oxidation (M)
1255.6000	1254.5927	1254.6067	-11.13	195	-	205	0 13	K.FDGLGMAYPR.I + Oxidation (M)
1445.7839	1444.7766	1444.7674	6.38	52	-	65	1 ---	K.GPISKYATGEPAVR.Q
1958.8956	1957.8883	1957.9204	-16.36	239	-	256	1 ---	K.AQPGGELMLGGTDSKYR.G + Oxidation (M)
2096.0430	2095.0357	2095.0806	-21.40	37	-	56	1 ---	R.TMSEAMGPVVEHLIAKGPISK.Y
2244.0684	2243.0611	2243.1083	-21.03	393	-	411	2 ---	R.YYTVFDRDQNRVGLAEAAAR.L
2284.1841	2283.1768	2283.1715	2.33	36	-	56	2 ---	R.TMSEAMGPVVEHLIAKGPISK.Y + 2 Oxidation (M)
No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.7251, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1768.8987, 1767.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696								

40. [E1BNB8](#) Mass: 12329 Score: 13 Expect: 1.1e+003 Matches: 5

Uncharacterized protein OS=Bos taurus PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1557.6992	1556.6919	1556.6929	-0.66	100	-	113	0	--- R.VDPADSSLYFCGAR.-
2088.1108	2087.1035	2087.0629	19.5	41	-	57	1	--- R.ALDFQATAVFWYRQFPK.R
2561.1729	2560.1656	2560.2115	-17.93	59	-	82	1	--- R.GLVLMATSNVGS DATYEQQYNKDK.I
2717.2725	2716.2652	2716.3126	-17.45	58	-	82	2	--- K.RGLVLMATSNVGS DATYEQQYNKDK.I
2974.4124	2973.4051	2973.4654	-20.28	54	-	80	2	--- R.QFPKRGVLMATSNVGS DATYEQQYNK.D
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2538, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675,								

3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

41. [E1B9N9](#) Mass: 39688 Score: 13 Expect: 1.1e+003 Matches: 12

Uncharacterized protein OS=Bos taurus GN=WISP3 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
995.4181	994.4108	994.4324	-21.74	208	-	216	0	--- R.TCGMGISNR.V
1103.6257	1102.6184	1102.6281	-8.76	193	-	201	2	--- K.RKCLVQATK.W
1390.6974	1389.6901	1389.7075	-12.50	251	-	262	1	--- K.GKTCQPTFPQVK.A
1643.7688	1642.7615	1642.7985	-22.48	165	-	179	1	--- K.CGLGSSQKQLSTSYK.T
1718.8790	1717.8717	1717.8821	-6.06	251	-	265	2	--- K.GKTCQPTFPQVKAEK.F
1772.8273	1771.8200	1771.7910	16.4	298	-	312	0	--- K.MITVQFDCPNEGFSFK.W
2087.0103	2086.0030	2085.9652	18.1	298	-	314	1	--- K.MITVQFDCPNEGFSFKWK.M
2203.0386	2202.0313	2202.0587	-12.41	160	-	179	2	--- K.TDQSKCGLGSSQKQLSTSYK.T
2701.2820	2700.2747	2700.2135	22.7	266	-	288	0	--- K.FVFSGCASQTQSYRPTFCGICLDK.R
2889.2024	2888.1951	2888.2554	-20.89	19	-	42	2	--- K.GSPAEGAEGHHRRKQFCHWPCQCPR.R
3185.4236	3184.4163	3184.4893	-22.90	263	-	289	2	--- K.AEKVFVSGCASQTQSYRPTFCGICLDK.R
3553.6230	3552.6157	3552.6121	1.02	298	-	325	2	--- K.MITVQFDCPNEGFSFKWKMLWITSVCVQR.N + 2 Oxidation (M)

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1665.8208, 1707.8933, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.8844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1773.3949, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8322, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2894.3218, 2927.2520, 2931.3428, 2959.3505, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

42. [Q5E9I6](#) Mass: 20645 Score: 13 Expect: 1.1e+003 Matches: 9

ADP-ribosylation factor 3 OS=Bos taurus GN=ARF3 PE=2 SV=3

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
992.4958	991.4885	991.4644	24.3	110	-	117	0	--- R.MLAEDEL.R + Oxidation (M)
1061.6168	1060.6095	1060.6063	3.08	11	-	19	2	--- K.SLIGKKEMR.I
1103.6257	1102.6184	1102.6056	11.6	20	-	30	0	--- R.IILMVGLDAAGK.T + Oxidation (M)
1565.7223	1564.7150	1564.7522	-23.76	60	-	73	0	--- K.NISFTVWDVGDQDK.I
1630.8103	1629.8030	1629.7668	22.2	128	-	142	0	--- K.QDLPNAMNAAEITDK.L
1663.8466	1662.8393	1662.8797	-24.26	16	-	30	2	--- K.KEMRILMVGLDAAGK.T + 2 Oxidation (M)
1666.7545	1665.7472	1665.7702	-13.77	105	-	117	1	--- R.EELMRMLAEDEL.R + 2 Oxidation (M)
2423.2439	2422.2366	2422.2274	3.80	128	-	149	1	--- K.QDLPNAMNAAEITDKLGLHSR.H + Oxidation (M)
2438.1724	2437.1651	2437.1775	-5.07	80	-	99	1	--- R.HYFQNTQGLIFVVDNSDRER.V

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 993.5046, 995.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1664.8557, 1665.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8322, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006,

2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2426.5667, 2427.1211, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.1628, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3922, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

43. [F1M1V1](#) Mass: 57360 Score: 13 Expect: 1.1e+003 Matches: 16

Uncharacterized protein OS=Bos taurus GN=ZBTB34 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
978.5100	977.5027	977.5043	-1.58	460	468	0	---	K.NHPGVAEVR.S
978.5146	977.5073	977.5043	3.11	460	468	0	---	K.NHPGVAEVR.S
1149.6057	1148.5984	1148.5859	10.9	190	199	1	---	R.METTPSKALR.S + Oxidation (M)
1170.5497	1169.5424	1169.5434	-0.82	320	329	1	---	R.SMLSCFRGGR.A
1318.6750	1317.6677	1317.6574	7.86	403	413	0	---	R.LHMGITPFVCK.F + Oxidation (M)
1400.6683	1399.6610	1399.6440	12.2	200	211	1	---	R.SSRLEQEGHSDR.G
1630.8103	1629.8030	1629.8007	1.42	382	394	1	---	R.LICICYCGKSFNQK.G
1758.8987	1757.8914	1757.8528	22.0	400	413	1	---	R.HMRLHMGITPFVCK.F + 2 Oxidation (M)
1761.9023	1760.8950	1760.8978	-1.60	67	83	0	---	R.DHSALSTMSGLSISVIK.N + Oxidation (M)
2255.1482	2254.1409	2254.1286	5.49	395	413	2	---	K.GSLDRHMRHMGITPFVCK.F
2272.1736	2271.1663	2271.1279	16.9	106	125	0	---	K.DVVSFLTAASFLQMCVIDK.C
2287.1108	2286.1035	2286.1184	-6.50	395	413	2	---	K.GSLDRHMRHMGITPFVCK.F + 2 Oxidation (M)
2559.1470	2558.1397	2558.1442	-1.75	477	499	1	---	R.TDVYAEQKLENDASASEMALDSR.M + Oxidation (M)
2836.2397	2835.2324	2835.2175	5.28	485	510	1	---	K.LENDASASEMALDSRMEIHTVSDAPD.- + 2 Oxidation (M)
3738.5837	3737.5764	3737.6672	-24.29	477	510	2	---	R.TDVYAEQKLENDASASEMALDSRMEIHTVSDAPD.-
4010.8696	4009.8623	4009.9554	-23.20	1	34	2	---	-.RRRFMSVEMDSSSFIQDFVPEYSSTVLSQLNELR.L

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5797, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308

44. [F1MK70](#) Mass: 59648 Score: 13 Expect: 1.1e+003 Matches: 21

Uncharacterized protein OS=Bos taurus GN=SPATS2 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
820.4053	819.3981	819.4127	-17.84	80	86	0	---	K.EWTVIGK.K
912.5132	911.5060	911.4937	13.5	443	450	1	---	R.EALPGNRR.G
1074.6073	1073.6000	1073.6080	-7.47	235	244	1	---	K.LGSNIEKSVK.D
1074.6100	1073.6027	1073.6080	-4.96	235	244	1	---	K.LGSNIEKSVK.D
1076.6123	1075.6050	1075.6026	2.27	80	88	2	---	K.EWTVIGKKK.N
1193.6041	1192.5968	1192.5836	11.1	345	354	1	---	K.YDEDLGRVAR.F
1240.5974	1239.5901	1239.6169	-21.62	355	364	1	---	R.FTCDVETLKK.N
1309.6780	1308.6707	1308.6417	22.2	262	272	2	---	K.EEMDASIKMK.Q
1318.6750	1317.6677	1317.6823	-11.07	245	255	1	---	K.DLQRCVTSLAR.Y
1328.6600	1327.6527	1327.6521	0.49	365	376	0	---	K.NIDSFQGVSHPK.N
1328.6620	1327.6547	1327.6521	2.00	365	376	0	---	K.NIDSFQGVSHPK.N
1456.7717	1455.7644	1455.7470	12.0	364	376	1	---	K.KNIDSFQGVSHPK.N
1628.7136	1627.7063	1627.7148	-5.21	175	189	0	---	R.TGSMLENGVSDFESR.S
1969.9998	1968.9925	1968.9905	1.03	4	20	2	---	R.QKQKQDSSGFIQDLQSK.T
2087.0103	2086.0030	2085.9940	4.31	451	470	1	---	R.GGQGYRPGPKSSDPTNQGR.H
2243.1243	2242.1170	2242.0951	9.76	450	470	2	---	R.RGGQGYRPGPKSSDPTNQGR.H
2287.1108	2286.1035	2286.0950	3.71	345	363	2	---	K.YDEDLGRVARFTCDVETLKK.K

2455.1553 2454.1480 2454.1346 5.46 504 - 528 0 --- R.GQAHSAGTNGTGASMEPGPPKPSFR.K + Oxidation (M)  
 2706.2766 2705.2693 2705.3007 -11.59 9 - 33 1 --- K.DSSGFIFDLQSKTVLAQGGAFFENMK.E + Oxidation (M)  
 2714.2156 2713.2083 2713.2117 -1.23 479 - 503 1 --- R.NSSWSSSGSRYSQAPPQAPGNTSER.G  
 2975.4084 2974.4011 2974.3908 3.47 271 - 295 2 --- K.MKQAFALQSCCLMDREVALLAEMDK.V + 3 Oxidation (M)  
**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791,  
 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 823.4778, 829.4589, 830.4522, 839.3830,  
 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144,  
 894.8973, 897.5006, 898.4523, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692,  
 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959,  
 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238,  
 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168,  
 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463,  
 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412,  
 1188.5603, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1242.6003,  
 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099,  
 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1319.6589, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202,  
 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142,  
 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633,  
 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343,  
 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7233,  
 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1630.8103, 1635.7697,  
 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790,  
 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089,  
 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268,  
 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634,  
 1906.8156, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998,  
 1967.9565, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735,  
 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771,  
 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457,  
 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2244.0684, 2254.0896,  
 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2327.6050,  
 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2430.0864,  
 2420.5930, 2433.2439, 2426.5667, 2427.1211, 2438.1724, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746,  
 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682,  
 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2712.2104, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351,  
 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439,  
 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2282, 2836.2397, 2862.2927, 2873.2961, 2889.2024,  
 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447,  
 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486,  
 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985,  
 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729,  
 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

45. [FLMY44](#) Mass: 77716 Score: 13 Expect: 1.2e+003 Matches: 22

Uncharacterized protein OS=Bos taurus GN=HNRNPM PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
745.3838	744.3765	744.3589	23.7	404	-	410	0	R.MGPGIDR.I
872.5054	871.4982	871.5127	-16.67	127	-	134	1	K.KAAEVLNK.H
975.5167	974.5094	974.4855	24.6	278	-	285	1	K.MDERALPK.G + Oxidation (M)
1021.5699	1020.5626	1020.5539	8.58	651	-	658	1	R.KACQIFVR.N
1188.5603	1187.5530	1187.5791	-21.95	532	-	543	0	R.MVPAGMGAGLER.M
1264.7130	1263.7057	1263.6863	15.4	73	-	83	0	R.AFITNIPFDVK.W
1450.7223	1449.7150	1449.7001	10.3	57	-	69	1	R.GGNRFEPYANPTK.R
1528.6973	1527.6900	1527.6844	3.70	437	-	449	1	R.MGLVMDRMGSVER.M + 3 Oxidation (M)
1565.7223	1564.7150	1564.7344	-12.39	673	-	685	0	K.FNECGHVLADIK.M
1566.7162	1565.7089	1565.7290	-12.82	472	-	485	1	R.MQGTMERIGSGVER.M + Oxidation (M)
1663.8466	1662.8393	1662.8036	21.5	693	-	707	1	K.GCGVVKFESPEVAER.A
1768.8339	1767.8266	1767.8430	-9.25	711	-	725	2	R.MMNGMKLSGREIDVR.I + 2 Oxidation (M)
1772.8273	1771.8200	1771.8307	-6.01	113	-	127	2	R.GCAVVEFKMEESMKK.A
1895.9634	1894.9561	1894.9861	-15.82	383	-	403	1	R.GEIIAKQGGGGGGSVPGIER.M
2081.9827	2080.9754	2080.9816	-2.95	566	-	583	2	R.MGLERMGANSLERMGLER.M + 2 Oxidation (M)
2178.0471	2177.0398	2177.0432	-1.53	323	-	345	0	K.GIGMGNLGPAGMGMEGIGFGINK.M
2211.1052	2210.0979	2210.0428	24.9	437	-	456	2	R.MGLVMDRMGSVERMSGIER.M
2354.0767	2353.0694	2353.0936	-10.29	571	-	591	2	R.MGANSLERMGLERMGANSLER.M + 2 Oxidation (M)
2392.1462	2391.1389	2391.0981	17.1	450	-	471	1	R.MGSGIERMGLGLDHMASSIER.M + 3 Oxidation (M)
2706.2766	2705.2693	2705.2506	6.92	419	-	443	2	R.MGAGLGHGMDRVGSEIERMGLVMDR.M + 2 Oxidation (M)
2717.2725	2716.2652	2716.3103	-16.60	518	-	543	2	R.MGPAIERMGLGMERMVPMGAGLER.M
3553.6230	3552.6157	3552.6404	-6.94	592	-	627	2	R.MGPAMGPALGAGIERMGLAMGGGGGASFDRAIEMER.G + 2 Oxidation (M)

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791,  
 744.8651, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830,  
 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973,  
 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692,  
 970.5181, 972.4899, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007,  
 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405,  
 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6107, 1061.6168, 1074.6073, 1074.6100,  
 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574,  
 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428,  
 1184.6412, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414,  
 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1256.6000, 1260.6227, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305,  
 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888,  
 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974,  
 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1456.7717, 1462.6630, 1467.7329, 1470.7394,  
 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849,  
 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992,  
 1558.7140, 1563.6658, 1564.3619, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968,  
 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1657.7932, 1664.8557, 1666.7545, 1695.8208,  
 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703,  
 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1769.8287, 1770.3949, 1773.8792, 1774.9180, 1774.9200, 1786.8268,  
 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1906.8195,  
 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565,  
 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735,  
 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771,  
 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831,  
 2199.1499, 2203.0386, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482,  
 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050,



2341.5510, 2353.0518, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2712.2104, 2714.2156, 2716.1953, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

46. [E1BHM6](#) Mass: 206984 Score: 13 Expect: 1.2e+003 Matches: 19

Uncharacterized protein OS=Bos taurus GN=SCN11A PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
957.5774	956.5701	956.5728	-2.85	1002	-	1009	1	--- R.VLEMIPKK.E
1045.5568	1044.5495	1044.5426	6.64	1329	-	1336	2	--- K.KYYNAMKK.L
1057.6100	1056.6027	1056.6291	-24.98	829	-	837	1	13 K.TKIQIALDR.F
1057.6107	1056.6034	1056.6291	-24.32	829	-	837	1	--- K.TKIQIALDR.F
1137.5463	1136.5390	1136.5172	19.2	357	-	365	0	--- R.LMTQDSWEK.L
1145.6348	1144.6275	1144.6492	-18.94	686	-	695	0	--- K.SWPTLSTLIK.I
1172.6156	1171.6083	1171.6085	-0.12	867	-	877	1	--- K.EVTEDPGGKIK.D
1318.6750	1317.6677	1317.6751	-5.57	1330	-	1340	2	--- K.YYNAMKKLGSK.K + Oxidation (M)
1493.7366	1492.7293	1492.7409	-7.78	1316	-	1328	0	--- K.ISGQDVFLETEQK.K
1526.7343	1525.7270	1525.7558	-18.89	45	-	57	0	--- K.AACEPRPQLDLK.V
2008.9971	2007.9898	2007.9917	-0.93	556	-	570	1	--- R.YLVWDCSPWLDIKK.V
2097.0200	2096.0127	2096.0203	-3.63	749	-	764	1	--- R.RWHMGDFYHSFLVVR.I
2284.1841	2283.1768	2283.2144	-16.47	867	-	887	2	--- K.EVTEDPGGKIKDIPLVTGMR.K + Oxidation (M)
2287.1108	2286.1035	2286.0979	2.45	838	-	854	1	--- R.FCRAFCFVHITLHFRR.K
2392.1462	2391.1389	2391.1780	-16.35	1316	-	1335	2	--- K.ISGQDVFLETEQKKYYNAMK.K
2412.0872	2411.0799	2411.1097	-12.35	980	-	1001	1	--- K.KSDAASVLSCESTIGPDFFMR.V + Oxidation (M)
2759.2573	2758.2500	2758.2003	18.0	1256	-	1279	0	--- K.GWMDIMYAAVDSTEEGQQQFEAR.S
3110.7285	3109.7212	3109.6860	11.3	1394	-	1419	1	--- K.HLLESINMAFVVVIFAIKIFALR.Q + Oxidation (M)
3218.3301	3217.3228	3217.2490	22.9	307	-	331	2	--- K.EESTEFKCMGMWGNRACPEQYECR.D + 2 Oxidation (M)

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1661.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0033, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0552, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.0510, 2353.0518, 2354.0772, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2404.0471, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2832.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

47. [Q58DW6](#) Mass: 23636 Score: 13 Expect: 1.2e+003 Matches: 4

Ras-related protein Rab-25 OS=Bos taurus GN=RAB25 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1020.5577	1019.5504	1019.5685	-17.74	53	-	62	0	--- R.TVMGLGTAIAK.A + Oxidation (M)
1057.6100	1056.6027	1056.6179	-14.38	15	-	25	0	13 K.VVLIGESGVGK.T
1057.6107	1056.6034	1056.6179	-13.72	15	-	25	0	--- K.VVLIGESGVGK.T
2082.9966	2081.9893	2081.9767	6.09	35	-	52	1	--- R.NEFSHDSRTTIGVEFSTR.T

**No match to:** 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194,

1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8315, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9988, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5273, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3665.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

48. [Q08D88](#) Mass: 51575 Score: 13 Expect: 1.2e+003 Matches: 13  
Nuclear factor interleukin-3-regulated protein OS=Bos taurus GN=NFIL3 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
805.4606	804.4534	804.4527	0.78	331	-	337	1	--- K.AKAMQIK.V + Oxidation (M)
978.5100	977.5027	977.4825	20.7	55	-	62	6	K.NKSSACRR.K
1045.5568	1044.5495	1044.5424	6.82	83	-	91	2	--- K.NNEAARSR.E
1057.6100	1056.6027	1056.5815	20.1	96	-	104	0	--- R.LNDLVLENK.L
1057.6107	1056.6034	1056.5815	20.8	96	-	104	0	--- R.LNDLVLENK.L
1161.6295	1160.6222	1160.6189	2.83	64	-	72	2	--- K.REFIPDEKK.D
1242.6003	1241.5930	1241.5863	5.45	72	-	80	2	--- K.KDAMYWEKR.R + Oxidation (M)
1475.7633	1474.7560	1474.7263	20.1	11	-	24	1	--- K.KEQASLDAGTNVDK.M
1851.8885	1850.8812	1850.8687	6.79	141	-	156	0	--- K.LSNSSTAVYFQDYQTSK.S
1967.9565	1966.9492	1966.9822	-16.77	215	-	230	1	--- K.FQVIKQEPMELESYAR.E
2110.0061	2108.9988	2108.9837	7.17	333	-	350	1	--- K.AMQIKVEAFDHEFDGTQK.L + Oxidation (M)
2309.0659	2308.0586	2308.1158	-24.76	331	-	350	2	--- K.AKAMQIKVEAFDHEFDGTQK.L + Oxidation (M)
3488.6545	3487.6472	3487.7147	-19.35	126	-	156	1	--- K.FGLISSSTAYAEIQKLSNSTAVYFQDYQTSK.S

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574, 1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1243.6161, 1253.6216, 1255.5972, 1255.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.7693, 1471.7250, 1472.2531, 1474.5243, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1757.4702, 1757.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2227.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5273, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3665.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

49. [Q02691](#) Mass: 27294 Score: 13 Expect: 1.2e+003 Matches: 4  
3-hydroxyacyl-CoA dehydrogenase type-2 OS=Bos taurus GN=HSD17B10 PE=1 SV=3

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
888.4561	887.4488	887.4535	-5.22	185	-	192	0	--- R.DLAPMGIR.V + Oxidation (M)
993.5046	992.4973	992.4895	7.83	1	-	9	1	--- -.MAAACRSVK.G
1057.6100	1056.6027	1056.5927	9.45	70	-	79	0	13 K.DVQAALTLAR.E
1057.6107	1056.6034	1056.5927	10.1	70	-	79	0	--- K.DVQAALTLAR.E

No match to: 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 891.4898, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4899, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5577, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1061.6168, 1074.6073, 1074.6100, 1076.6123, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 1113.5486, 1120.5498, 1122.5322, 1123.5986, 1128.5724, 1129.5924, 1134.3574,

1137.5463, 1145.6348, 1149.6057, 1153.6460, 1156.4957, 1161.6295, 1162.6174, 1164.1815, 1170.5497, 1172.6156, 1177.6410, 1180.6428, 1184.6412, 1188.5603, 1193.6041, 1206.5107, 1209.5889, 1211.6099, 1212.6160, 1215.6743, 1216.7081, 1219.6886, 1227.6234, 1229.7098, 1234.6414, 1240.5974, 1242.6003, 1243.6161, 1253.6216, 1255.5972, 1256.6000, 1260.6227, 1264.7130, 1265.7064, 1269.6498, 1270.6575, 1273.6556, 1277.6305, 1286.6099, 1289.6875, 1293.6401, 1303.6455, 1304.6677, 1307.6788, 1309.6780, 1318.6750, 1319.6589, 1328.6600, 1328.6620, 1331.7888, 1333.7644, 1336.0798, 1336.6155, 1350.6853, 1351.7202, 1356.5811, 1359.1302, 1359.6246, 1365.6489, 1374.7588, 1383.7037, 1390.6974, 1393.7992, 1400.6683, 1401.6989, 1414.8191, 1429.3142, 1436.7889, 1444.7122, 1445.7839, 1450.7223, 1456.7717, 1462.6630, 1467.7329, 1470.7394, 1471.2693, 1471.7250, 1472.2531, 1474.5243, 1475.7633, 1483.7141, 1488.5333, 1488.7194, 1493.7366, 1502.5601, 1513.7441, 1514.6849, 1516.6807, 1517.6437, 1518.7053, 1523.7611, 1526.7343, 1528.6973, 1530.6893, 1536.8230, 1540.7114, 1551.7063, 1553.7252, 1554.7474, 1557.6992, 1558.7140, 1563.6658, 1564.3619, 1565.7223, 1566.7162, 1572.7062, 1580.8400, 1580.8423, 1586.8090, 1597.7913, 1599.8337, 1601.8030, 1614.8046, 1616.7968, 1628.7136, 1630.8103, 1635.7697, 1642.7682, 1643.7688, 1644.7915, 1646.8154, 1651.7681, 1657.7932, 1663.8466, 1664.8557, 1666.7545, 1695.8208, 1707.8933, 1718.8790, 1721.9192, 1722.9375, 1728.8976, 1730.9116, 1732.2391, 1734.1844, 1739.7894, 1743.8966, 1755.2666, 1755.7703, 1757.4702, 1758.9089, 1758.4524, 1758.8987, 1761.9023, 1765.7578, 1768.8339, 1769.8287, 1770.3949, 1772.8273, 1773.8792, 1774.9180, 1774.9200, 1786.8268, 1787.8239, 1809.0499, 1810.0303, 1829.8895, 1830.8380, 1833.3470, 1833.8501, 1851.8885, 1852.0399, 1862.9515, 1881.7703, 1895.9634, 1906.8195, 1908.8512, 1920.7972, 1932.0050, 1936.9479, 1939.8563, 1940.8103, 1943.8293, 1954.8351, 1956.8574, 1958.8956, 1965.7998, 1967.9565, 1969.9998, 1979.8927, 1981.3531, 1982.8179, 1995.8232, 1997.8312, 2003.8595, 2008.9971, 2011.8464, 2015.9408, 2019.8779, 2025.8735, 2031.9606, 2047.9397, 2062.9578, 2067.0020, 2076.8943, 2081.9827, 2082.9966, 2087.0103, 2088.1108, 2089.1162, 2096.0430, 2097.0200, 2108.9771, 2110.0061, 2139.0991, 2140.0918, 2143.1006, 2144.0718, 2149.8516, 2160.0554, 2174.0378, 2178.0471, 2179.0574, 2188.0547, 2191.0457, 2198.1831, 2199.1499, 2203.0386, 2211.1052, 2223.1582, 2225.1470, 2226.1042, 2228.0725, 2238.1086, 2239.1538, 2243.1243, 2244.0684, 2254.0896, 2255.1482, 2260.0779, 2270.2183, 2272.1736, 2284.1841, 2287.1108, 2307.0549, 2309.0659, 2310.0798, 2310.5271, 2311.0454, 2319.0945, 2337.6050, 2341.5510, 2353.0518, 2354.0767, 2355.0564, 2371.0581, 2383.9592, 2388.0437, 2392.1462, 2404.0471, 2412.0872, 2419.5879, 2420.0864, 2420.5930, 2423.2439, 2426.5667, 2427.1211, 2438.1724, 2455.1553, 2458.1648, 2459.1794, 2478.1587, 2516.1133, 2533.1262, 2542.1650, 2546.1746, 2549.1316, 2550.1252, 2559.1470, 2561.1729, 2562.1765, 2567.1514, 2572.1523, 2574.2678, 2576.1628, 2583.1218, 2587.2722, 2604.1682, 2612.1438, 2653.7173, 2655.1897, 2671.1787, 2687.1833, 2701.2820, 2706.2766, 2712.2104, 2714.2156, 2716.1953, 2717.2725, 2725.2354, 2729.1675, 2729.1675, 2739.2351, 2743.2642, 2745.2900, 2754.2197, 2755.2358, 2759.2573, 2769.2219, 2771.2437, 2776.2644, 2785.2388, 2786.2617, 2787.2400, 2793.2439, 2801.2378, 2803.2302, 2809.2549, 2815.2153, 2817.2322, 2819.2236, 2830.2788, 2833.2280, 2836.2397, 2862.2927, 2873.2961, 2889.2024, 2894.3218, 2927.2520, 2931.3428, 2955.3005, 2974.4124, 2975.4084, 2990.3921, 3006.3206, 3011.2810, 3020.3557, 3021.2412, 3035.3281, 3053.3447, 3062.2456, 3086.4507, 3091.2622, 3103.3140, 3110.7285, 3113.8591, 3130.3557, 3140.4265, 3144.3657, 3159.4985, 3173.5386, 3174.5486, 3185.4236, 3218.3301, 3259.3625, 3312.3267, 3331.4678, 3347.4761, 3363.4788, 3390.4675, 3431.4570, 3447.4666, 3463.4895, 3485.6985, 3488.6545, 3489.6521, 3493.0195, 3494.5571, 3504.6423, 3509.5613, 3525.6025, 3538.4521, 3553.6230, 3579.5403, 3648.1956, 3655.4729, 3664.7500, 3695.6177, 3712.5720, 3738.5837, 3816.7043, 3937.8308, 4010.8696

50. [F1MEV2](#) Mass: 44049 Score: 13 Expect: 1.2e+003 Matches: 18

Uncharacterized protein OS=Bos taurus GN=K1AA0930 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
891.4898	890.4825	890.4644	20.4	296	-	302	1	--- R.NRITEMK.K
1076.6123	1075.6050	1075.5808	22.5	202	-	211	1	--- R.VSVAARMAQK.M + Oxidation (M)
1234.6414	1233.6341	1233.6466	-10.09	118	-	128	1	--- K.RSQQVFASPSK.H
1318.6750	1317.6677	1317.6565	8.52	267	-	278	0	--- R.VTSFSTPTPTPER.N
1336.6155	1335.6082	1335.5951	9.81	219	-	228	1	--- K.YSNMEFVRMK.G + 2 Oxidation (M)
1374.7588	1373.7515	1373.7276	17.4	107	-	118	2	--- R.ADGGDIHIHRRK.S
1470.7394	1469.7321	1469.7449	-8.70	28	-	38	2	--- R.QDDMLFYVRKK.L
1553.7252	1552.7179	1552.6906	17.6	303	-	315	1	--- K.KSHSANDSEEFPR.E
1707.8933	1706.8860	1706.8886	-1.51	197	-	211	2	--- K.VYDNRVSVARMAQK.M
1773.8792	1772.8719	1772.8516	11.5	119	-	134	1	--- R.SQQVFASPSKHPMDSK.G
1787.8239	1786.8166	1786.8494	-18.37	219	-	233	2	--- K.YSNMEFVRMKGPQK.G + Oxidation (M)
1936.9479	1935.9406	1935.9699	-15.12	202	-	218	2	--- R.VSVAARMAQKMSFGFYK.Y + Oxidation (M)
2015.9408	2014.9335	2014.9362	-1.31	9	-	23	0	--- R.IVFWTWMFSTYFMEK.W
2031.9606	2030.9533	2030.9311	11.0	9	-	23	0	--- R.IVFWTWMFSTYFMEK.W + Oxidation (M)
2047.9397	2046.9324	2046.9260	3.14	9	-	23	0	--- R.IVFWTWMFSTYFMEK.W + 2 Oxidation (M)
2412.0872	2411.0799	2411.0748	2.11	208	-	226	2	--- R.MAQKMSFGFYKYSNMEFVR.M + 3 Oxidation (M)
2542.1650	2541.1577	2541.2014	-17.18	9	-	27	1	--- R.IVFWTWMFSTYFMEKWAPR.Q + Oxidation (M)
2576.1628	2575.1555	2575.1730	-6.79	95	-	116	1	--- K.LDYMVTCACVCTRADGGDIHHR.K + Oxidation (M)
<b>No match to:</b> 716.4763, 723.4098, 724.2417, 725.2533, 726.3622, 728.3046, 729.4749, 734.4570, 736.3904, 737.4152, 738.3791, 744.8651, 745.3838, 747.4550, 768.3673, 788.4571, 801.4262, 805.4606, 813.4481, 814.4558, 820.4053, 823.4778, 829.4589, 830.4522, 839.3830, 842.5110, 857.4382, 860.4207, 865.4518, 870.4165, 872.5054, 880.4424, 882.4292, 887.4245, 887.9669, 888.4561, 894.4144, 894.8973, 897.5006, 898.4523, 912.5132, 913.5293, 925.4620, 927.4981, 931.4992, 934.5098, 957.5774, 960.5294, 961.4949, 963.4734, 965.4692, 970.5181, 972.4889, 975.5167, 976.5063, 977.5212, 978.5100, 978.5146, 983.6283, 992.4958, 993.5046, 995.4181, 998.5911, 1000.5959, 1002.5007, 1006.5014, 1011.5474, 1012.5447, 1014.5485, 1020.5571, 1021.5699, 1024.5516, 1027.5438, 1028.5397, 1030.5978, 1032.5238, 1036.5260, 1037.5405, 1039.5641, 1040.5908, 1042.5388, 1043.5178, 1045.5568, 1046.6018, 1056.5515, 1057.6100, 1057.6100, 1061.6168, 1074.6073, 1074.6100, 1102.6007, 1103.6257, 1105.6136, 1107.1058, 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Variable modifications : [Oxidation \(M\)](#)  
Mass values : Monoisotopic  
Protein Mass : Unrestricted  
Peptide Mass Tolerance :  $\pm 25$  ppm  
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Max Missed Cleavages : 2  
Instrument type : MALDI-TOF-TOF

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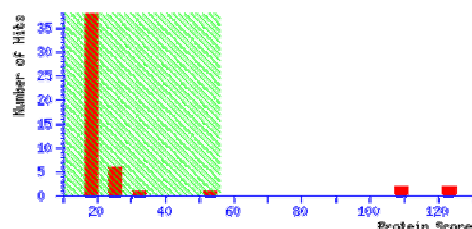
Mascot: <http://www.matrixscience.com/>

# MASCOT SEARCH RESULTS

User : 2c\_(G5@11273\_12Mar2012)  
 Email : proteomics@ipatimup.pt  
 Search title : Project: Proteomica, Spot Set: Proteomica\12Jan2012, Label: G5, Spot Id: 221892, Peak List Id: 435350, MS Job Run Id: 303  
 MS data file : C:\Documents and Settings\Administrator\Desktop\xu\xu\xu\Proteomica\12Jan2012\ppw\_G5\_146796935705.txt  
 Database : OrganismSpecie Bos\_taurus\_Reference\_Proteome\_2016\_06 (24214 sequences; 12839866 residues)  
 Timestamp : 8 Jul 2016 at 10:10:07 GMT  
 Warning : **A Peptide summary report will usually give a much clearer picture of MS/MS search results.**  
 Top Score : 123 for **P46193**, Annexin A1 OS=Bos taurus GN=ANXA1 PE=1 SV=2

## Mascot Score Histogram

Protein score is  $-10 \cdot \log(P)$ , where P is the probability that the observed match is a random event.  
 Protein scores greater than 56 are significant ( $p < 0.05$ ).  
 Protein scores are derived from ions scores as a non-probabilistic basis for ranking protein hits.



## Protein Summary Report

Format As  [Help](#)

Significance threshold  $p < 0.05$  Max. number of hits

Preferred taxonomy

## Index

	Accession	Mass	Score	Description
1.	<a href="#">P46193</a>	39212	123	Annexin A1 OS=Bos taurus GN=ANXA1 PE=1 SV=2
2.	<a href="#">F1N650</a>	39240	123	Annexin OS=Bos taurus GN=ANXA1 PE=1 SV=1
3.	<a href="#">P04272</a>	38873	109	Annexin A2 OS=Bos taurus GN=ANXA2 PE=1 SV=2
4.	<a href="#">F10096</a>	36073	107	Glyceraldehyde-3-phosphate dehydrogenase OS=Bos taurus GN=GAPDH PE=1 SV=4
5.	<a href="#">Q2H760</a>	36041	50	Heterogeneous nuclear ribonucleoproteins A2/B1 OS=Bos taurus GN=HNRNPA2B1 PE=2 SV=1
6.	<a href="#">E1BB48</a>	65458	34	Polypeptide N-acetylgalactosaminyltransferase OS=Bos taurus GN=GALNT2 PE=3 SV=2
7.	<a href="#">P02687</a>	18312	26	Myelin basic protein OS=Bos taurus GN=MBP PE=1 SV=1
8.	<a href="#">F1NON9</a>	36314	26	Uncharacterized protein OS=Bos taurus PE=4 SV=1
9.	<a href="#">F6QBPI</a>	18443	26	Myelin basic protein OS=Bos taurus GN=MBP PE=4 SV=1
10.	<a href="#">G3M2A4</a>	83962	25	Uncharacterized protein OS=Bos taurus GN=CXorf23 PE=4 SV=1
11.	<a href="#">Q3T087</a>	20468	24	60S ribosomal protein L11 OS=Bos taurus GN=RPL11 PE=2 SV=3
12.	<a href="#">F1MI98</a>	52161	23	Uncharacterized protein OS=Bos taurus GN=KRT36 PE=3 SV=2
13.	<a href="#">Q58DL0</a>	26401	22	Chromosome X open reading frame 23 OS=Bos taurus GN=CXorf23 PE=2 SV=1
14.	<a href="#">Q3SZ43</a>	16409	22	Ubiquitin-conjugating enzyme E2 variant 2 OS=Bos taurus GN=UBE2V2 PE=2 SV=3
15.	<a href="#">E1BE64</a>	104496	22	Uncharacterized protein OS=Bos taurus GN=TSGA10 PE=4 SV=2
16.	<a href="#">Q2K1J9</a>	18752	21	Transcription elongation factor A protein-like 1 OS=Bos taurus GN=TCEAL1 PE=2 SV=1
17.	<a href="#">G3MYE2</a>	34779	21	Uncharacterized protein OS=Bos taurus PE=3 SV=1
18.	<a href="#">E1BJY0</a>	22866	20	Guanylyl cyclase-activating protein 2 OS=Bos taurus GN=GUCA1B PE=4 SV=2
19.	<a href="#">F1MTD8</a>	31878	20	Tyrosine-protein kinase OS=Bos taurus GN=HCK PE=3 SV=1
20.	<a href="#">Q2YDN4</a>	58176	20	Coiled-coil domain-containing protein 105 OS=Bos taurus GN=CCDC105 PE=2 SV=1
21.	<a href="#">F1MNJ2</a>	65953	20	Signal recognition particle receptor subunit alpha OS=Bos taurus GN=SRPRA PE=4 SV=1
22.	<a href="#">Q3MHN7</a>	69222	20	Endonuclease 8-like 3 OS=Bos taurus GN=NEIL3 PE=2 SV=2
23.	<a href="#">G3M2K6</a>	94689	20	Uncharacterized protein OS=Bos taurus GN=MAP7D3 PE=4 SV=1
24.	<a href="#">P02548</a>	62665	19	Neurofilament light polypeptide OS=Bos taurus GN=NEFL PE=1 SV=3
25.	<a href="#">E1BF55</a>	69481	19	Uncharacterized protein OS=Bos taurus GN=MAP7D2 PE=4 SV=2
26.	<a href="#">E1BGS4</a>	63649	19	Uncharacterized protein OS=Bos taurus GN=TXLNA PE=4 SV=1
27.	<a href="#">Q32LI7</a>	30313	19	Putative uncharacterized protein MGC133880 OS=Bos taurus GN=MGC133880 PE=2 SV=1
28.	<a href="#">Q8MKH7</a>	29800	19	Troponin T fast skeletal muscle type OS=Bos taurus GN=Tnnt3 PE=2 SV=1
29.	<a href="#">G5E6L5</a>	47201	19	Centrosomal protein of 290 kDa OS=Bos taurus GN=CEP290 PE=4 SV=1
30.	<a href="#">F1MJU1</a>	14824	19	Histone H2B OS=Bos taurus PE=3 SV=2
31.	<a href="#">G3MYI2</a>	118628	19	Uncharacterized protein OS=Bos taurus PE=4 SV=1
32.	<a href="#">E1BP00</a>	59905	19	PC4 and SFRS1-interacting protein OS=Bos taurus GN=PSIP1 PE=4 SV=2
33.	<a href="#">A4FV84</a>	27623	19	mRNA turnover protein 4 homolog OS=Bos taurus GN=MRTO4 PE=2 SV=1
34.	<a href="#">G8JL04</a>	5563	19	Uncharacterized protein OS=Bos taurus PE=4 SV=1
35.	<a href="#">Q02366</a>	15044	19	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 6 OS=Bos taurus GN=NDUFA6 PE=1 SV=2
36.	<a href="#">G3M291</a>	14728	19	Histone H2B OS=Bos taurus PE=3 SV=1
37.	<a href="#">F1MEY1</a>	167004	19	Uncharacterized protein OS=Bos taurus GN=ATAD2B PE=4 SV=2
38.	<a href="#">F1N469</a>	96792	19	Uncharacterized protein OS=Bos taurus GN=MAP7D3 PE=4 SV=2
39.	<a href="#">F1MTS2</a>	9764	19	Uncharacterized protein OS=Bos taurus PE=3 SV=2
40.	<a href="#">F1MHH2</a>	64063	19	Outer dense fiber protein 2-like OS=Bos taurus GN=ODF2L PE=4 SV=2
41.	<a href="#">E1BPQ8</a>	60653	19	Uncharacterized protein OS=Bos taurus GN=CDC73 PE=4 SV=1
42.	<a href="#">Q2TA00</a>	49021	18	Coiled-coil domain-containing protein 83 OS=Bos taurus GN=CCDC83 PE=2 SV=1
43.	<a href="#">E1B992</a>	72756	18	Uncharacterized protein OS=Bos taurus PE=4 SV=2
44.	<a href="#">F1MB20</a>	119646	18	Oral-facial-digital syndrome 1 isoform 1 OS=Bos taurus GN=OFD1 PE=2 SV=2
45.	<a href="#">E1B142</a>	127633	18	Uncharacterized protein OS=Bos taurus GN=CCDC158 PE=4 SV=2
46.	<a href="#">G3MWK4</a>	30649	18	Uncharacterized protein OS=Bos taurus GN=SRSF12 PE=4 SV=1
47.	<a href="#">E1BLN1</a>	117436	18	Uncharacterized protein OS=Bos taurus GN=SYCP1 PE=4 SV=1
48.	<a href="#">G3N2Q8</a>	20708	18	Uncharacterized protein OS=Bos taurus GN=ISG20 PE=4 SV=1

49. [Q32L31](#) 23052 18 High mobility group protein B3 OS=Bos taurus GN=HMGB3 PE=2 SV=2  
 50. [I7FVA7](#) 23052 18 HMGB3 transcript variant 1/2 OS=Bos taurus GN=HMGB3 PE=4 SV=1

## Results List

1.	<a href="#">P46193</a>	Mass: 39212	Score: 123	Expect: 1.2e-008	Matches: 27			
Annexin A1 OS=Bos taurus GN=ANXA1 PE=1 SV=2								
Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
767.4740	766.4667	766.4813	-19.07	293	- 298	1	---	R.HKTLIR.I
772.4178	771.4105	771.4028	10.1	229	- 234	0	---	R.SYPHLR.R
788.4225	787.4152	787.4300	-18.81	145	- 150	1	---	R.TNREIR.E
822.4321	821.4249	821.4283	-4.18	82	- 88	0	---	K.AAYLQEK.G
908.4577	907.4504	907.4399	11.6	205	- 212	0	---	R.ALYEAGER.R
928.5031	927.4958	927.5039	-8.72	229	- 235	1	---	R.SYPHLRR.V
940.4773	939.4700	939.4735	-3.75	2	- 9	0	---	M.AMVSEFLK.Q + Oxidation (M)
1016.5522	1015.5449	1015.5484	-3.47	338	- 346	1	---	K.ILVALCGRD.-
1064.5358	1063.5285	1063.5410	-11.75	205	- 213	1	---	R.ALYEAGERR.K
1071.5361	1070.5288	1070.5140	13.8	1	- 9	0	---	-.MAMVSEFLK.Q + Oxidation (M)
1092.6000	1091.5927	1091.6087	-14.64	155	- 162	2	21	R.VYREELKR.D
1092.6002	1091.5929	1091.6087	-14.46	155	- 162	2	---	R.VYREELKR.D
1276.5977	1275.5904	1275.6095	-14.96	114	- 124	0	---	K.TPAQFDAEELR.A
1276.6000	1275.5927	1275.6095	-13.16	114	- 124	0	76	K.TPAQFDAEELR.A
1400.6588	1399.6515	1399.6554	-2.77	240	- 250	2	---	K.YSKYSKDHMMNK.V
1416.6047	1415.5974	1415.6214	-16.90	270	- 281	0	---	K.CATSQPMFFAEK.L
1677.8074	1676.8001	1676.8192	-11.36	114	- 128	1	---	K.TPAQFDAEELRAAMK.G
1703.8214	1702.8141	1702.8373	-13.63	129	- 144	0	---	K.GLGTDIEDTLNEILASR.T
1719.8075	1718.8002	1718.7595	23.7	189	- 204	0	---	R.SEELAVNDDLADSDAR.A
1723.8743	1722.8670	1722.8862	-11.13	318	- 332	0	---	K.LYGISLCAQLDETK.G
1826.8450	1825.8377	1825.8522	-7.95	10	- 23	0	---	K.QAWFIENEEQEYIK.T
2047.9097	2046.9024	2046.9090	-3.21	186	- 204	1	---	K.GDRSEELAVNDDLADSDAR.A
2155.0667	2154.0594	2154.0633	-1.80	10	- 26	1	---	K.QAWFIENEEQEYIKTVK.G
2166.0911	2165.0838	2165.1184	-15.97	295	- 312	2	---	K.TLIRIMVSRSEIDMNDIK.A + 2 Oxidation (M)
2414.1833	2413.1760	2413.1550	8.71	30	- 53	0	---	K.GGPGSAVSPYPTFNPSSDVEALHK.A
2686.3572	2685.3499	2685.3035	17.3	27	- 53	1	---	K.GSKGGPGSAVSPYPTFNPSSDVEALHK.A
2788.3362	2787.3289	2787.3645	-12.78	258	- 281	2	---	K.GDIEKCLTVIVKCATSQPMFFAEK.L + Oxidation (M)
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 768.3865, 770.3671, 779.4436, 784.3415, 787.2366, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 913.5685, 919.5024, 925.5089, 927.4999, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1406.7207, 1410.6736, 1411.6647, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8136, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1721.8296, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2159.0752, 2160.0703, 2161.0813, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

2.	<a href="#">F1N650</a>	Mass: 39240	Score: 123	Expect: 1.2e-008	Matches: 27			
Annexin OS=Bos taurus GN=ANXA1 PE=1 SV=1								
Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
767.4740	766.4667	766.4813	-19.07	293	- 298	1	---	R.HKTLIR.I
772.4178	771.4105	771.4028	10.1	229	- 234	0	---	R.SYPHLR.R
788.4225	787.4152	787.4300	-18.81	145	- 150	1	---	R.TNREIR.E
822.4321	821.4249	821.4283	-4.18	82	- 88	0	---	K.AAYLQEK.G
908.4577	907.4504	907.4399	11.6	205	- 212	0	---	R.ALYEAGER.R
928.5031	927.4958	927.5039	-8.72	229	- 235	1	---	R.SYPHLRR.V
940.4773	939.4700	939.4735	-3.75	2	- 9	0	---	M.AMVSEFLK.Q + Oxidation (M)
1016.5522	1015.5449	1015.5484	-3.47	338	- 346	1	---	K.ILVALCGRD.-
1064.5358	1063.5285	1063.5410	-11.75	205	- 213	1	---	R.ALYEAGERR.K
1071.5361	1070.5288	1070.5140	13.8	1	- 9	0	---	-.MAMVSEFLK.Q + Oxidation (M)
1092.6000	1091.5927	1091.6087	-14.64	155	- 162	2	21	R.VYREELKR.D
1092.6002	1091.5929	1091.6087	-14.46	155	- 162	2	---	R.VYREELKR.D
1276.5977	1275.5904	1275.6095	-14.96	114	- 124	0	---	K.TPAQFDAEELR.A
1276.6000	1275.5927	1275.6095	-13.16	114	- 124	0	76	K.TPAQFDAEELR.A
1400.6588	1399.6515	1399.6554	-2.77	240	- 250	2	---	K.YSKYSKDHMMNK.V
1416.6047	1415.5974	1415.6214	-16.90	270	- 281	0	---	K.CATSQPMFFAEK.L
1677.8074	1676.8001	1676.8192	-11.36	114	- 128	1	---	K.TPAQFDAEELRAAMK.G



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1703.8214 1702.8141 1702.8373 -13.63 129 - 144 0 --- K.GLGTDDEDTLNEILASR.T
1719.8075 1718.8002 1718.7595 23.7 189 - 204 0 --- R.SEELAVNDLADSDAR.A
1723.8743 1722.8670 1722.8862 -11.13 318 - 332 0 --- K.LYGISLCAQLIDETK.G
1826.8450 1825.8377 1825.8522 -7.95 10 - 23 0 --- K.QAWFIENEQEYIK.T
2047.9097 2046.9024 2046.9090 -3.21 186 - 204 1 --- K.GDRSEELAVNDLADSDAR.A
2155.0667 2154.0594 2154.0633 -1.80 10 - 26 1 --- K.QAWFIENEQEYIKTVK.G
2166.0911 2165.0838 2165.1184 -15.97 295 - 312 2 --- K.TLIRIMVSRSEIDMNDIK.A + 2 Oxidation (M)
2414.1833 2413.1760 2413.1550 8.71 30 - 53 0 --- K.GGPGSAVSPYPTFPNPSDVEALHK.A
2686.3572 2685.3499 2685.3035 17.3 27 - 53 1 --- K.GSKGGPGSAVSPYPTFPNPSDVEALHK.A
2788.3362 2787.3289 2787.3645 -12.78 258 - 281 2 --- K.GDIEKCLTVIVKCATSQPMFFAEK.L + Oxidation (M)
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419,
752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 768.3865, 770.3671, 779.4436, 784.3415, 787.2366, 790.4196,
795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 829.4457, 837.4396, 840.4623, 842.5109,
854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 913.5685,
919.5024, 925.5089, 927.4999, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240,
981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1018.5189, 1021.5313, 1024.5028,
1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1073.5377, 1079.5398,
1083.4637, 1086.4774, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819,
1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008,
1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699,
1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922,
1258.6344, 1268.6414, 1271.6490, 1275.6388, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025,
1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067,
1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1406.7207, 1410.6736, 1411.6647,
1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375,
1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987,
1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277,
1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852,
1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969,
1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672,
1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1721.8296, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975,
1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339,
1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494,
1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872,
1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869,
2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2059.0122, 2064.9746, 2070.9209,
2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510,
2159.0752, 2160.0703, 2161.0813, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464,
2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991,
2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947,
2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907,
2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310,
2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2963.6167, 3056.4641,
3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

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3. [P04272](#) Mass: 38873 Score: 109 Expect: 3e-007 Matches: 37

Annexin A2 OS=Bos taurus GN=ANXA2 PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
743.4729	742.4656	742.4701	-6.04	285	- 290	1	---	R.DKVLIR.I
745.4483	744.4410	744.4568	-21.13	170	- 176	0	---	K.LMVALAK.G
756.3716	755.3643	755.3524	15.8	274	- 279	0	---	R.LYDSMK.G
779.4436	778.4363	778.4337	3.35	303	- 308	1	---	K.IRSEFK.K
821.4247	820.4174	820.4000	21.2	296	- 302	0	---	R.SEVDMLK.I
880.4412	879.4339	879.4338	0.17	197	- 204	0	---	R.DLYDAGVK.R
960.4840	959.4767	959.4786	-2.01	146	- 152	1	---	R.VYKEMYK.T
1035.5203	1034.5130	1034.5219	-8.56	213	- 220	0	---	K.WISIMTER.S
1051.5074	1050.5001	1050.5168	-15.87	213	- 220	0	---	K.WISIMTER.S + Oxidation (M)
1086.4774	1085.4701	1085.4778	-7.04	29	- 37	0	---	K.AYTNDFAER.D
1111.5398	1110.5325	1110.5458	-11.95	69	- 77	0	---	R.QDIAFAYQR.R
1111.5400	1110.5327	1110.5458	-11.77	69	- 77	0	63	R.QDIAFAYQR.R
1222.5789	1221.5716	1221.5877	-13.17	105	- 115	0	---	K.TPAQYDASELK.A
1244.6069	1243.5996	1243.6156	-12.88	136	- 145	0	---	R.TNQELQEI.NR.V
1271.6490	1270.6417	1270.6340	6.11	274	- 284	2	---	R.LYDSMKKGTR.D + Oxidation (M)
1421.6632	1420.6559	1420.6874	-22.17	314	- 324	0	---	K.SLYYYIQDQTK.G
1432.6718	1431.6645	1431.6591	3.75	234	- 245	0	---	K.SYSPYDMLSEIK.K
1439.7164	1438.7091	1438.7160	-4.76	291	- 302	1	---	R.IMVSRSEVDMLK.I + 2 Oxidation (M)
1542.8290	1541.8217	1541.8413	-12.71	50	- 63	0	---	K.GVDEVTVINILNTR.S
1560.7551	1559.7478	1559.7541	-4.03	234	- 246	1	---	K.SYSPYDMLSEIKK.E
1576.7402	1575.7329	1575.7490	-10.22	234	- 246	1	---	K.SYSPYDMLSEIKK.E + Oxidation (M)
1581.8373	1580.8300	1580.8232	4.32	296	- 308	2	---	R.SEVDMLKIRSEFK.K
1639.8157	1638.8084	1638.7923	9.85	105	- 119	1	---	K.TPAQYDASELKASMK.G
1725.8090	1724.8017	1724.8230	-12.34	64	- 77	1	---	R.SNEQRQDIAFAYQR.R
1771.9686	1770.9613	1770.9840	-12.78	48	- 63	1	---	K.TKGDEVTVINILNTR.S
1777.8727	1776.8654	1776.8564	5.10	120	- 135	0	---	K.GLGTDSDSLIEIICSR.T
1797.8339	1796.8266	1796.8429	-9.03	153	- 168	1	---	K.TDLEKIDVSDTSGDFR.K
1844.8785	1843.8712	1843.8952	-13.00	11	- 28	0	---	K.LSLEGDHSTPPSAYGSVK.A
1851.9031	1850.8958	1850.9124	-8.95	232	- 246	2	---	R.YKSYSPYDMLSEIKK.E
1908.8663	1907.8590	1907.8748	-8.29	180	- 196	0	---	R.AEDGSVIDYELIDQDAR.D
1916.9475	1915.9402	1915.9601	-10.36	234	- 249	2	---	K.SYSPYDMLSEIKKEVK.G
1925.9336	1924.9263	1924.9378	-5.96	153	- 169	2	---	K.TDLEKIDVSDTSGDFR.L
1932.9833	1931.9760	1931.9550	10.9	234	- 249	2	---	K.SYSPYDMLSEIKKEVK.G + Oxidation (M)
2012.9506	2011.9433	2011.9527	-4.66	314	- 329	1	---	K.SLYYYIQDQTKGQYQK.A
2064.9746	2063.9673	2063.9760	-4.18	179	- 196	1	---	R.AEDGSVIDYELIDQDAR.D
2155.0667	2154.0594	2154.0593	0.07	29	- 47	1	---	K.AYTNDFAERDALNIETAIK.T
2211.1077	2210.1004	2210.0559	20.2	116	- 135	1	---	K.ASMKGLGTDSDSLIEIICSR.T + Oxidation (M)

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 747.4419, 752.3972, 754.3827, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313,

1024.5028,	1025.5192,	1029.5330,	1032.5870,	1033.5739,	1045.5564,	1046.5759,	1056.5415,	1057.6005,	1064.5358,	1071.5361,	1073.5377,
1079.5398,	1083.4637,	1092.6000,	1092.6002,	1094.5596,	1096.5302,	1106.5431,	1110.5461,	1115.5790,	1118.5620,	1120.5724,	1123.5819,
1128.5537,	1132.5682,	1134.5841,	1135.5942,	1137.5565,	1143.5844,	1145.6155,	1149.5597,	1153.5929,	1158.6288,	1163.5771,	1173.6008,
1175.5867,	1177.6178,	1178.6053,	1179.5962,	1181.6432,	1192.5721,	1199.6315,	1203.5826,	1211.5984,	1215.6246,	1216.6786,	1221.5699,
1227.6271,	1228.6411,	1229.6412,	1231.6102,	1233.6571,	1237.6270,	1238.5917,	1248.5958,	1250.6042,	1255.5922,	1258.6344,	1268.6414,
1275.6388,	1276.5977,	1276.6000,	1285.5864,	1294.6315,	1299.6810,	1300.6566,	1309.6340,	1320.6268,	1328.6292,	1333.7025,	1336.6038,
1338.6589,	1341.6488,	1343.6613,	1345.6910,	1349.6838,	1350.6704,	1352.6350,	1355.6870,	1357.7130,	1358.6704,	1369.7067,	1371.7366,
1374.6705,	1377.6100,	1377.6146,	1384.7109,	1386.7134,	1390.6848,	1393.7169,	1399.6119,	1400.6588,	1406.7207,	1410.6736,	1411.6647,
1416.6047,	1418.6714,	1425.7395,	1426.6846,	1427.7076,	1430.7102,	1434.6552,	1438.6991,	1443.7589,	1444.7375,	1445.7306,	1454.6836,
1461.7990,	1472.7026,	1475.7024,	1485.6906,	1489.7172,	1490.7058,	1493.7157,	1510.7383,	1515.7393,	1523.6987,	1524.7383,	1527.7585,
1529.7466,	1530.6902,	1531.6953,	1537.7804,	1538.7736,	1539.7621,	1541.7805,	1549.6758,	1553.7277,	1555.7928,	1556.7874,	1563.7314,
1568.7372,	1570.8015,	1572.8151,	1577.7395,	1578.7518,	1591.7852,	1600.8068,	1603.8092,	1604.8136,	1606.8130,	1608.7599,	1613.7793,
1615.8575,	1615.8600,	1624.7632,	1628.7653,	1633.7913,	1634.7969,	1635.7941,	1643.8085,	1646.8591,	1647.8268,	1651.8206,	1653.8284,
1677.8074,	1681.8087,	1688.8287,	1690.8313,	1694.7357,	1697.8672,	1703.8214,	1706.8364,	1707.8435,	1708.3533,	1709.3307,	1710.8229,
1715.8053,	1719.8075,	1721.8296,	1723.8743,	1724.8828,	1730.8199,	1748.7931,	1757.8975,	1763.7841,	1768.8075,	1774.9059,	1779.8081,
1786.8824,	1787.8207,	1790.8423,	1793.9556,	1796.8109,	1800.8578,	1815.9008,	1819.8838,	1821.8926,	1822.9185,	1826.8450,	1829.8655,
1833.8975,	1836.9054,	1843.8765,	1859.8494,	1862.9265,	1863.9319,	1866.8857,	1868.8972,	1879.9445,	1880.9215,	1887.9023,	1888.8057,
1890.8025,	1896.8954,	1901.0060,	1906.8872,	1913.8895,	1924.9314,	1928.0060,	1931.9956,	1968.8563,	1984.9392,	2008.0485,	2008.9869,
2009.9747,	2015.9661,	2020.9644,	2030.0151,	2030.4648,	2046.9839,	2047.5186,	2047.9097,	2051.9133,	2059.0122,	2070.9209,	2077.0454,
2082.9409,	2085.9888,	2090.9844,	2097.9778,	2103.1526,	2108.9897,	2118.8926,	2140.0432,	2142.0310,	2142.9895,	2152.0510,	2159.0752,
2160.0703,	2161.0813,	2166.0911,	2167.0676,	2174.0425,	2178.0034,	2181.0369,	2184.0767,	2189.9133,	2194.9761,	2199.0986,	2203.0464,
2205.9102,	2208.9729,	2213.1116,	2214.1145,	2218.1018,	2221.1035,	2223.2205,	2225.1592,	2229.1064,	2233.1023,	2245.0991,	2269.1128,
2273.0393,	2277.0576,	2279.1094,	2280.1204,	2283.1279,	2285.1169,	2292.1465,	2296.1479,	2312.0664,	2323.1892,	2326.0947,	2334.1531,
2335.1282,	2337.1343,	2369.2256,	2372.2229,	2383.9978,	2385.2129,	2392.1528,	2400.1094,	2401.1360,	2409.1914,	2411.1907,	2414.1833,
2429.1475,	2436.1699,	2437.1758,	2440.2007,	2447.2368,	2477.1301,	2495.0542,	2498.0898,	2510.2229,	2522.1980,	2524.1689,	2527.2310,
2535.2598,	2541.2075,	2543.1907,	2544.1514,	2553.1934,	2557.2300,	2560.1125,	2569.2915,	2572.0935,	2612.1936,	2686.3572,	2788.3362,
2963.6167,	3056.4641,	3058.5842,	3180.5432,	3313.5032,	3330.6311,	3347.6077,	3511.9668,	3761.1558			

4. [P10096](#) Mass: 36073 Score: 107 Expect: 4.8e-007 Matches: 28

Glyceraldehyde-3-phosphate dehydrogenase OS=Bos taurus GN=GAPDH PE=1 SV=4

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
752.3972	751.3899	751.3864	4.60	138	-	143	0	--- K.YNNTLK.I
795.4260	794.4187	794.4174	1.63	253	-	258	1	--- K.YDEIKK.V
802.4372	801.4299	801.4246	6.68	193	-	198	1	--- K.LWRDGR.G
805.4478	804.4405	804.4243	20.2	4	-	11	0	--- K.VGVNGFGR.I
811.4178	810.4105	810.4058	5.81	226	-	232	0	--- K.LTGMAFR.V + Oxidation (M)
829.4457	828.4385	828.4341	5.25	262	-	269	0	--- K.QASEGLPK.G
977.5352	976.5279	976.5342	-6.43	71	-	78	0	--- K.AITIFQER.D
1032.5870	1031.5797	1031.5876	-7.66	2	-	11	1	--- M.VKVGVNGFGR.I
1215.6246	1214.6173	1214.6408	-19.31	185	-	195	1	--- K.TVDGPSKGLWR.D
1229.6412	1228.6339	1228.6308	2.54	322	-	332	0	--- R.VVDLMVHMASKE.E
1358.6704	1357.6631	1357.6734	-7.56	322	-	333	1	--- R.VVDLMVHMASKE.-
1374.6705	1373.6632	1373.6683	-3.70	322	-	333	1	--- R.VVDLMVHMASKE.- + Oxidation (M)
1390.6848	1389.6775	1389.6632	10.3	322	-	333	1	--- R.VVDLMVHMASKE.- + 2 Oxidation (M)
1461.7990	1460.7917	1460.8238	-21.97	247	-	258	2	--- R.LEKPAKYDEIKK.V
1556.7874	1555.7801	1555.8029	-14.61	233	-	246	0	--- R.VPTPNVSVVDLTCLR.L
1615.8575	1614.8502	1614.8729	-14.06	71	-	84	1	--- K.AITIFQERDPANIK.W
1615.8600	1614.8527	1614.8729	-12.51	71	-	84	1	60 K.AITIFQERDPANIK.W
1697.8672	1696.8599	1696.8856	-15.14	196	-	213	1	--- R.DGRGAAQNIIPASTGAAK.A
1763.7841	1762.7768	1762.7951	-10.35	308	-	321	0	--- K.LISWYDNEFGYSNR.V
1819.8838	1818.8765	1818.8968	-11.14	144	-	160	0	--- K.IVSNASCTTNCLAPLAK.V
2213.1116	2212.1043	2212.1020	1.03	117	-	137	0	--- R.VIISAPSADAPMFVMGVNHEK.Y
2223.2205	2222.2132	2222.2093	1.77	233	-	252	1	--- R.VPTPNVSVVDLTCLRLEKPAK.Y
2229.1064	2228.0991	2228.0970	0.97	117	-	137	0	--- R.VIISAPSADAPMFVMGVNHEK.Y + Oxidation (M)
2245.0991	2244.0918	2244.0919	-0.02	117	-	137	0	--- R.VIISAPSADAPMFVMGVNHEK.Y + 2 Oxidation (M)
2277.0576	2276.0503	2276.0307	8.61	85	-	105	0	--- K.WGDAGAEYVVESTGVFTTMEK.A
2369.2256	2368.2183	2368.2031	6.41	116	-	137	1	--- K.RVIISAPSADAPMFVMGVNHEK.Y
2385.2129	2384.2056	2384.1981	3.17	116	-	137	1	--- K.RVIISAPSADAPMFVMGVNHEK.Y + Oxidation (M)
3347.6077	3346.6004	3346.5679	9.72	26	-	53	0	--- K.VDIVAINDPFDILHYMVYMFQYDSTHGK.F + Oxidation (M)
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 799.2464, 808.4353, 814.4170, 819.4304, 821.4247, 822.4321, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1369.7067, 1371.7366, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1567.7551, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1774.9059, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1848.785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2214.1145, 2218.1018, 2221.1035, 2225.1592, 2233.1023, 2269.1128, 2273.0393, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2372.2229, 2383.9978, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3511.9668, 3761.1558								

5. [Q2HJ60](#) Mass: 36041 Score: 50 Expect: 0.24 Matches: 13

Heterogeneous nuclear ribonucleoproteins A2/B1 OS=Bos taurus GN=HNRNPA2B1 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1013.4454	1012.4381	1012.4363	1.82	192	201	0	---	R.GGNFGFGDSR.G
1221.5699	1220.5626	1220.5455	14.0	179	188	0	---	R.QEMQEVSQSSR.S
1377.6100	1376.6027	1376.6222	-14.14	202	216	0	38	R.GGGGNFGPGPGSNFR.G
1377.6146	1376.6073	1376.6222	-10.80	202	216	0	---	R.GGGGNFGPGPGSNFR.G
1410.6736	1409.6663	1409.6800	-9.70	162	173	0	---	K.YHTINGHNAEVR.K
1538.7736	1537.7663	1537.7749	-5.61	162	174	1	---	K.YHTINGHNAEVRK.A
1647.8268	1646.8195	1646.8232	-2.26	35	48	2	---	K.LTDCVVMRDPASKR.S
1851.9031	1850.8958	1850.8588	20.0	141	156	1	---	K.RGFGFVTFDDHDPVDK.I
1879.9445	1878.9372	1878.9588	-11.48	102	117	1	---	K.LFVGGIKEDTEEHLR.D
2008.0485	2007.0412	2007.0538	-6.24	101	117	2	---	K.KLFVGGIKEDTEEHLR.D
2189.9133	2188.9060	2188.8981	3.61	314	338	0	---	R.NMGGPYGGNGYPGGSGGSGGYGGR.S
2205.9102	2204.9029	2204.8930	4.48	314	338	0	---	R.NMGGPYGGNGYPGGSGGSGGYGGR.S + Oxidation (M)
2495.0542	2494.0469	2494.0323	5.85	227	254	0	---	R.GFGDGYNGYGGGPGGNGFGGSPGYGGR.G

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 854.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2194.9761, 2199.0986, 2203.0464, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1360, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

6. [E1BB48](#) Mass: 65458 Score: 34 Expect: 9 Matches: 28

Polypeptide N-acetylgalactosaminyltransferase OS=Bos taurus GN=GALNT2 PE=3 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
842.5109	841.5036	841.4923	13.5	357	363	1	---	R.VGHVERK.Q
906.4929	905.4856	905.4793	6.95	421	427	0	---	K.LNCKPFK.W
1229.6412	1228.6339	1228.6636	-24.16	207	218	2	---	R.SRVGADAAQAK.V
1244.6069	1243.5996	1243.5721	22.2	43	52	0	---	K.EDWNIDIPK.K
1258.6344	1257.6271	1257.6142	10.3	394	404	0	---	K.NFYAAVPSAR.N
1345.6910	1344.6837	1344.6932	-7.05	112	122	2	---	K.LRMDRAVPDTR.H + Oxidation (M)
1358.6704	1357.6631	1357.6483	11.0	492	502	0	---	K.HMDLCLTVVDR.A
1374.6705	1373.6632	1373.6432	14.6	492	502	0	---	K.HMDLCLTVVDR.A + Oxidation (M)
1411.6647	1410.6574	1410.6887	-22.19	303	315	0	---	K.TPMIAGGLFVMDK.F + 2 Oxidation (M)
1490.7058	1489.6985	1489.7056	-4.72	510	521	2	---	K.LQGCRENDSRQK.W
1527.7585	1526.7512	1526.7623	-7.28	533	546	1	---	R.HVGSNLCDSRAAK.T
1615.8575	1614.8502	1614.8478	1.52	520	532	2	---	R.QKWEQIEGNSKLR.H
1615.8600	1614.8527	1614.8478	3.07	520	532	2	4	R.QKWEQIEGNSKLR.H
1624.7632	1623.7559	1623.7576	-1.02	282	293	2	---	K.WDYMTPEQRSR.Q
1653.8284	1652.8211	1652.7940	16.4	104	116	2	---	K.FNQVESDKLRMDR.A + Oxidation (M)
1688.8287	1687.8214	1687.8386	-10.16	489	502	1	---	K.SVKHMDLCLTVVDR.A + Oxidation (M)
1721.8296	1720.8223	1720.8322	-5.73	364	379	0	---	K.QHPYTFPGSGTVFAR.N
1768.8075	1767.8002	1767.8362	-20.36	380	393	2	---	R.NTRRAAEVVMDEYK.N
1779.8081	1778.8008	1778.7716	16.4	219	232	0	---	K.VLTFLDSSHCECNER.W
1901.0060	1899.9987	1899.9585	21.2	503	519	2	---	R.APGSLIKLQGCRENDSR.Q
1916.9475	1915.9402	1915.9462	-3.13	547	564	0	---	K.TGGLSVEVCGPALSQQWK.F
2082.9409	2081.9336	2081.9766	-20.65	94	111	2	---	R.SGQDPYARNKFNQVESDK.L
2184.0767	2183.0694	2183.0694	-0.01	76	93	2	---	K.VWRDRFNGEAYVGGTMVR.S
2208.9729	2207.9656	2207.9326	15.0	324	341	0	---	K.YDMMMDVWGENLEISF.V + Oxidation (M)
2221.1035	2220.0962	2220.1189	-10.19	363	382	2	---	R.QKHPYTFPGSGTVFARNT.R
2369.2256	2368.2183	2368.2038	6.15	421	438	1	---	K.LNCKPFKWLLENVYPELR.V
2409.1914	2408.1841	2408.1796	1.87	303	323	1	---	K.TPMIAGGLFVMDKIFYEELGK.Y + Oxidation (M)
2477.1301	2476.1228	2476.1077	6.09	80	101	1	---	R.DFNQEAYVGGTMVRSGQDPYAR.N + Oxidation (M)

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 854.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682,

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1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178,
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1228.6411, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1248.5958, 1250.6042, 1255.5922, 1268.6414, 1271.6490, 1275.6388, 1276.5977,
1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488,
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1485.6906, 1489.7172, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736,
1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151,
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1730.8199, 1748.7931, 1757.8975, 1763.7841, 1771.9686, 1774.9059, 1777.8727, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109,
1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785,
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1906.8872, 1908.8663, 1913.8895, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869,
2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.5186, 2051.9133, 2059.0122, 2064.9746,
2070.9209, 2077.0454, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0501,
2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2189.9133, 2194.9761, 2199.0986,
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2437.1758, 2440.2007, 2447.2368, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907,
2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842,
3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

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7. [P02687](#) Mass: 18312 Score: 26 Expect: 61 Matches: 11

Myelin basic protein OS=Bos taurus GN=MBP PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
811.4178	810.4105	810.4236	-16.11	97	104	0	---	R.TPPPSQGGK.G
1237.6270	1236.6197	1236.6364	-13.45	42	52	2	---	R.FFGSDRGAPKR.G
1537.7804	1536.7731	1536.7354	24.5	10	23	1	---	R.SKYLASASTMDHAR.H
1553.7277	1552.7204	1552.7304	-6.40	10	23	1	---	R.SKYLASASTMDHAR.H + Oxidation (M)
1800.8578	1799.8505	1799.8380	6.97	113	129	0	---	R.FSWGAEQKPGFGYGGGR.A
2030.0151	2029.0078	2028.9952	6.23	12	29	1	---	K.YLASASTMDHARHGFLPR.H
2245.0991	2244.0918	2244.1222	-13.53	10	29	2	---	R.SKYLASASTMDHARHGFLPR.H
2323.1892	2322.1819	2322.1552	11.5	12	31	2	---	K.YLASASTMDHARHGFLPRHR.D
2414.1833	2413.1760	2413.1927	-6.92	107	129	1	---	R.GLSSLRSFSWGAEQKPGFGYGGGR.A
2686.3572	2685.3499	2685.3888	-14.48	74	96	1	---	K.AQGHRRPQDENPVVHFFKNIVTPR.T
2788.3362	2787.3289	2787.3154	4.87	113	138	2	---	R.FSWGAEQKPGFGYGGGRASDYKSAHK.G
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1637.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.4648, 2046.9839, 2047.5186, 2047.5186, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2209.1064, 2213.1023, 2218.1116, 2219.1077, 2223.1023, 2225.1592, 2229.1064, 2233.1023, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

8. [F1N0N9](#) Mass: 36314 Score: 26 Expect: 62 Matches: 12

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
752.3972	751.3899	751.3752	19.5	144	149	0	---	K.YDLDDVK.S
919.5024	918.4952	918.5175	-24.27	172	179	0	---	K.NYPVVSK.D
1328.6292	1327.6219	1327.5932	21.6	157	167	0	---	R.YTPEQTSDDPK.Y.S
1349.6838	1348.6765	1348.7099	-24.74	312	322	1	---	K.SFSEQRNIQK.-
1604.8136	1603.8063	1603.7664	24.9	71	84	0	---	R.EAMHIGAEVYNNLK.N + Oxidation (M)
1615.8575	1614.8502	1614.8803	-18.64	20	33	0	---	R.GVLYLHIADMLNLK.V + Oxidation (M)
1615.8600	1614.8527	1614.8803	-17.09	20	33	0	16	R.GVLYLHIADMLNLK.V + Oxidation (M)
1646.8591	1645.8518	1645.8788	-16.37	94	109	1	---	K.DATNVGKGNFLLGNK.E
1771.9686	1770.9613	1770.9814	-11.35	19	33	1	---	R.RGVLYLHIADMLNLK.V + Oxidation (M)
1800.8578	1799.8505	1799.8149	19.8	250	265	0	---	R.WGVWVSYSNGSETEGRI.I + Oxidation (M)
2012.9506	2011.9433	2011.9487	-2.66	150	167	1	---	K.SPSGLSRYTPEQTSDDPK.Y.S
2181.0369	2180.0296	2180.0075	10.1	180	196	1	---	K.DLFNPNFNDWENWQKFTAR.T
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412,								

904.4613, 906.4929, 908.4577, 913.5685, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.5151, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1606.8130, 1608.7599, 1613.7793, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

9. [F6QBP1](#) Mass: 18443 Score: 26 Expect: 62 Matches: 11

Myelin basic protein OS=Bos taurus GN=MBP PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
811.4178	810.4105	810.4236	-16.11	98	-	105	0	--- R.TPPFSQKG.G
1237.6270	1236.6197	1236.6364	-13.45	43	-	53	2	--- R.PFGSDRGAPKR.G
1537.7804	1536.7731	1536.7354	24.5	11	-	24	1	--- R.SKYLASASTMDHAR.H
1553.7277	1552.7204	1552.7304	-6.40	11	-	24	1	--- R.SKYLASASTMDHAR.H + Oxidation (M)
1800.8578	1799.8505	1799.8380	6.97	114	-	130	0	--- R.FSWGAEQGKPGFGYGGR.A
2030.0151	2029.0078	2028.9952	6.23	13	-	30	1	--- K.YLASASTMDHARHGFLPR.H
2245.0991	2244.0918	2244.1222	-13.53	11	-	30	2	--- R.SKYLASASTMDHARHGFLPR.H
2323.1892	2322.1819	2322.1552	11.5	13	-	32	2	--- K.YLASASTMDHARHGFLPRHR.D
2414.1833	2413.1760	2413.1927	-6.92	108	-	130	1	--- R.GLSLSRFSWGAEQGKPGFGYGGR.A
2686.3572	2685.3499	2685.3888	-14.48	75	-	97	1	--- K.AQHGRPDQENPVVHFFKNIVTPR.T
2788.3362	2787.3289	2787.3154	4.87	114	-	139	2	--- R.FSWGAEQGKPGFGYGGRASDYKSAHK.G

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

10. [G3MZA4](#) Mass: 83962 Score: 25 Expect: 75 Matches: 34

Uncharacterized protein OS=Bos taurus GN=CXorf23 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
766.3494	765.3422	765.3439	-2.32	364	-	369	1	--- R.SCKDTR.K
908.4577	907.4504	907.4624	-13.20	220	-	226	0	--- K.RPHDVER.Y
928.5031	927.4958	927.5025	-7.29	546	-	553	0	--- K.IIDPSDLR.H
1015.5150	1014.5077	1014.5094	-1.68	413	-	421	0	--- K.VDVQGGQNK.S
1024.5028	1023.4955	1023.4985	-2.91	255	-	262	0	--- R.NLETQTYR.Y
1064.5358	1063.5285	1063.5298	-1.19	303	-	310	2	--- K.YPKEEDRK.L
1079.5398	1078.5325	1078.5407	-7.58	176	-	183	1	--- R.YQRQTDEK.Y
1106.5431	1105.5358	1105.5192	15.0	242	-	250	0	--- R.HFSAPYQEK.K
1250.6042	1249.5969	1249.6224	-20.37	522	-	532	0	--- R.IDMSLAEQSK.Q + Oxidation (M)
1258.6344	1257.6271	1257.6426	-12.28	413	-	423	1	--- K.VDVQGGQNSR.V



1349.6838	1348.6765	1348.6524	17.9	240	-	250	1	---	K.SRHFSAPYQEK.K
1377.6100	1376.6027	1376.6149	-8.87	30	-	39	1	---	R.FEHYGYDYRK.D
1377.6146	1376.6073	1376.6149	-5.52	30	-	39	1	---	R.FEHYGYDYRK.D
1406.7207	1405.7134	1405.7235	-7.15	521	-	532	1	---	R.RIDMSLAELQSK.Q + Oxidation (M)
1553.7277	1552.7204	1552.7521	-20.42	263	-	276	1	---	R.YAPREFPETSSAAK.V
1556.7874	1555.7801	1555.7916	-7.37	533	-	545	1	---	K.QTMVYDSKQTLVK.I + Oxidation (M)
1570.8015	1569.7942	1569.7787	9.89	191	-	203	2	---	R.GSEDFEKRISFQK.R
1576.7402	1575.7329	1575.7001	20.8	116	-	127	1	---	R.HSEGMFYREHQR.S
1613.7793	1612.7720	1612.7338	23.7	612	-	624	0	---	K.FIQKPCSSDITMQR.K + Oxidation (M)
1633.7913	1632.7840	1632.8008	-10.29	242	-	254	2	---	R.HFSAPYQEKKDQR.N
1725.8090	1724.8017	1724.8338	-18.60	612	-	625	1	---	K.FIQKPCSSDITMQR.D
1786.8824	1785.8751	1785.8832	-4.51	40	-	53	2	---	K.DPKRPITWRMDDEK.Y
1821.8926	1820.8853	1820.9017	-8.99	148	-	164	2	---	R.SEKGGTPPVRSTTDSFR.F
1896.8954	1895.8881	1895.9213	-17.50	109	-	123	2	---	R.RAQYVPRHSEGMFYR.E
2009.9747	2008.9674	2008.9926	-12.52	504	-	521	2	---	K.AADANETKLSSDPEIHRR.I
2178.0034	2176.9961	2176.9841	5.52	348	-	366	2	---	K.DCAALHTSDKSDVDLRSC.D
2203.0464	2202.0391	2202.0548	-7.12	522	-	540	1	---	R.IDMSLAELQSKQTMVYDSK.Q + Oxidation (M)
2279.1094	2278.1021	2278.1277	-11.21	43	-	60	2	---	K.RPITWRMDDEKYGQSKPR.I + Oxidation (M)
2312.0664	2311.0591	2311.0869	-12.03	592	-	610	1	---	K.DTHVDEFQKPTSFEEKSNFR.K
2337.1343	2336.1270	2336.1543	-11.67	424	-	444	2	---	R.VASSYSYTERQMSHDLVAVGRK.S + Oxidation (M)
2429.1475	2428.1402	2428.1996	-24.45	626	-	645	1	---	K.DVITHRPFVEENNQNTGRF.R
2436.1699	2435.1626	2435.1975	-14.34	422	-	443	2	---	K.SRVASSYSYTERQMSHDLVAVGR.K
2440.2007	2439.1934	2439.1819	4.73	592	-	611	2	---	K.DTHVDEFQKPTSFEEKSNFR.F
2527.2310	2526.2237	2526.2139	3.88	590	-	610	2	---	R.SKDTHVDEFQKPTSFEEKSNFR.K
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 913.5685, 919.5024, 925.5089, 927.4999, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1016.5522, 1018.5189, 1021.5313, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1071.5361, 1073.5377, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1255.5922, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1555.7928, 1560.7551, 1563.7314, 1568.7372, 1572.8151, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1475, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2437.1758, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1555									

11. [Q3T087](#) Mass: 20468 Score: 24 Expect: 99 Matches: 7

60S ribosomal protein L11 OS=Bos taurus GN=RPL11 PE=2 SV=3									
Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide	
837.4396	836.4323	836.4392	-8.22	91	-	96	1	---	R.EYELRK.N
1092.6000	1091.5927	1091.6087	-14.64	89	-	96	2	16	K.VREYELRK.N
1092.6002	1091.5929	1091.6087	-14.46	89	-	96	2	---	K.VREYELRK.N
1352.6350	1351.6277	1351.6343	-4.85	160	-	169	1	---	K.EEAMRWFQKK.Y
1549.6758	1548.6685	1548.6660	1.60	1	-	13	1	---	-MAQDQGEKENPMR.E + Oxidation (M)
1800.8578	1799.8505	1799.8584	-4.37	2	-	16	2	---	M.AQDQGEKENPMREL.R
1862.9265	1861.9192	1861.9138	2.89	20	-	35	1	---	K.LCLNLCVGESGDRLLTR.A
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392,									

2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

12. [F1MI98](#) Mass: 52161 Score: 23 Expect: 1.2e+002 Matches: 20

Uncharacterized protein OS=Bos taurus GN=KRT36 PE=3 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
904.4613	903.4540	903.4735	-21.59	219	225	0	---	K.EELICLK.K
1032.5870	1031.5797	1031.5685	10.9	219	226	1	---	K.EELICLK.N
1215.6246	1214.6173	1214.6255	-6.73	187	197	0	---	R.QLVEADTNGLR.Q
1227.6271	1226.6198	1226.5965	19.0	177	186	1	---	R.TKYETELGMR.Q
1237.6270	1236.6197	1236.6462	-21.42	383	392	1	---	R.LESEIATYRR.L
1643.8085	1642.8012	1642.7773	14.5	2	16	0	---	M.ASQFCSPIFSSGSIR.G
1703.8214	1702.8141	1702.7992	8.78	17	32	1	---	R.GHCGATSGISRVSCVR.S
1706.8364	1705.8291	1705.8392	-5.92	401	415	0	---	K.LPAHPATECKPAVR.V
1790.8423	1789.8350	1789.8127	12.4	1	16	0	---	-.MASQFCSPIFSSGSIR.G + Oxidation (M)
1868.8972	1867.8899	1867.9210	-16.64	312	327	0	---	R.NVNALIEIQAQHSMR.N + Oxidation (M)
2008.9869	2007.9796	2008.0272	-23.69	311	327	1	---	R.RNVNLEIELQAHSMR.N
2015.9661	2014.9588	2014.9782	-9.61	170	186	2	---	K.LAADDFTKYETELGMR.Q
2097.9778	2096.9705	2097.0021	-15.07	226	242	2	---	K.KNHEEEVNTLRCLQGLDR.L
2211.1077	2210.1004	2210.0637	16.6	179	197	1	---	K.YETELGMRQLVEADTNGLR.Q + Oxidation (M)
2213.1116	2212.1043	2212.1310	-12.06	92	109	2	---	K.ETMQFLNDRLASYLEKVR.Q
2229.1064	2228.0991	2228.1259	-12.02	92	109	2	---	K.ETMQFLNDRLASYLEKVR.Q + Oxidation (M)
2292.1465	2291.1392	2291.1752	-15.71	208	226	2	---	K.ADLEMQVESLKEELICLK.N + Oxidation (M)
2323.1892	2322.1819	2322.1638	7.81	237	257	1	---	R.CQLGDRLNVEVDAAFPVDLNK.I
2440.2007	2439.1934	2439.2064	-5.30	177	197	2	---	R.TKYETELGMRQLVEADTNGLR.Q + Oxidation (M)
2535.2598	2534.2525	2534.2798	-10.78	341	363	0	---	R.YSSQLAQMQGLIGNVEAQLAEIR.C + Oxidation (M)
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1216.6786, 1221.5699, 1222.5789, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8633, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2009.9747, 2012.9506, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

13. [Q58D10](#) Mass: 26401 Score: 22 Expect: 1.6e+002 Matches: 15

Chromosome X open reading frame 23 OS=Bos taurus GN=CXorf23 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
928.5031	927.4958	927.5025	-7.29	113	120	0	---	K.IIDPSDLR.H
1035.5203	1034.5130	1034.4920	20.3	217	225	0	---	K.EYTNIDPAI.-
1228.6411	1227.6338	1227.6394	-4.53	1	11	1	---	-.MSHDLVAVGRK.S + Oxidation (M)
1250.6042	1249.5969	1249.6224	-20.37	89	99	0	---	R.IDMSLAELQSK.Q + Oxidation (M)
1406.7207	1405.7134	1405.7235	-7.15	88	99	1	---	R.IDMSLAELQSK.Q + Oxidation (M)
1556.7874	1555.7801	1555.7916	-7.37	100	112	1	---	K.QTMVYDSKQTLVK.I + Oxidation (M)
1572.8151	1571.8078	1571.8090	-0.72	1	14	2	---	-.MSHDLVAVGRKSEK.F + Oxidation (M)
1613.7793	1612.7720	1612.7338	23.7	179	191	0	---	K.FIQKPCSSDTMQR.K + Oxidation (M)
1725.8090	1724.8017	1724.8338	-18.60	179	192	1	---	K.FIQKPCSSDTMQRK.D
2009.9747	2008.9674	2008.9926	-12.52	71	88	2	---	K.AADANETKLSDPETHRR.I
2203.0464	2202.0391	2202.0548	-7.12	89	107	1	---	R.IDMSLAELQSKQTMVYDSK.Q + Oxidation (M)
2312.0664	2311.0591	2311.0869	-12.03	159	177	1	---	K.DTHVDEFQKPTSFESKSNFR.K
2429.1475	2428.1402	2428.1996	-24.45	193	212	1	---	K.DVITHRPFVEENQNTGRFR.R
2440.2007	2439.1934	2439.1819	4.73	159	178	2	---	K.DTHVDEFQKPTSFESKSNFR.F
2527.2310	2526.2237	2526.2139	3.88	157	177	2	---	R.SKDTHVDEFQKPTSFESKSNFR.K
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840,								

966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2049.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2205.9152, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2436.1699, 2437.1758, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2535.2598, 2541.1689, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

14. [Q3SZ43](#) Mass: 16409 Score: 22 Expect: 1.7e+002 Matches: 13

Ubiquitin-conjugating enzyme E2 variant 2 OS=Bos taurus GN=UBE2V2 PE=2 SV=3

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
808.4353	807.4280	807.4160	14.8	1	-	8	0	--- -.MAVSTGVK.V + Oxidation (M)
856.5045	855.4972	855.5178	-24.02	117	-	123	0	--- K.VVLQELR.R
1015.5150	1014.5077	1014.5134	-5.62	73	-	81	0	--- K.YEAPPSPVR.F
1025.5192	1024.5119	1024.4978	13.8	109	-	116	0	--- K.WQNSYSIK.V
1111.5398	1110.5325	1110.5235	8.11	125	-	133	1	--- R.LMMSKENMK.L
1111.5400	1110.5327	1110.5235	8.29	125	-	133	1	--- R.LMMSKENMK.L
1143.5844	1142.5771	1142.5907	-11.84	46	-	55	0	--- R.WTGMIGPPR.T + Oxidation (M)
1604.8136	1603.8063	1603.8205	-8.86	12	-	24	1	--- R.NFRLLLEEGQK.G
1859.8494	1858.8421	1858.8519	-5.27	130	-	145	1	--- K.ENMKLPQPPGQTYNN.-
2161.0813	2160.0740	2160.1038	-13.77	67	-	85	2	--- K.VECGPKYPEAPPSPVFRVK.I
2184.0767	2183.0694	2183.0463	10.6	82	-	101	1	--- R.FVTKINMNGINNSSGMVDAR.S + Oxidation (M)
2498.0898	2497.0825	2497.1287	-18.49	125	-	145	2	--- R.LMMSKENMKLPQPPGQTYNN.- + 3 Oxidation (M)
3180.5432	3179.5359	3179.5492	-4.17	73	-	101	2	--- K.YEAPPSPVRFVTKINMNGINNSSGMVDAR.S + Oxidation (M)
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2049.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

15. [E1BE64](#) Mass: 104496 Score: 22 Expect: 1.7e+002 Matches: 32

Uncharacterized protein OS=Bos taurus GN=TSQA10 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
978.5240	977.5168	977.5328	-16.35	371	-	378	2	--- K.EMKSLARK.A + Oxidation (M)
1009.5097	1008.5024	1008.5127	-10.23	398	-	405	0	--- R.LLYENTEK.D
1045.5564	1044.5491	1044.5563	-6.90	559	-	567	1	--- K.QENQALSKK.L
1092.6000	1091.5927	1091.5724	18.7	299	-	307	1	6 R.DVAFTDLRR.M
1092.6002	1091.5929	1091.5724	18.8	299	-	307	1	--- R.DVAFTDLRR.M
1135.5942	1134.5869	1134.5782	7.73	826	-	834	1	--- R.QLGTERFER.E
1179.5962	1178.5889	1178.5675	18.2	227	-	235	1	--- R.EELKCMLEK.Y
1393.7169	1392.7096	1392.7249	-10.96	171	-	182	1	--- R.LDSFVTKLEADR.D
1443.7589	1442.7516	1442.7616	-6.93	47	-	58	1	--- K.IDQLAEQLEKEK.N

1445.7306	1444.7233	1444.7310	-5.33	7	-	18	1	---	K.QTNHGLEEYVKK.L
1537.7804	1536.7731	1536.7494	15.5	683	-	694	1	---	K.MEEELQKVQFEK.V
1553.7277	1552.7204	1552.7443	-15.36	683	-	694	1	---	K.MEEELQKVQFEK.V + Oxidation (M)
1556.7874	1555.7801	1555.8107	-19.62	236	-	248	1	---	K.YERHLAEIQGNVK.V
1624.7632	1623.7559	1623.7675	-7.11	877	-	889	1	---	R.GLDRSLEENLCYR.D
1643.8085	1642.8012	1642.7694	19.4	227	-	238	2	---	R.EELKCMLEKYER.H + Oxidation (M)
1706.8364	1705.8291	1705.8556	-15.52	474	-	489	1	---	K.SENIASLGSGLAMKEK.T
1707.8435	1706.8362	1706.8363	-0.03	59	-	73	1	---	K.NEVVDTDADKELEAK.K
1710.8229	1709.8156	1709.8519	-21.21	299	-	312	2	---	R.DVAFDTRLRRMTTER.D
1721.8296	1720.8223	1720.8414	-11.06	741	-	754	1	---	R.SEIELLRSQMTNER.I + Oxidation (M)
1777.8727	1776.8654	1776.8788	-7.55	212	-	226	2	---	R.GTNCDEVLLKTTDR.D
1793.9556	1792.9483	1792.9795	-17.40	239	-	254	1	---	R.HLAEIQGNVKVLTSEK.D
1796.8109	1795.8036	1795.8080	-2.45	507	-	521	0	---	R.QSTEALIMCEQDISR.M + Oxidation (M)
1815.9008	1814.8935	1814.8767	9.27	790	-	804	1	---	K.EHLCLAENKMAIQSR.D + Oxidation (M)
1896.8954	1895.8881	1895.8465	21.9	598	-	612	2	---	K.SEESENQRMMDQLRK.A + Oxidation (M)
2059.0122	2058.0049	2058.0276	-11.01	522	-	538	2	---	R.MRRQLDETNDLAQIAR.E
2152.0510	2151.0437	2151.0663	-10.51	488	-	506	2	---	K.EKTISGMKNIIAEMEQASR.Q + Oxidation (M)
2218.1018	2217.0945	2217.1034	-4.00	231	-	248	2	---	K.CMLEKYERHLAEIQGNVK.V
2221.1035	2220.0962	2220.0626	15.1	594	-	611	2	---	K.NILKSESENQRMMDQLR.K
2223.2205	2222.2132	2222.1695	19.7	255	-	272	2	---	R.DKTFLLYEQAQEEIARLR.R
2245.0991	2244.0918	2244.0510	18.2	352	-	370	1	---	R.MEQMSNMNTLMKETITITVEK.E
2277.0576	2276.0503	2276.0408	4.18	352	-	370	1	---	R.MEQMSNMNTLMKETITITVEK.E + 2 Oxidation (M)
2369.2256	2368.2183	2368.1771	17.4	539	-	558	2	---	R.ERDILAHENDNLQEQFAKAK.Q

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1444.7375, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1538.7736, 1539.7621, 1541.7805, 1542.8373, 1549.6758, 1555.7928, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1708.3533, 1709.3307, 1715.8053, 1719.8075, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1790.8578, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2221.1145, 2225.1592, 2229.1064, 2233.1023, 2269.1128, 2273.0393, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

16. [Q2KIJ9](#) Mass: 18752 Score: 21 Expect: 1.8e+002 Matches: 11

Transcription elongation factor A protein-like 1 OS=Bos taurus GN=TCEAL1 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
766.3494	765.3422	765.3513	-11.95	1	-	6	1 ---	-MEKACK.E
790.4196	789.4123	789.4246	-15.48	109	-	114	0 ---	R.SRPQFR.G
960.4840	959.4767	959.4721	4.76	144	-	150	0 ---	K.LMVMHWK.A + Oxidation (M)
1094.5596	1093.5523	1093.5404	10.9	97	-	105	1 ---	K.LEEGSFKER.L
1203.5826	1202.5753	1202.6052	-24.88	144	-	152	1 ---	K.LMVMHWKAR.R + 2 Oxidation (M)
1425.7395	1424.7322	1424.7385	-4.42	109	-	120	1 ---	R.SRPQFRGDIHGR.N
1445.7306	1444.7233	1444.7431	-13.70	142	-	152	2 ---	R.NKLMVMHWKAR.R + 2 Oxidation (M)
1624.7632	1623.7559	1623.7562	-0.20	4	-	17	1 ---	K.ACKEPEEQPSPPK.A
2012.9506	2011.9433	2011.9343	4.50	1	-	17	2 ---	-MEKACKEPEEQPSPPK.A
2326.0947	2325.0874	2325.0650	9.65	121	-	139	2 ---	R.NLSNEEMIKVAEEMEMKR.V + Oxidation (M)
2437.1758	2436.1685	2436.2042	-14.65	76	-	96	2 ---	R.KDLFEARPPMEQPPCGVGKHK.L + Oxidation (M)

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435,

1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2015.9644, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

17. [G3MYE2](#) Mass: 34779 Score: 21 Expect: 2e+002 Matches: 15

Uncharacterized protein OS=Bos taurus PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
840.4623	839.4550	839.4654	-12.34	20	-	25	1	R.YQVKFR.R
856.5045	855.4972	855.4827	17.0	267	-	272	1	K.RWNRPK.M
957.5654	956.5581	956.5655	-7.70	40	-	47	1	R.LVIQDKNK.Y
1341.6488	1340.6415	1340.6693	-20.72	53	-	62	1	K.YRMILCVTNR.D + Oxidation (M)
1358.6704	1357.6631	1357.6626	0.39	28	-	38	2	R.QEGKTDYIYARK.R
1374.6705	1373.6632	1373.6350	20.5	214	-	224	1	R.YLTDEDEDAYKK.Q
1434.6552	1433.6479	1433.6544	-4.50	202	-	213	0	K.HIMGQNVADYMR.Y
1475.7224	1474.7151	1474.7198	-3.17	273	-	285	1	K.MSLGQENDRVAQK.K
1578.7518	1577.7445	1577.7442	0.18	201	-	213	1	R.KHIMGQNVADYMR.Y + Oxidation (M)
1603.8092	1602.8019	1602.8148	-8.01	273	-	286	2	K.MSLGQENDRVAQKK.A
1730.8199	1729.8126	1729.8318	-11.09	268	-	281	1	R.WNRPKMSLGQENDR.V
1916.9475	1915.9402	1915.9172	12.0	73	-	89	0	R.IEGDMIVCAAYAHLPK.Y
2218.1018	2217.0945	2217.0670	12.4	232	-	250	2	K.NNVTFDMEEMYKKAHAIR.E
2269.1128	2268.1055	2268.0950	4.65	214	-	231	2	R.YLTDEDEDAYKKQFSQYIK.N
3058.5842	3057.5769	3057.6256	-15.91	90	-	116	2	K.YGVKVGLTNYAVAYCTGLLACRLNLR.F
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 842.5109, 854.4525, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1369.7067, 1371.7366, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1581.8373, 1591.7852, 1600.8068, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2253.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

18. [E1BJY0](#) Mass: 22866 Score: 20 Expect: 2.5e+002 Matches: 10

Guanylyl cyclase-activating protein 2 OS=Bos taurus GN=GUCA1B PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
822.4321	821.4249	821.4106	17.4	168	-	173	1	R.DKWVMK.M + Oxidation (M)
978.5240	977.5168	977.5117	5.23	167	-	173	2	R.RDKWVMK.M + Oxidation (M)
1371.7366	1370.7293	1370.6983	22.7	99	-	108	2	K.WTFKIDYDKDR.N
1524.7383	1523.7310	1523.7151	10.5	103	-	114	2	K.IYDKIDRNGCIDR.Q
1901.0060	1899.9987	1899.9724	13.9	109	-	124	1	R.NGCIDRQELLDIVEVK.R
2218.1018	2217.0945	2217.1146	-9.07	174	-	191	2	K.MLQMDLNPSSWSISQRRK.S
2337.1343	2336.1270	2336.0783	20.8	48	-	66	1	R.FFKVPDNEEATQYVEAMFR.A + Oxidation (M)
2477.1301	2476.1228	2476.1845	-24.91	47	-	66	2	K.RFFKVPDNEEATQYVEAMFR.A
2510.2229	2509.2156	2509.1916	9.58	170	-	189	1	K.WVMKMLQMDLNPSSWSISQRR.R + 2 Oxidation (M)
2535.2598	2534.2525	2534.2653	-5.03	144	-	166	0	R.IFLVLVDENGDGQLSLNEFVEGAR.R
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414,								



1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.0310, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2495.0542, 2498.0898, 2522.1980, 2524.1689, 2527.2310, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

19. [F1MTD8](#) Mass: 31878 Score: 20 Expect: 2.6e+002 Matches: 14

Tyrosine-protein kinase OS=Bos taurus GN=HCK PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
880.4412	879.4339	879.4371	-3.63	157	-	163	1	--- R.ESLKMEK.K + Oxidation (M)
906.4929	905.4856	905.4640	23.8	1	-	7	0	--- -.MEQTLLR.S + Oxidation (M)
1268.6414	1267.6341	1267.6197	11.4	22	-	32	0	--- K.EGYIPSNVVAR.V
1529.7466	1528.7393	1528.7369	1.58	69	-	82	1	--- R.DSETTKGSYSLSVR.D
1560.7551	1559.7478	1559.7845	-23.48	2	-	13	1	--- M.EQTLLRSGEWWR.A
1615.8600	1614.8527	1614.8916	-24.06	54	-	68	0	--- R.QLLAPGNVLGSGFMIR.D
1707.8435	1706.8362	1706.8199	9.59	1	-	13	1	--- -.MEQTLLRSGEWWR.A + Oxidation (M)
1779.8081	1778.8008	1778.8336	-18.43	75	-	89	1	--- K.GSYSLSVRDYPQHR.D
1787.8207	1786.8134	1786.8349	-11.99	165	-	180	0	--- K.LGAGQFGEVWMATYNNK.H + Oxidation (M)
1931.9956	1930.9883	1930.9645	12.3	134	-	149	0	--- K.LTIVPCMSKPKQPKWEK.D + Oxidation (M)
2103.1526	2102.1453	2102.0942	24.3	50	-	68	1	--- K.DAERQLLAPGNVLGSGFMIR.D + Oxidation (M)
2155.0667	2154.0594	2154.0523	3.32	188	-	207	0	--- K.TMKPGSMSEVAFLAEANLMK.T
2203.0464	2202.0391	2202.0370	0.95	188	-	207	0	--- K.TMKPGSMSEVAFLAEANLMK.T + 3 Oxidation (M)
2535.2598	2534.2525	2534.3104	-22.83	165	-	187	2	--- K.LGAGQFGEVWMATYNNKHTKVAVK.T
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 904.4613, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1786.8824, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1932.9833, 1968.8563, 1984.9392, 1986.8857, 1988.8972, 1989.9445, 1990.9747, 1991.5361, 1992.9409, 1993.9409, 1994.9747, 1995.9747, 1996.9747, 1997.9747, 1998.9747, 1999.9747, 2000.9747, 2001.9747, 2002.9747, 2003.9747, 2004.9747, 2005.9747, 2006.9747, 2007.9747, 2008.9747, 2009.9747, 2010.9747, 2011.9747, 2012.9747, 2013.9747, 2014.9747, 2015.9747, 2016.9747, 2017.9747, 2018.9747, 2019.9747, 2020.9747, 2021.9747, 2022.9747, 2023.9747, 2024.9747, 2025.9747, 2026.9747, 2027.9747, 2028.9747, 2029.9747, 2030.9747, 2031.9747, 2032.9747, 2033.9747, 2034.9747, 2035.9747, 2036.9747, 2037.9747, 2038.9747, 2039.9747, 2040.9747, 2041.9747, 2042.9747, 2043.9747, 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2135.9747, 2136.9747, 2137.9747, 2138.9747, 2139.9747, 2140.9747, 2141.9747, 2142.9895, 2142.9895, 2152.0510, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2205.9101, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1904, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

1639.8157 1638.8084 1638.8208 -7.56 303 - 316 1 --- R.LLMESKDTLLDMAK.N + 2 Oxidation (M)  
 1887.9023 1886.8950 1886.8718 12.3 317 - 331 1 --- K.NEEDIREQQQQISDR.V  
 1925.9336 1924.9263 1924.9274 -0.55 195 - 210 2 --- K.ADSMLTWEKEELKSMK.R  
 2155.0667 2154.0594 2154.0462 6.12 359 - 375 2 --- R.GTIHRCITKFNQEMYITR.G  
 2199.0986 2198.0913 2198.0381 24.2 213 - 231 2 --- K.MEADMEKSEALLKTLASCR.D + Oxidation (M)  
 2292.1465 2291.1392 2291.1110 12.3 323 - 341 2 --- R.EQQQQISDRVCASLAQKMR.E + Oxidation (M)  
 2411.1907 2410.1834 2410.1237 24.8 469 - 487 1 --- R.HPQVCYCEQAQRLVNDWDP.R  
 2686.3572 2685.3499 2685.3870 -13.80 75 - 99 2 --- R.VEMLKGGSTMEKPPPGEGVILNKS.K.M  
**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 974.5551, 977.5352, 978.5240, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1173.6008, 1175.5867, 1177.6178, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8581, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

21. [F1MNJ2](#) Mass: 65953 Score: 20 Expect: 2.7e+002 Matches: 24

Signal recognition particle receptor subunit alpha OS=Bos taurus GN=SRPRA PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
745.4483	744.4410	744.4242	22.6	166	- 171	2	---	K.NNNKKN.K
805.4478	804.4405	804.4276	16.1	403	- 408	1	---	R.RVDMLR.D + Oxidation (M)
814.4170	813.4097	813.3915	22.3	222	- 228	1	---	K.HGRGMEK.S
819.4304	818.4231	818.4134	11.9	232	- 239	1	---	K.SSKSDAPK.E
1111.5398	1110.5325	1110.5566	-21.66	316	- 326	0	---	K.TGLGGMFGMLK.G
1111.5400	1110.5327	1110.5566	-21.48	316	- 326	0	---	K.TGLGGMFGMLK.G
1132.5682	1131.5609	1131.5455	13.7	222	- 231	2	---	K.HGRGMEKSSK.S + Oxidation (M)
1143.5844	1142.5771	1142.5832	-5.35	216	- 224	1	---	R.EEFIQKHGR.G
1216.6786	1215.6713	1215.6758	-3.64	147	- 156	1	---	K.KPVRSMIETR.G
1299.6810	1298.6737	1298.6843	-8.18	215	- 224	2	---	K.REEFIQKHGR.G
1352.6350	1351.6277	1351.6112	12.3	337	- 347	1	---	R.EDMESVLDKMR.D
1357.7130	1356.7057	1356.6959	7.21	375	- 387	0	---	K.VMGTFTSVTSTVK.Q
1406.7207	1405.7134	1405.7023	7.88	498	- 511	0	---	K.DAAGIAMEAIAFAR.N
1445.7306	1444.7233	1444.7522	-19.95	172	- 186	2	---	K.GAKKEGSDGPLATSK.A
1527.7585	1526.7512	1526.7286	14.8	132	- 144	2	---	R.APTTMKKFEDSEK.A + Oxidation (M)
1538.7736	1537.7663	1537.7294	24.0	333	- 345	1	---	K.SLTREDMESVLDK.M + Oxidation (M)
1604.8136	1603.8063	1603.7776	17.9	216	- 228	2	---	R.EEFIQKHGRGMEK.S + Oxidation (M)
1634.7969	1633.7896	1633.8028	-8.08	403	- 415	2	---	R.RVDMLRDIMDAQ.R.H + Oxidation (M)
1677.8074	1676.8001	1676.8403	-23.95	123	- 137	2	---	R.EAEESKIRAPTTMK.K
1730.8199	1729.8126	1729.8318	-11.10	567	- 581	1	---	K.FNRLADHSMATQPR.L + Oxidation (M)
1771.9686	1770.9613	1770.9774	-9.08	147	- 161	2	---	K.KPVRSMIETRGEKPK.E + Oxidation (M)
2030.0151	2029.0078	2028.9972	5.23	337	- 353	2	---	R.EDMESVLDKMRDHLIAK.N
2229.1064	2228.0991	2228.1470	-21.51	354	- 374	1	---	K.NVAADIADVQLCESVANKLEGK.V
3347.6077	3346.6004	3346.6582	-17.26	92	- 119	2	---	R.DKYRTEIQQSALSLNLNGTFDFQNDFLR.L

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 808.4353, 811.4178, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1134.5841, 1135.5942, 1137.5565, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1355.6870, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8581, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872,

1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2510.2229, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3511.9668, 3761.1558

22. [Q3MHN7](#) Mass: 69222 Score: 20 Expect: 2.7e+002 Matches: 23

Endonuclease 8-like 3 OS=Bos taurus GN=NEIL3 PE=2 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
790.4196	789.4123	789.4232	-13.76	167	173	1	---	R.AESEVKK.Q
966.4929	965.4856	965.4977	-12.53	511	518	0	---	K.HGRPCALR.V
1046.5759	1045.5686	1045.5767	-7.76	167	175	2	---	R.AESEVKKQ.K
1338.6589	1337.6516	1337.6802	-21.36	576	586	1	---	K.NFFVCPGLKEK.Q
1341.6488	1340.6415	1340.6554	-10.34	508	518	1	---	R.CSKHGRPCALR.V
1386.7134	1385.7061	1385.6761	21.6	367	378	2	---	K.YPCNSFGKSKAK.V
1393.7169	1392.7096	1392.7071	1.79	448	459	0	---	K.VNISPVVCSQYK.L
1489.7172	1488.7099	1488.7395	-19.85	354	366	0	---	R.NEGNPVFNLMK.Y
1529.7466	1528.7393	1528.7668	-17.95	2	15	1	---	M.VEGPGCTLNGEKIR.A
1537.7804	1536.7731	1536.7541	12.4	237	249	2	---	R.CCKVGSALSCHKY.V
1578.7518	1577.7445	1577.7838	-24.90	69	83	0	---	R.LFNHGYSVGTGLGK.E
1600.8068	1599.7995	1599.7603	24.5	128	140	0	---	K.DLICFFDSSVEIR.N
1603.8092	1602.8019	1602.7858	10.1	149	161	1	---	R.IRVMEELDVCSPR.F
1721.8296	1720.8223	1720.8423	-11.58	174	187	2	---	K.QGKRMLCDVLMQK.V
1757.8975	1756.8902	1756.9043	-7.99	293	307	1	---	R.MLPVRNTTVNWPSSR.E
1821.8926	1820.8853	1820.8509	18.9	338	353	0	---	K.TCDACLTSPADSVLR.N
1862.9265	1861.9192	1861.9006	10.0	523	538	2	---	K.SGENKGRHFYACPLAR.E
1968.8563	1967.8490	1967.8369	6.16	253	267	1	---	K.RPNCQGCKKITVCR.L
2059.0122	2058.0049	2058.0429	-18.44	293	309	2	---	R.MLPVRNTTVNWPSSRRER.H + Oxidation (M)
2070.9209	2069.9136	2069.8870	12.9	268	283	1	---	R.LGENNRMTYFCHPQK.E + Oxidation (M)
2312.0664	2311.0591	2311.0824	-10.08	319	337	1	---	K.SEEQWTCEVCTLINKLSK.T
2409.1914	2408.1841	2408.2336	-20.54	385	406	1	---	K.TAFGTTTTLVLTDFSNKHSALER.E
3056.4641	3055.4568	3055.4401	5.47	274	297	2	---	R.MTYFCHPQCKENPQHVDIRMLPVR.N

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1390.6848, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1530.6902, 1531.6953, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1581.8373, 1591.7852, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8053, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

23. [G3MZK6](#) Mass: 94689 Score: 20 Expect: 2.7e+002 Matches: 34

Uncharacterized protein OS=Bos taurus GN=MAP7D3 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
802.4372	801.4299	801.4344	-5.64	547	552	1	---	K.EERLQK.E
819.4304	818.4231	818.4358	-15.58	162	168	1	---	R.SSSLNRR.C
870.5100	869.5027	869.5235	-24.00	120	126	1	---	K.FKAVLHR.T
960.4840	959.4767	959.4784	-1.82	96	102	2	---	K.EKDEQRR.I
1001.5782	1000.5709	1000.5665	4.42	539	546	2	---	R.LAREQKEK.E
1016.5522	1015.5449	1015.5410	3.83	154	161	2	---	K.TETPEKRR.S
1046.5759	1045.5686	1045.5628	5.54	739	747	1	---	R.SSTKRPTNR.A
1071.5361	1070.5288	1070.5356	-6.36	514	524	1	---	K.ESGNKGTGPKN.N
1145.6155	1144.6082	1144.6088	-0.47	66	74	1	---	K.ETQLLEKER.K
1221.5699	1220.5626	1220.5455	14.0	109	117	1	---	K.RNEMLEER.E + Oxidation (M)
1222.5789	1221.5716	1221.5772	-4.54	754	764	0	---	K.AETSSMTMRPSR.S
1231.6102	1230.6029	1230.6316	-23.32	98	107	2	---	K.DEQRRISAEK.K
1238.5917	1237.5844	1237.5721	9.97	754	764	0	---	K.AETSSMTMRPSR.S + Oxidation (M)
1276.5977	1275.5904	1275.5691	16.7	592	601	1	---	K.RESQEDEDQK.V
1276.6000	1275.5927	1275.5691	18.5	592	601	1	---	K.RESQEDEDQK.V
1299.6810	1298.6737	1298.6466	20.9	519	531	1	---	K.GTGPKNAAEATK.I
1343.6613	1342.6540	1342.6703	-12.16	713	723	1	---	K.AFLNTDMKTFR.Q

1386.7134	1385.7061	1385.7238	-12.73	422	-	432	1	---	K.RIPPSQIPCYR.W
1426.6846	1425.6773	1425.7108	-23.48	553	-	563	2	---	K.EMEQSFIRKMK.D
1443.7589	1442.7516	1442.7841	-22.53	726	-	738	2	---	K.GVKDPLNQTKSTR.S
1524.7383	1523.7310	1523.7362	-3.39	751	-	764	1	---	K.TGKAETSSMTMRPSR.S + Oxidation (M)
1527.7585	1526.7512	1526.7650	-9.02	76	-	87	2	---	K.SKIVYEKQMEEK.Q + Oxidation (M)
1530.6902	1529.6829	1529.7209	-24.83	172	-	184	0	---	R.LHSSTETEQIEEK.R
1542.8290	1541.8217	1541.8347	-8.45	627	-	638	1	---	R.IMLQNLQERLER.K
1604.8136	1603.8063	1603.7817	15.3	823	-	837	1	---	K.SVPAPSGKALSCFHF.-
1615.8575	1614.8502	1614.8188	19.5	713	-	725	2	---	K.AFLNTDMKTFRQK.G + Oxidation (M)
1615.8600	1614.8527	1614.8188	21.0	713	-	725	2	---	K.AFLNTDMKTFRQK.G + Oxidation (M)
1715.8053	1714.7980	1714.8382	-23.44	483	-	498	1	---	R.TVFAQNALGTGMGKSK.A + 2 Oxidation (M)
1774.9059	1773.8986	1773.8857	7.30	497	-	513	1	---	K.SKAVSNTINNSEAPSQK.E
1797.8339	1796.8266	1796.8594	-18.25	139	-	153	1	---	K.RWSWAGYTTVNSQNK.T
1819.8838	1818.8765	1818.9087	-17.68	821	-	837	2	---	R.SKSVAPPSGKALSCFHF.-
1822.9185	1821.9112	1821.9043	3.81	547	-	560	2	---	K.EERLQKEMEQQSFIR.K
2009.9747	2008.9674	2008.9749	-3.71	803	-	820	1	---	R.GSVTSCLSHQPPIDNKNR.S
2225.1592	2224.1519	2224.1019	22.5	803	-	822	2	---	R.GSVTSCLSHQPPIDNKNRSK.S
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 805.4478, 808.4353, 811.4178, 814.4170, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1227.6786, 1227.6271, 1228.6411, 1229.6412, 1233.6571, 1237.6270, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1285.5864, 1294.6315, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1529.7466, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1606.8130, 1608.7599, 1613.7793, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1800.8578, 1815.9008, 1821.8926, 1826.8455, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2304, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558									

24. [P02548](#) Mass: 62665 Score: 19 Expect: 2.8e+002 Matches: 18

Neurofilament light polypeptide OS=Bos taurus GN=NEFL PE=1 SV=3									
Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide	
1015.5150	1014.5077	1014.4995	8.09	129	-	136	1	---	K.HSEPSRFR.A
1021.5313	1020.5240	1020.5240	0.05	137	-	144	0	---	R.ALYEQEIR.D
1024.5028	1023.4955	1023.4873	8.08	178	-	185	0	---	R.YEEEVLSR.E
1271.6490	1270.6417	1270.6530	-8.91	127	-	136	2	---	R.QKHSEPSRFR.A
1276.5977	1275.5904	1275.5877	2.13	186	-	196	1	---	R.EDAEGRLMEAR.K
1276.6000	1275.5927	1275.5877	3.93	186	-	196	1	8	R.EDAEGRLMEAR.K
1390.6848	1389.6775	1389.6736	2.86	542	-	554	2	---	K.DEGAGEEQATKKK.D
1393.7169	1392.7096	1392.7435	-24.30	381	-	392	1	---	K.MALDIETAAAYRK.L
1443.7589	1442.7516	1442.7365	10.5	198	-	211	1	---	K.GADEAALARAEELEK.R
1445.7306	1444.7233	1444.7157	5.25	145	-	157	1	---	R.DLRLAADATNEK.Q
1542.8290	1541.8217	1541.8314	-6.29	18	-	30	1	---	R.YVETPRVHISSVR.S
1606.8130	1605.8057	1605.8110	-3.31	173	-	185	1	---	R.NLQARYEEVLSR.E
1843.8765	1842.8692	1842.9071	-20.56	148	-	164	1	---	R.LAADATNEKQALQGER.E
1863.9319	1862.9246	1862.8866	20.4	317	-	332	1	---	K.TLEIEACRGMNEALEK.Q
2020.9644	2019.9571	2019.9326	12.1	2	-	17	2	---	M.SSFSYEPYYSTSYKRR.Y
2323.1892	2322.1819	2322.1492	14.1	401	-	422	0	---	R.LSFTSVGSLTITGYTQSSQVFR.S
2409.1914	2408.1841	2408.2084	-10.08	88	-	107	2	---	R.TQEKAQLQDLNDRFASFIER.V
2495.0542	2494.0469	2494.0354	4.63	520	-	541	2	---	K.EEEEGEGEEAEETKEAEEEEKK.D
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1115.5398, 1111.5400, 1118.5620, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6412, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1275.6388, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1444.7375, 1444.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1608.7599, 1613.7793, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075,									

1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

25. [E1BF55](#) Mass: 69481 Score: 19 Expect: 2.8e+002 Matches: 24

Uncharacterized protein OS=Bos taurus GN=MAP7D2 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
745.4483	744.4410	744.4494	-11.19	302	-	307	1	--- K.ILSEKR.R
766.3494	765.3422	765.3513	-11.95	4	-	9	0	--- R.LEAMMR.R + Oxidation (M)
790.4196	789.4123	789.4021	13.0	195	-	201	0	--- K.AYQPSPK.N
802.4372	801.4299	801.4344	-5.64	368	-	374	1	--- K.VAEAEKR.K
919.5024	918.4952	918.4770	19.8	229	-	236	2	--- K.ADKEKSNK.E
1032.5870	1031.5797	1031.5797	0.01	439	-	446	2	--- K.KRIDEIMK.R
1045.5564	1044.5491	1044.5312	17.2	121	-	129	1	--- K.SSPTRNVER.K
1073.5377	1072.5304	1072.5335	-2.88	87	-	95	1	--- K.QTEPPMSKR.L
1163.5771	1162.5698	1162.5587	9.61	1	-	9	1	--- -.QERLEAMMR.R
1177.6178	1176.6105	1176.6139	-2.84	191	-	201	1	--- K.ATSKAYQSPK.N
1179.5962	1178.5889	1178.6143	-21.51	183	-	194	1	--- R.SSSPVTSKATSK.A
1432.6718	1431.6645	1431.6689	-17.00	23	-	38	1	--- K.KCSSGGASLAAGPGGR.D
1434.6552	1433.6479	1433.6642	-11.38	424	-	434	0	--- R.EQIMLQMEQER.L
1454.6836	1453.6763	1453.7049	-19.63	96	-	109	0	--- R.LSSSTAASISYSPDR.A
1510.7383	1509.7310	1509.7535	-14.91	117	-	129	2	--- K.SSYKSSPTRNVER.K
1560.7551	1559.7478	1559.7838	-23.07	22	-	38	2	--- K.KKCCSGGASLAAGPGGR.D
1570.8015	1569.7942	1569.7998	-3.56	237	-	251	1	--- K.EKEGTLPQQAASSPK.E
1647.8268	1646.8195	1646.8046	9.09	406	-	420	2	--- K.EAAEAKAQEAARKQMR.L + Oxidation (M)
1748.7931	1747.7858	1747.8224	-20.95	283	-	301	0	--- R.DAASGKPTAGTTDAGEATK.I
1771.9686	1770.9613	1770.9556	3.22	582	-	597	0	--- R.ALQDLLDFTGPIPFK.R
1863.9319	1862.9246	1862.9342	-5.14	421	-	434	2	--- R.LKREQIMLQMEQER.L + 2 Oxidation (M)
1901.0060	1899.9987	1900.0452	-24.44	163	-	181	1	--- R.ATASVPSVGLMSPLRSISK.R
2020.9644	2019.9571	2019.9829	-12.78	423	-	437	2	--- K.REQIMLQMEQERLER.K + 2 Oxidation (M)
2218.1018	2217.0945	2217.0985	-1.81	278	-	301	2	--- K.ARGGRDAASGKPTAGTTDAGEATK.I

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 795.4260, 799.2464, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1033.5739, 1035.5203, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1173.6008, 1175.5867, 1178.6053, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1563.7314, 1568.7372, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1757.8975, 1763.7841, 1768.8075, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

26. [E1BGS4](#) Mass: 63649 Score: 19 Expect: 2.8e+002 Matches: 23

Uncharacterized protein OS=Bos taurus GN=TXLNA PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
770.3671	769.3599	769.3606	-0.98	324	-	329	0	--- R.EEHIDK.V
863.4233	862.4161	862.4331	-19.71	209	-	215	1	--- R.NSQQMK.L
913.5685	912.5613	912.5505	11.8	162	-	168	2	--- R.RPQKKK.A
969.4786	968.4713	968.4563	15.5	142	-	150	0	--- K.GEPGPDIEIR.T
1024.5028	1023.4955	1023.4729	22.1	417	-	424	1	--- K.QEMKMTK.K
1045.5564	1044.5491	1044.5564	-6.92	258	-	266	1	--- R.SLKEEGVQR.A
1115.5790	1114.5717	1114.5731	-1.20	3	-	12	2	--- K.NQDKKNGPSK.Q
1132.5682	1131.5609	1131.5818	-18.49	474	-	482	1	--- K.LCRALQSER.N
1158.6288	1157.6215	1157.6292	-6.61	458	-	467	1	--- R.DKELEGQVK.I
1328.6292	1327.6219	1327.6117	7.73	151	-	161	1	--- R.TSDEVVDHR.R
1426.6846	1425.6773	1425.7099	-22.88	138	-	150	1	--- K.EISKGEPPDIEIR.T
1443.7589	1442.7516	1442.7589	-5.07	477	-	488	2	--- R.ALQSERNDLNKR.V



1444.7375 1443.7302 1443.7430 -8.83 58 - 72 1 --- K.AEQAQAKSAQSGALR.D  
 1646.8591 1645.8518 1645.8709 -11.56 446 - 459 2 --- K.ALLEMAEEKTLRDK.E  
 1690.8313 1689.8240 1689.7920 19.0 408 - 421 1 --- K.SSEVFTTFKQEMEK.M  
 1706.8364 1705.8291 1705.7869 24.8 408 - 421 1 --- K.SSEVFTTFKQEMEK.M + Oxidation (M)  
 1790.8423 1789.8350 1789.8053 16.6 432 - 445 2 --- K.ETTMYSRWSWESSNK.A + Oxidation (M)  
 2077.0454 2076.0381 2076.0660 -13.43 175 - 192 0 --- K.EITLLMQTLNTLSTPEEK.L + Oxidation (M)  
 2082.9409 2081.9336 2081.9649 -15.04 408 - 424 2 --- K.SSEVFTTFKQEMEKMTK.K + 2 Oxidation (M)  
 2140.0432 2139.0359 2139.0490 -6.13 345 - 361 2 --- K.LQQAQEMLEKAEEHRQR.E + Oxidation (M)  
 2174.0425 2173.0352 2173.0287 2.99 118 - 137 1 --- R.TYASRNGEPEPETPVVNGEK.E  
 2269.1128 2268.1055 2268.0950 4.63 398 - 416 1 --- K.FEEFQNTLSKSSSEVFTTFK.Q  
 2279.1094 2278.1021 2278.0574 19.6 142 - 161 2 --- K.GEPGPDEIRTSDEVVDRDHR.R  
**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1111.5620, 1120.5724, 1123.5819, 1128.5537, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1694.7357, 1697.8672, 1703.8214, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2273.0393, 2277.0576, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1023, 2325.0991, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

27. [Q32L17](#) Mass: 30313 Score: 19 Expect: 2.8e+002 Matches: 13

Putative uncharacterized protein MGCI133880 OS=Bos taurus GN=MGCI133880 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
805.4478	804.4405	804.4453	-5.96	266	272	2	---	K.SKNKNSK.-
1018.5189	1017.5116	1017.4978	13.6	89	97	1	---	R.DSDPELSKK.G
1021.5313	1020.5240	1020.5465	-21.99	97	105	1	---	K.KGSFRPSSR.E
1118.5620	1117.5547	1117.5476	6.38	57	67	1	---	R.GDSPRSSSSILGR.A
1255.5922	1254.5849	1254.6105	-20.41	240	249	1	---	K.TDDLGRWHQK.N
1393.7169	1392.7096	1392.7222	-9.02	97	108	2	---	K.KGSFRPSSRESR.A
1489.7172	1488.7099	1488.7209	-7.34	84	96	1	---	R.GSLWRDSDPELSK.K
1635.7941	1634.7868	1634.7756	6.88	250	263	1	---	K.NAMNNMLQKALDEK.E + Oxidation (M)
1646.8591	1645.8518	1645.8675	-9.53	68	83	0	---	R.ASLIEIPPPPPSAVSR.G
1777.8727	1776.8654	1776.8642	0.66	145	160	0	---	K.FGSNVVDQLVSEEQAR.K
2199.0986	2198.0913	2198.0724	8.60	246	263	2	---	R.WHQKNAMNNMLQKALDEK.E
2214.1145	2213.1072	2213.1413	-15.42	2	21	1	---	M.ELGHRPGTTLTLRAHPNNNK.E
2277.0576	2276.0503	2276.0894	-17.15	123	144	1	---	K.EDPNAGAQGSGSSIPNNIRHK.F

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7383, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1639.8157, 1643.8085, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1023, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310,

2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

28. [Q8MKH7](#) Mass: 29800 Score: 19 Expect: 2.9e+002 Matches: 14

Troponin T fast skeletal muscle type OS=Bos taurus GN=Tnnt3 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
802.4372	801.4299	801.4457	-19.67	153	159	2	---	K.ADQKRGK.K
863.4233	862.4161	862.4331	-19.71	161	167	1	---	K.QTAREMK.K
991.5198	990.5125	990.5280	-15.66	161	168	2	---	K.QTAREMKK.K
1007.5089	1006.5016	1006.5229	-21.17	161	168	2	---	K.QTAREMKK.K + Oxidation (M)
1143.5844	1142.5771	1142.5904	-11.64	92	100	2	---	R.RAERAEQQR.I
1578.7518	1577.7445	1577.7395	3.17	138	152	0	---	K.ALSSMGANYSSYLAK.A + Oxidation (M)
1653.8284	1652.8211	1652.7933	16.8	194	206	0	---	K.ELWDTLYQLETDK.F
1690.8313	1689.8240	1689.8396	-9.19	137	152	1	---	K.KALSSMGANYSSYLAK.A
1706.8364	1705.8291	1705.8345	-3.14	137	152	1	---	K.KALSSMGANYSSYLAK.A + Oxidation (M)
1887.9023	1886.8950	1886.9196	-13.03	59	74	0	---	K.DLMELQALIDSHFEAR.K
2020.9644	2019.9571	2019.9571	0.01	138	156	1	---	K.ALSSMGANYSSYLAKADQK.R + Oxidation (M)
2160.0703	2159.0630	2159.1044	-19.18	59	76	2	---	K.DLMELQALIDSHFEARKK.E + Oxidation (M)
2161.0813	2160.0740	2160.0633	4.97	138	157	2	---	K.ALSSMGANYSSYLAKADQKR.G
2414.1833	2413.1760	2413.2172	-17.05	55	74	2	---	K.RQNKDLMELQALIDSHFEAR.K

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 993.5112, 1001.5782, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.7118, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1677.8074, 1681.8087, 1688.8287, 1694.7357, 1697.8672, 1703.8214, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0566, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

29. [G5E6L5](#) Mass: 47201 Score: 19 Expect: 3e+002 Matches: 19

Centrosomal protein of 290 kDa OS=Bos taurus GN=CEP290 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
940.4773	939.4700	939.4662	4.11	13	20	0	---	K.VDPDELPR.Q
1007.5089	1006.5016	1006.5196	-17.84	388	396	1	---	R.NKNGSVFNK.Y
1015.5150	1014.5077	1014.4957	11.9	1	8	0	---	-MPPNINWK.E + Oxidation (M)
1092.6000	1091.5927	1091.5863	5.92	374	382	0	---	K.NTFIIEDLK.N
1092.6002	1091.5929	1091.5863	6.11	374	382	0	---	K.NTFIIEDLK.N
1115.5790	1114.5717	1114.5982	-23.76	331	340	1	---	K.LKNAQLDADK.S
1432.6718	1431.6645	1431.6589	3.90	152	163	1	---	R.NEEAENENSKLR.R
1489.7172	1488.7099	1488.7355	-17.15	341	353	0	---	K.SNVMALQQGIQER.D + Oxidation (M)
1490.7058	1489.6985	1489.6983	0.13	42	53	0	---	K.SESQENMIHLFR.I
1572.8151	1571.8078	1571.8406	-20.86	21	34	0	---	R.QEELADNLLLSLSK.V
1647.8268	1646.8195	1646.8488	-17.80	383	396	2	---	K.NELQRNKGNSVFNK.Y
1715.8053	1714.7980	1714.8195	-12.55	287	302	1	---	K.AKNEEDDPIMAAVNAK.V
1721.8296	1720.8223	1720.8632	-23.73	171	184	1	---	R.QDIDYQKQIDSQK.E
1730.8199	1729.8126	1729.8491	-21.10	255	269	1	---	K.AVVHQTDSDMDQLKK.E
1790.8423	1789.8350	1789.8516	-9.25	123	136	2	---	K.QLEQKDRELEDMK.E
2015.9661	2014.9588	2014.9564	1.20	91	108	1	---	K.VMKLENELEMAQHSAGGR.D + Oxidation (M)
2229.1064	2228.0991	2228.1041	-2.24	89	108	2	---	K.TKVMKLENELEMAQHSAGGR.D
2245.0991	2244.0918	2244.0990	-3.22	89	108	2	---	K.TKVMKLENELEMAQHSAGGR.D + Oxidation (M)
2292.1465	2291.1392	2291.1402	-0.42	42	60	1	---	K.SESQENMIHLFRITQSLMK.M

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1009.5097, 1013.4454, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632,

1425.7395, 1426.6846, 1427.7076, 1430.7102, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1719.8075, 1723.8743, 1724.8828, 1725.8090, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2233.1023, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

30. [F1MJU1](#) Mass: 14824 Score: 19 Expect: 3e+002 Matches: 9

Histone H2B OS=Bos taurus PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
745.4483	744.4410	744.4494	-11.21	18	-	24	1	--- K.AVTKAQK.D
1092.6000	1091.5927	1091.5975	-4.35	2	-	12	1	--- M.PEPAKSAPAPK.K
1092.6002	1091.5929	1091.5975	-4.17	2	-	12	1	--- M.PEPAKSAPAPK.K
1137.5565	1136.5492	1136.5390	9.02	35	-	43	0	--- K.ESYSVVYVK.V
1199.6315	1198.6242	1198.6306	-5.31	108	-	119	1	--- K.HAVSEGTKAATK.Y
1604.8136	1603.8063	1603.8430	-22.88	79	-	91	2	--- R.LEHYNKRSTITSR.E
1628.7653	1627.7580	1627.7334	15.1	58	-	71	0	--- K.AMGIMNSVNDIFER.I + 2 Oxidation (M)
1793.9556	1792.9483	1792.9068	23.2	108	-	124	2	--- K.HAVSEGTKAATKYTSSR.F
2788.3362	2787.3289	2787.3684	-14.15	47	-	71	1	--- K.QVHPDGTILSKAMGIMNSVNDIFER.I + Oxidation (M)
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1719.8075, 1723.8743, 1724.8828, 1725.8090, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

31. [G3MYI2](#) Mass: 118628 Score: 19 Expect: 3e+002 Matches: 34

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
747.4419	746.4346	746.4174	23.1	231	-	236	1	--- K.IKTEEK.S
802.4372	801.4299	801.4344	-5.64	299	-	305	1	--- R.GREAEK.Q
805.4478	804.4405	804.4341	7.98	258	-	264	0	--- K.SETLISR.E
819.4304	818.4231	818.4068	19.8	201	-	206	1	--- K.LNECKR.K
942.4820	941.4747	941.4930	-19.43	681	-	689	0	--- K.NITAAAPER.C
957.5654	956.5581	956.5403	18.6	293	-	300	1	--- K.DIDLLRG.E
1175.5867	1174.5794	1174.5578	18.4	894	-	902	1	--- R.QEEERQRTK.R
1250.6042	1249.5969	1249.5860	8.76	407	-	416	0	--- K.ELELEMESVR.A + Oxidation (M)
1299.6810	1298.6737	1298.6983	-18.90	21	-	30	2	--- R.KKLYQTFTDR.G
1355.6870	1354.6797	1354.6802	-0.37	433	-	443	1	--- K.VKEMDNYSLLK.E + Oxidation (M)
1400.6588	1399.6515	1399.6805	-20.73	214	-	224	1	--- R.AEMNQELKYFK.D
1426.6846	1425.6773	1425.6809	-2.54	435	-	446	1	--- K.EMDNYSLLKEGK.L
1485.6906	1484.6833	1484.6639	13.1	949	-	960	1	--- K.NFEMSVMQMKDK.S
1523.6987	1522.6914	1522.6722	12.6	744	-	756	0	--- R.SHDSEMYLEGLSR.S
1539.7621	1538.7548	1538.7246	19.6	712	-	726	0	--- K.SVSEVPSSMASTR.K + Oxidation (M)
1570.8015	1569.7942	1569.8038	-6.12	353	-	364	1	--- K.YQLELKEDYITR.T
1578.7518	1577.7445	1577.7144	19.1	910	-	921	1	--- R.ENGELMLDRER.R + Oxidation (M)
1651.8206	1650.8133	1650.8247	-6.88	712	-	727	1	--- K.SVSEVPSSMASTRK.L
1653.8284	1652.8211	1652.8443	-14.03	433	-	446	2	--- K.VKEMDNYSLLKEGK.L
1721.8296	1720.8223	1720.8454	-13.40	961	-	975	1	--- K.SISVSGENHLEKYM.K
1730.8199	1729.8126	1729.8080	2.67	332	-	345	1	--- R.EMTKISLEETYDQK.L + Oxidation (M)

1815.9008	1814.8935	1814.8911	1.34	880 - 893	2	---	K.EEDKLWEQQAQKQ.R
1822.9185	1821.9112	1821.8679	23.8	239 - 252	2	---	K.CEKELAEFRNELER.A
1887.9023	1886.8950	1886.9342	-20.77	417 - 432	1	---	R.AHCLALTKQNQLMSEK.V + Oxidation (M)
1984.9392	1983.9319	1983.9208	5.63	973 - 988	1	---	K.YMKLIKQONQDQDTDK.C + Oxidation (M)
2008.0485	2007.0412	2007.0385	1.38	248 - 264	2	---	R.NELERAYQAKSETLISR.E
2108.9897	2107.9824	2108.0320	-23.53	757 - 776	2	---	R.SPVAAPCPDRKSPQSPAESK.C
2152.0510	2151.0437	2151.0954	-24.01	712 - 732	2	---	K.SVVSEVPSSMASTRKSAVSR.W
2184.0767	2183.0694	2183.1044	-16.04	208 - 224	2	---	K.IEQQLRAEMNQELKYFK.D + Oxidation (M)
2334.1531	2333.1458	2333.1070	16.7	904 - 921	2	---	R.QETLQREWGELEMLDRER.R + Oxidation (M)
2372.2229	2371.2156	2371.2239	-3.49	405 - 424	2	---	R.VKELELEMESVRAHCLALTK.Q + Oxidation (M)
2409.1914	2408.1841	2408.2084	-10.07	491 - 511	2	---	K.AENATASEHKFETHKQALQK.Q
2498.0898	2497.0825	2497.1406	-23.26	940 - 960	2	---	K.QFFSFGNGKNFEMSVQEMKDK.S
2544.1514	2543.1441	2543.1697	-10.06	155 - 176	1	---	K.ESRNMETQTSSTFPEDSLVEK.L + Oxidation (M)
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 808.4353, 811.4178, 814.4170, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 950.4946, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1572.8151, 1576.7402, 1577.7395, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1723.8743, 1724.8828, 1725.8090, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8573, 1819.8838, 1821.8926, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1865.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2335.1282, 2337.1343, 2369.2256, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2626.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558							

32. [E1BP00](#) Mass: 59905 Score: 19 Expect: 3e+002 Matches: 22

PC4 and SFRS1-interacting protein OS=Bos taurus GN=PSIP1 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
819.4304	818.4231	818.4385	-18.86	518	524	0	---	R.ETEISLK.D
863.4233	862.4161	862.4032	14.9	128	135	0	---	K.ASNEDVTK.A
913.5685	912.5613	912.5392	24.1	463	470	2	---	K.GPNKKLEK.E
928.5031	927.4958	927.5138	-19.39	181	189	0	---	R.GRPAATEVK.I
981.4474	980.4401	980.4345	5.70	344	351	1	---	K.RETSMDSR.L
1029.5330	1028.5257	1028.5264	-0.66	293	300	1	---	R.NFQTAHRR.N
1057.6005	1056.5932	1056.6040	-10.17	220	228	2	---	R.NVRDLKQK.N
1143.5844	1142.5771	1142.5693	6.82	290	299	1	---	K.GGRNFQTAHR.R
1222.5789	1221.5716	1221.5772	-4.54	345	354	1	---	R.ETSMDSRLQR.I
1238.5917	1237.5844	1237.5721	9.97	345	354	1	---	R.ETSMDSRLQR.I + Oxidation (M)
1258.6344	1257.6271	1257.6077	15.5	15	24	1	---	K.MKGYPHPAR.V + Oxidation (M)
1268.6414	1267.6341	1267.6269	5.72	305	315	2	---	K.GQHEKEAADRK.R
1271.6490	1270.6417	1270.6643	-17.76	289	299	2	---	R.KGRGNFQTAHR.R
1299.6810	1298.6737	1298.6704	2.53	290	300	2	---	K.GGRNFQTAHRR.N
1406.7207	1405.7134	1405.7089	3.21	229	241	0	---	K.NFVGITIVESSPEK.L
1421.6632	1420.6559	1420.6318	17.0	101	113	0	---	K.QSNASSDVEVEEK.E
1539.7621	1538.7548	1538.7437	7.24	443	455	1	---	K.SLAEQRQHEEANK.T
1563.7314	1562.7241	1562.7035	13.2	202	214	0	---	K.QPCPSESDIFLDR.N
1786.8824	1785.8751	1785.9005	-14.19	408	422	1	---	K.VSQVIMEKSTMLYNK.F + Oxidation (M)
1916.9475	1915.9402	1915.9540	-7.20	74	89	2	---	K.RKGFNEGLWEIDNNPK.V
2292.1465	2291.1392	2291.1137	11.1	373	392	0	---	R.CIEALDELASLQVTMQQAQK.H + Oxidation (M)
3330.6311	3329.6238	3329.6669	-12.94	373	401	1	---	R.CIEALDELASLQVTMQQAQKHTEMITTLK.K
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 919.5024, 925.5089, 927.4999, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1516.9475, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199,								

1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2622.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3347.6077, 3511.9668, 3761.1558

33. [A4FVB4](#) Mass: 27623 Score: 19 Expect: 3e+002 Matches: 14

mRNA turnover protein 4 homolog OS=Bos taurus GN=MRT04 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
908.4577	907.4504	907.4619	-12.70	72	-	79	0 ---	K.VMMVALGR.S + 2 Oxidation (M)
940.4773	939.4700	939.4774	-7.85	87	-	94	0 ---	K.DNLHQVSK.K
1009.5097	1008.5024	1008.4964	6.02	62	-	69	1 ---	K.HSRMFFGK.N
1025.5192	1024.5119	1024.4913	20.2	62	-	69	1 ---	K.HSRMFFGK.N + Oxidation (M)
1134.5841	1133.5768	1133.6049	-24.77	70	-	79	1 ---	K.NKVMVALGR.S + Oxidation (M)
1250.6042	1249.5969	1249.5689	22.4	192	-	201	0 ---	K.LFGYEMAEFK.V + Oxidation (M)
1411.6647	1410.6574	1410.6667	-6.58	108	-	118	1 ---	R.TKEEVDEWFTK.Y
1418.6714	1417.6641	1417.6296	24.4	119	-	130	1 ---	K.YTEM DYARAGNK.A
1434.6552	1433.6479	1433.6245	16.3	119	-	130	1 ---	K.YTEM DYARAGNK.A + Oxidation (M)
1524.7383	1523.7310	1523.7456	-9.55	58	-	69	2 ---	R.NAWKH SRMFFGK.N + Oxidation (M)
1556.7874	1555.7801	1555.7453	22.4	202	-	214	1 ---	K.VSIKYMWDQAQSGR.F + Oxidation (M)
1924.9314	1923.9241	1923.9546	-15.85	70	-	86	2 ---	K.NKVMVALGRSPSDEYK.D
2142.9895	2141.9822	2142.0278	-21.28	33	-	49	1 ---	K.CVDTYKYLFI FSVANMR.N + Oxidation (M)
2788.3362	2787.3289	2787.3036	9.07	192	-	214	2 ---	K.LFGYEMAEFKVSIKYMWDQAQSGR.F + 2 Oxidation (M)
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1416.6047, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

34. [G8JL04](#) Mass: 5563 Score: 19 Expect: 3.1e+002 Matches: 5

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1371.7366	1370.7293	1370.7041	18.4	27	-	38	1 ---	K.TETQKNPLPSK.E
1906.8872	1905.8799	1905.8812	-0.65	1	-	18	0 ---	-.SAPSATMSDKPNMAEIEK.F
1984.9392	1983.9319	1983.9749	-21.65	33	-	50	2 ---	K.NPLPSKETIEQE KQAGES.-
2229.1064	2228.0991	2228.1172	-8.10	27	-	45	2 ---	K.TETQKNPLPSKETIEQE.K
2544.1514	2543.1441	2543.1883	-17.37	1	-	23	2 ---	-.SAPSATMSDKPNMAEIEKFDKSK.L + 2 Oxidation (M)
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653,								



1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7337, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1779.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0066, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1928.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0677, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2233.1023, 2245.0941, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3183.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

35. [Q02366](#) Mass: 15044 Score: 19 Expect: 3.1e+002 Matches: 8  
NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 6 OS=Bos taurus GN=NDUFA6 PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
863.4233	862.4161	862.3967	22.5	24	-	30	1	R.DMNEAKR.R
927.4999	926.4926	926.4868	6.21	99	-	105	1	K.QRTHVMR.F
1035.5203	1034.5130	1034.4927	19.7	24	-	31	2	R.DMNEAKRR.V + Oxidation (M)
1177.6178	1176.6105	1176.6060	3.86	86	-	95	1	K.GKMELEETIK.V
1358.6704	1357.6631	1357.6779	-10.86	106	-	116	0	R.FFHETEAPRPK.D
1606.8130	1605.8057	1605.8436	-23.58	86	-	98	2	K.GKMELEETIKVWK.Q + Oxidation (M)
2283.1279	2282.1206	2282.1491	-12.47	99	-	116	2	K.QRTHVMRFFHETEAPRPK.D + Oxidation (M)
2337.1343	2336.1270	2336.1794	-22.43	8	-	29	1	R.QAAVAASTSVKPIFSRDMNEAKR + Oxidation (M)
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0066, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 2008.0485, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0677, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0941, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

36. [G3MZ91](#) Mass: 14728 Score: 19 Expect: 3.1e+002 Matches: 9  
Histone H2B OS=Bos taurus PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
745.4483	744.4410	744.4494	-11.21	18	-	24	1	K.AVTKAQK.D
1092.6000	1091.5927	1091.5975	-4.35	2	-	12	1	M.PEPAKSAPAPK.K
1092.6002	1091.5929	1091.5975	-4.17	2	-	12	1	M.PEPAKSAPAPK.K
1137.5565	1136.5492	1136.5390	9.02	35	-	43	0	K.ESYSVVYVYK.V
1199.6315	1198.6242	1198.6306	-5.31	108	-	119	1	K.HAVSEGKKAATK.Y
1604.8136	1603.8063	1603.8430	-22.88	79	-	91	2	R.LEHYNKRSTITSR.E
1628.7653	1627.7580	1627.7334	15.1	58	-	71	0	K.AMGIMNSVNDIFER.I + 2 Oxidation (M)
1793.9556	1792.9483	1792.9068	23.2	108	-	124	2	K.HAVSEGKKAATKYTSSR.I
2788.3362	2787.3289	2787.3684	-14.15	47	-	71	1	K.QVHPDGTILSKAMGIMNSVNDIFER.I + Oxidation (M)
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6118, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1368.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068,								



1603.8092, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.8895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

37. [F1MEY1](#) Mass: 167004 Score: 19 Expect: 3.2e+002 Matches: 33

Uncharacterized protein OS=Bos taurus GN=ATAD2B PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
808.4353	807.4280	807.4174	13.2	1135	- 1140	1	---	K.CAFRVR.R
906.4929	905.4856	905.4865	-0.99	355	- 362	2	---	K.SKSMARAR.N
1015.5150	1014.5077	1014.5247	-16.69	1113	- 1120	1	---	R.VEEAFRHK.Q
1173.6008	1172.5935	1172.5906	2.46	363	- 371	1	---	R.NRCLPMNLR.A
1175.5867	1174.5794	1174.6016	-18.89	92	- 101	1	---	R.TLKQPDVCK.D
1233.6571	1232.6498	1232.6322	14.3	1006	- 1016	0	---	K.EPMDLSTVITK.I
1237.6270	1236.6197	1236.6098	7.99	1109	- 1118	1	---	K.TETRVEEAFR.H
1258.6344	1257.6271	1257.6313	-3.32	1419	- 1429	0	---	K.SNNLAVDQLER.L
1276.5977	1275.5904	1275.5844	4.76	113	- 123	0	---	R.EEWNISGQAR.L
1276.6000	1275.5927	1275.5844	6.56	113	- 123	0	19	R.EEWNISGQAR.L
1299.6810	1298.6737	1298.6843	-8.18	1113	- 1122	2	---	R.VEEAFRHKQR.N
1300.6566	1299.6493	1299.6684	-14.65	313	- 322	1	---	K.RENTLFDIHR.S
1320.6268	1319.6195	1319.6139	4.23	458	- 469	1	---	R.ALANECSSQDKK.V
1349.6838	1348.6765	1348.6888	-9.07	633	- 643	1	---	R.RYPQIYASSHK.L
1445.7306	1444.7233	1444.7270	-2.55	58	- 73	1	---	K.AGGSGSAGVALDEARK.A
1555.7928	1554.7855	1554.7903	-3.05	314	- 326	1	---	R.ENTLFDIHRSPAR.R
1560.7551	1559.7478	1559.7501	-1.47	386	- 400	0	---	K.VGASLADVDPMNIDK.S + Oxidation (M)
1707.8435	1706.8362	1706.8700	-19.79	1091	- 1107	0	---	R.GLSVTAEQINPHGTGAR.K
1721.8296	1720.8223	1720.8203	1.20	476	- 490	2	---	R.KGADCLSKWVGESER.Q
1771.9686	1770.9613	1770.9186	24.1	384	- 400	1	---	R.VKVGASLADVDPMNIDK.S
1779.8081	1778.8008	1778.7927	4.55	152	- 167	1	---	K.GDGLSCINGDMEVRK.S
1793.9556	1792.9483	1792.9294	10.5	441	- 457	1	---	R.GCLFYGGPTGKTLVAR.A
1819.8838	1818.8765	1818.8609	8.61	108	- 123	1	---	R.TTGQREWNISGQAR.L
1863.9319	1862.9246	1862.9711	-24.95	1090	- 1107	1	---	K.RGLSVTAEQINPHGTGAR.K
1931.9956	1930.9883	1930.9530	18.3	955	- 969	2	---	K.IRMEDQEENTLREL.L
1932.9833	1931.9760	1931.9629	6.81	593	- 609	1	---	R.DWNPKLSDAFGLGELAEK.C
2166.0911	2165.0838	2165.1076	-11.00	74	- 94	2	---	K.AEADGSLSDSHVSPKAKTLK.Q
2199.0986	2198.0913	2198.1412	-22.68	363	- 381	2	---	R.NRCLPMNLRADLASGILR.E
2214.1145	2213.1072	2213.1408	-15.19	365	- 383	2	---	R.CLPMNLRADLASGILRER.V
2323.1892	2322.1819	2322.2040	-9.51	1091	- 1112	2	---	R.GLSVTAEQINPHGTGARKTETR.V
2335.1282	2334.1209	2334.1121	3.78	948	- 966	2	---	R.QLSESEKIRMEDQEENTLR.E
2392.1528	2391.1455	2391.0900	23.2	1031	- 1051	1	---	K.DIDLICNSALEYNPDKDPGDK.I
3056.4641	3055.4568	3055.4419	4.88	593	- 619	2	---	R.DWNPKLSDAFGLGELAEKCVGYCGADIK.A

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5546, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1268.6414, 1271.6490, 1275.6388, 1285.5864, 1294.6315, 1309.6340, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6767, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1556.7874, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.8895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2218.1018, 2221.1035, 2223.2205, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2326.0947, 2334.1531, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

38. [F1N469](#) Mass: 96792 Score: 19 Expect: 3.2e+002 Matches: 34

Uncharacterized protein OS=Bos taurus GN=MAP7D3 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
802.4372	801.4299	801.4344	-5.64	599	- 604	1	---	K.EERLQK.E

819.4304	818.4231	818.4358	-15.58	195	-	201	1	---	R.SSSLNRR.C
870.5100	869.5027	869.5235	-24.00	120	-	126	1	---	K.FKAVLHR.T
960.4840	959.4767	959.4784	-1.82	96	-	102	2	---	K.EKDEQRR.I
1001.5782	1000.5709	1000.5665	4.42	591	-	598	2	---	R.LAREQKEK.E
1046.5759	1045.5686	1045.5628	5.54	809	-	817	1	---	R.SSTKRPTNR.A
1145.6155	1144.6082	1144.6088	-0.47	66	-	74	1	---	K.ETQLEKER.K
1221.5699	1220.5626	1220.5455	14.0	109	-	117	1	---	K.RNEMLEER.E + Oxidation (M)
1222.5789	1221.5716	1221.5772	-4.54	824	-	834	0	---	K.AETSSTMRPSR.S
1231.6102	1230.6029	1230.6204	-14.22	154	-	164	1	---	K.TVNHKSTSTEK.L
1238.5917	1237.5844	1237.5721	9.97	824	-	834	0	---	K.AETSSTMRPSR.S + Oxidation (M)
1276.5977	1275.5904	1275.5691	16.7	644	-	653	1	---	K.RESQEDEDQK.V
1276.6000	1275.5927	1275.5691	18.5	644	-	653	1	---	K.RESQEDEDQK.V
1299.6810	1298.6737	1298.6466	20.9	571	-	583	1	---	K.GTPGPKNAEEATK.I
1343.6613	1342.6540	1342.6703	-12.16	783	-	793	1	---	K.AFLNTDMKTFR.Q
1350.6704	1349.6631	1349.6609	1.64	175	-	187	0	---	R.QMSSTGLQNSVAK.K
1384.7109	1383.7036	1383.6956	5.82	328	-	339	0	---	K.VSVETFLEVSMK.E + Oxidation (M)
1386.7134	1385.7061	1385.7238	-12.73	468	-	478	1	---	K.RIPPSQIPCYR.W
1426.6846	1425.6773	1425.7108	-23.48	605	-	615	2	---	K.EMEQSFIKRMK.D
1443.7589	1442.7516	1442.7841	-22.53	796	-	808	2	---	K.GVKDPLNQTKSTR.S
1524.7383	1523.7310	1523.7362	-3.39	821	-	834	1	---	K.TGKAETSSTMRPSR.S + Oxidation (M)
1527.7585	1526.7512	1526.7650	-9.02	76	-	87	2	---	K.SKIVYEKQMEEK.Q + Oxidation (M)
1530.6902	1529.6829	1529.7209	-24.83	205	-	217	0	---	R.LHSSTETEQIEEK.R
1542.8290	1541.8217	1541.8347	-8.45	679	-	690	1	---	R.IMLQNLQERLER.K
1615.8575	1614.8502	1614.8188	19.5	783	-	795	2	---	K.AFLNTDMKTFRQK.G + Oxidation (M)
1615.8600	1614.8527	1614.8188	21.0	783	-	795	2	---	K.AFLNTDMKTFRQK.G + Oxidation (M)
1715.8053	1714.7980	1714.8382	-23.44	530	-	545	1	---	R.TVFAQNALGTMGMSK.A + 2 Oxidation (M)
1719.8075	1718.8002	1718.7604	23.2	561	-	576	1	---	K.DMICEESGNKGTGPGK.N
1774.9059	1773.8986	1773.8857	7.30	544	-	560	1	---	K.SKAVSNTINNSEAPSQK.D
1797.8339	1796.8266	1796.8594	-18.25	139	-	153	1	---	K.RNSWAGYTTVNSQNK.T
1822.9185	1821.9112	1821.9043	3.81	599	-	612	2	---	K.EERLQKEMEQSFIK.R
2159.0752	2158.0679	2158.0212	21.7	449	-	467	2	---	K.DSPQKSEMDQPSNPITKK.R
2203.0464	2202.0391	2202.0739	-15.78	356	-	375	1	---	K.EHPAVNVVEALAEASMKHEPK.V + Oxidation (M)
2211.1077	2210.1004	2210.1457	-20.48	479	-	497	2	---	R.WSSSPTRRRRPPSPISASR.Q
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 805.4478, 808.4353, 811.4178, 814.4170, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1227.6271, 1228.6411, 1229.6412, 1233.6571, 1237.6270, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1285.5864, 1294.6315, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1345.6910, 1349.6838, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1529.7466, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2205.9102, 2208.9729, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1245, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2501.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558									

39. [FIMIS2](#) Mass: 9764 Score: 19 Expect: 3.3e+002 Matches: 7

Uncharacterized protein OS=Bos taurus PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
993.5112	992.5039	992.4862	17.9	20	-	27	1 ---	R.MTSAYHRK.C
1009.5097	1008.5024	1008.4811	21.2	20	-	27	1 ---	R.MTSAYHRK.C + Oxidation (M)
1563.7314	1562.7241	1562.7221	1.30	28	-	40	1 ---	K.CMPAHYKEAELSK.G
1707.8435	1706.8362	1706.8120	14.2	27	-	40	2 ---	R.KCMPAHYKEAELSK.G + Oxidation (M)
1896.8954	1895.8881	1895.8593	15.2	20	-	34	2 ---	R.MTSAYHRKCMPAHYK.E + Oxidation (M)
2118.8926	2117.8853	2117.9081	-10.75	9	-	26	1 ---	R.AGVEMADMYNRMSTAYHR.K + Oxidation (M)
2572.0935	2571.0862	2571.1444	-22.61	41	-	62	1 ---	K.GESVCLDPYASKYLDIHECMGK.K
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 1001.5782, 1007.5089, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5579, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736								

1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

40. [F1MHZ2](#) Mass: 64063 Score: 19 Expect: 3.3e+002 Matches: 22

Outer dense fiber protein 2-like OS=Bos taurus GN=ODF2L PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
767.4740	766.4667	766.4701	-4.40	160	165	1	---	K.LKEHIK.S
811.4178	810.4105	810.3945	19.7	183	189	0	---	K.YEAVAMK.E
904.4613	903.4540	903.4661	-13.39	350	357	0	---	K.AELSELRLK.K
925.5089	924.5016	924.5069	-5.74	534	540	0	---	K.NYLQFLK.T
960.4840	959.4767	959.4923	-16.31	154	161	1	---	K.EAENEKLK.E
1032.5870	1031.5797	1031.5611	18.1	350	358	1	---	K.AELSELRLK.D
1115.5790	1114.5717	1114.5618	8.89	453	462	0	---	R.QLEAALEEGR.Q
1181.6432	1180.6359	1180.6274	7.24	180	189	2	---	K.KNKYEAVAMK.E
1294.6315	1293.6242	1293.6234	0.62	465	475	1	---	K.VSEIEKMSSR.E
1352.6350	1351.6277	1351.6255	1.61	73	83	0	---	K.DTIEEISFENN.G
1371.7366	1370.7293	1370.7153	10.2	453	464	1	---	R.QLEAALEEGRQK.V
1377.6100	1376.6027	1376.6354	-23.73	410	420	1	---	K.QKLEQMDAENR.E + Oxidation (M)
1377.6146	1376.6073	1376.6354	-20.39	410	420	1	---	K.QKLEQMDAENR.E + Oxidation (M)
1721.8296	1720.8223	1720.7872	20.4	494	507	1	---	K.NEEQNQLVCKMNSK.A
1730.8199	1729.8126	1729.8127	-0.04	276	289	1	---	K.MEEHGKISCIEILR.K
1906.8872	1905.8799	1905.8891	-4.80	210	225	0	---	R.IEHFTGDMENLTSQIR.E + Oxidation (M)
2012.9506	2011.9433	2011.9810	-18.73	517	533	1	---	K.EIQHSLEKSENQNESIK.N
2046.9839	2045.9766	2045.9905	-6.79	291	307	0	---	K.LHSIEYENETLNLNLTN.L
2077.0454	2076.0381	2076.0422	-1.96	508	524	1	---	K.AQHGEVCLKEIQHSLEK.S
2334.1531	2333.1458	2333.1975	-22.13	444	464	2	---	K.SAEYTALARQLEAALEEGRQK.V
2522.1980	2521.1907	2521.2084	-7.02	226	247	2	---	R.EQEAKLSETVSASNAWSHYEK.I
2553.1934	2552.1861	2552.2475	-24.05	504	524	2	---	K.MNSKAQHGEVCLKEIQHSLEK.S + Oxidation (M)

No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 906.4929, 908.4577, 913.5685, 919.5024, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1374.6705, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1723.8743, 1724.8828, 1725.8090, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

41. [F1BPQ8](#) Mass: 60653 Score: 19 Expect: 3.3e+002 Matches: 22

Uncharacterized protein OS=Bos taurus GN=CDC73 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
805.4478	804.4405	804.4316	11.1	521	526	1	---	R.YMVKKH.K
821.4247	820.4174	820.4265	-11.12	521	526	1	---	R.YMVKKH.K + Oxidation (M)
872.4994	871.4921	871.5127	-23.63	2	9	0	---	M.ADVLSVLRL.Q
904.4613	903.4540	903.4709	-18.63	393	399	2	---	K.KKQGCQR.E
1024.5028	1023.4955	1023.4873	8.06	300	308	1	---	K.GKEETGFK.I
1029.5330	1028.5257	1028.5403	-14.17	284	292	0	---	K.QPIPAAYNR.Y
1096.5302	1095.5229	1095.5118	10.2	172	181	0	---	R.SLSEAMGVEK.I + Oxidation (M)
1158.6288	1157.6215	1157.6153	5.42	400	408	1	---	R.ENETLIQRR.K

1237.6270	1236.6197	1236.5986	17.0	212	-	222	0	---	R.SFVDAEVDVTR.D
1299.6810	1298.6737	1298.6507	17.8	298	-	308	2	---	R.FKGKEETEGFK.I
1430.7102	1429.7029	1429.6983	3.21	137	-	147	1	---	K.KPRIEDEECVR.L
1475.7224	1474.7151	1474.7416	-17.95	480	-	491	1	---	K.YDEVRLDPNVQK.W
1510.7383	1509.7310	1509.7140	11.3	22	-	34	0	---	K.GDEVIFGEFSWPK.N
1646.8591	1645.8518	1645.8563	-2.72	379	-	392	1	---	K.DLLQDLKFVPSEK.K
1690.8313	1689.8240	1689.7992	14.7	140	-	152	2	---	R.IEDEECVRLDKER.L
1786.8824	1785.8751	1785.9043	-16.34	137	-	150	2	---	K.KPRIEDEECVRLDK.E
1793.9556	1792.9483	1792.9505	-1.23	1	-	15	1	---	-.MADVLSVLQYNIQK.K + Oxidation (M)
1819.8838	1818.8765	1818.8934	-9.30	410	-	426	0	---	K.DQMOPGGTAISVTVPYR.V
1851.9031	1850.8958	1850.9203	-13.23	22	-	37	1	---	K.GDEVIFGEFSWPKNVK.T
1932.9833	1931.9760	1932.0164	-20.88	195	-	211	2	---	R.STIKTLDLDDITALKQR.S
2009.9747	2008.9674	2009.0065	-19.46	92	-	110	1	---	R.KDLLGYLNGEASTSASIDR.S
2326.0947	2325.0874	2325.1093	-9.41	309	-	330	1	---	K.IDTMGTYHGMTLKSVTEGASAR.K
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 808.4353, 811.4178, 814.4170, 819.4304, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 880.4412, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1025.5192, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1300.6566, 1309.6340, 1328.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1787.8207, 1790.8423, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9049, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2501.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558									

42. [Q2TA00](#) Mass: 49021 Score: 18 Expect: 3.4e+002 Matches: 20

Coiled-coil domain-containing protein 83 OS=Bos taurus GN=CCDC83 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
756.3716	755.3643	755.3710	-8.85	408	-	413	1	--- K.MMKSF.L-
993.5112	992.5039	992.4960	7.91	1	-	9	1	--- -.METAAKTNK.R
1009.5097	1008.5024	1008.4910	11.4	1	-	9	1	--- -.METAAKTNK.R + Oxidation (M)
1025.5192	1024.5119	1024.5302	-17.79	10	-	18	1	--- K.RDIQDGPPK.E
1029.5330	1028.5257	1028.5113	14.0	380	-	387	0	--- K.MPIHFQEK.E
1096.5302	1095.5229	1095.5461	-21.18	66	-	73	0	--- K.DEQIWHIR.N
1173.6008	1172.5935	1172.6012	-6.54	379	-	387	1	--- K.KMPIHFQEK.E + Oxidation (M)
1222.5789	1221.5716	1221.5547	13.9	93	-	102	1	--- R.EEVENAMKEK.W + Oxidation (M)
1231.6102	1230.6029	1230.6105	-6.15	52	-	60	2	--- R.EKNQKYHER.N
1276.5977	1275.5904	1275.5877	2.12	108	-	117	1	--- R.DQEQNLKDMR.I
1276.6000	1275.5927	1275.5877	3.92	108	-	117	1	--- R.DQEQNLKDMR.I
1320.6268	1319.6195	1319.6503	-23.33	115	-	125	1	--- K.DMRIQISNAEK.L + Oxidation (M)
1863.9319	1862.9246	1862.9044	10.9	84	-	100	1	--- K.SEGSVVVTTREEVENAMK.E
1879.9445	1878.9372	1878.8993	20.2	84	-	100	1	--- K.SEGSVVVTTREEVENAMK.E + Oxidation (M)
2155.0667	2154.0594	2154.0262	15.4	164	-	181	2	--- K.ENAEKMSQYKITLEDAR.K
2160.0703	2159.0630	2159.0640	-0.46	108	-	125	2	--- R.DQEQNLKDMRIQISNAEK.L
2199.0986	2198.0913	2198.0796	5.32	206	-	222	2	--- R.FIDKGSYREIWENDWLK.K
2277.0576	2276.0503	2276.0605	-4.49	393	-	410	2	--- K.FYEDVRSPESHITYKMMK.S + Oxidation (M)
2409.1914	2408.1841	2408.1835	0.28	380	-	398	2	--- K.MPIHFQEKETPVKFYEDVR.S + Oxidation (M)
2440.2007	2439.1934	2439.1342	24.3	131	-	150	2	--- K.LSEKEYWEEYKKNVGEQHGK.L

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 1001.5782, 1007.5089, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7393, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053,

1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059,  
 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926,  
 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1866.8857, 1868.8972,  
 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336,  
 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151,  
 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844,  
 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2159.0752, 2161.0813, 2166.0911, 2167.0676,  
 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145,  
 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2279.1094, 2280.1204, 2283.1279,  
 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978,  
 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2447.2368, 2477.1301, 2495.0542,  
 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125,  
 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077,  
 3511.9668, 3761.1558

43. [F1B992](#) Mass: 72756 Score: 18 Expect: 3.4e+002 Matches: 21

Uncharacterized protein OS=Bos taurus PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1025.5192	1024.5119	1024.4937	17.7	67	-	74	1	--- K.SYDRLSER.K
1153.5929	1152.5856	1152.5887	-2.67	67	-	75	2	--- K.SYDRLSERK.D
1299.6810	1298.6737	1298.6441	22.8	424	-	433	1	--- R.KPYQCKQYQK.T
1393.7169	1392.7096	1392.7105	-0.64	487	-	498	0	--- K.CSQVLLSVCLLK.N
1400.6588	1399.6515	1399.6554	-2.80	333	-	344	0	--- K.HMVTHSGDLPKYC + Oxidation (M)
1485.6906	1484.6833	1484.7194	-24.30	131	-	141	2	--- R.EHQKCKEYKY.C
1524.7383	1523.7310	1523.7225	5.62	404	-	415	1	--- K.CEKTFTISPNCRL.M
1568.7372	1567.7299	1567.7235	4.08	96	-	109	1	--- K.TAGFKPRECSACGK.F
1606.8130	1605.8057	1605.8086	-1.77	474	-	486	2	--- K.RFHIGETPYACK.C
1613.7793	1612.7720	1612.7490	14.3	528	-	541	0	--- K.HMIHTGDGFPCTCK.E
1688.8287	1687.8214	1687.7988	13.4	259	-	271	1	--- R.EIHTREQPYDCK.Q
1703.8214	1702.8141	1702.7845	17.4	157	-	170	2	--- R.THKRSHTGEAYECK.Q
1793.9556	1792.9483	1792.9189	16.4	284	-	298	2	--- R.LHRGKTPHVCITCSK.E
1800.8578	1799.8505	1799.8447	3.23	333	-	347	1	--- K.HMVTHSGDLPKYCQK.C
2159.0752	2158.0679	2158.0769	-4.15	434	-	451	1	--- K.TFKTPKPVGYMEEFTEVR.K
2199.0986	2198.0913	2198.1266	-16.04	255	-	271	2	--- R.IQIREIHTREQPYDCK.Q
2277.0576	2276.0503	2276.0790	-12.61	289	-	307	1	--- K.TPHVCITCSKELTTAHER.I
2436.1699	2435.1626	2435.1652	-1.04	299	-	318	1	--- K.ELTTAHERIHTGEKPYECK.E
2524.1689	2523.1616	2523.1965	-13.81	180	-	200	1	--- K.NTHTGKVPYKYKECGNALTWR.S
3180.5432	3179.5359	3179.5571	-6.65	180	-	206	2	--- K.NTHTGKVPYKYKECGNALTWRSNVVTR.T
3347.6077	3346.6004	3346.6292	-8.60	2	-	29	2	--- M.DSLVLFEDVAMNFTQWGLLDSQRKLYR.D
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1399.6119, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1608.7599, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1690.8313, 1694.7357, 1697.8672, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1796.8109, 1797.8339, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3313.5032, 3330.6311, 3511.9668, 3761.1558								

44. [F1MB20](#) Mass: 119646 Score: 18 Expect: 3.4e+002 Matches: 39

Oral-facial-digital syndrome 1 isoform 1 OS=Bos taurus GN=OFD1 PE=2 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
745.4483	744.4410	744.4382	3.85	55	-	61	0	--- R.GVLDTLK.T
802.4372	801.4299	801.4344	-5.64	323	-	329	1	--- R.GREALEK.Q
822.4321	821.4249	821.4395	-17.85	225	-	230	1	--- K.LNEYKR.K
950.4946	949.4873	949.4902	-3.10	238	-	245	1	--- R.AEMSQKLK.Y + Oxidation (M)
957.5654	956.5581	956.5403	18.6	317	-	324	1	--- K.DIDLLRGR.E
960.4840	959.4767	959.4825	-6.04	925	-	931	0	--- K.WQETLQR.E
977.5352	976.5263	976.5263	1.63	249	-	256	1	--- K.DTEIMKIK.M
993.5112	992.5039	992.5212	-17.45	249	-	256	1	--- K.DTEIMKIK.M + Oxidation (M)
1016.5522	1015.5449	1015.5662	-20.96	53	-	61	1	--- K.DRGVLDTLK.T
1021.5313	1020.5240	1020.5022	21.4	346	-	354	1	--- K.NKSMITGLR.R
1029.5330	1028.5257	1028.5475	-21.19	750	-	758	2	--- R.SHKSTASRR.L
1057.6005	1056.5932	1056.5676	24.3	230	-	237	1	--- K.REVEQQLR.A
1079.5398	1078.5325	1078.5519	-18.00	2	-	12	0	--- M.AHVSPSPASSR.R
1145.6155	1144.6082	1144.5836	21.5	390	-	398	1	--- R.TNRLIEDER.K
1158.6288	1157.6215	1157.6040	15.1	935	-	943	1	--- R.QLEKLDQER.R



1173.6008	1172.5935	1172.5646	24.6	913	-	921	2	---	R.ERRQGEQR.Q
1177.6178	1176.6105	1176.6033	6.13	346	-	355	2	---	K.NKSMTDGLRR.R
1199.6315	1198.6242	1198.6306	-5.33	722	-	732	0	---	R.VTSQPPVSTR.G
1229.6412	1228.6339	1228.6234	8.58	448	-	457	1	---	K.QNHMLSEKVK.E + Oxidation (M)
1231.6102	1230.6029	1230.6065	-2.90	915	-	924	2	---	R.RQGDEQRQSK.W
1271.6490	1270.6417	1270.6420	-0.23	25	-	34	0	---	R.FLSWSIMFPK.S + Oxidation (M)
1275.6388	1274.6315	1274.6466	-11.86	35	-	45	1	---	K.SDVLSQDDLRLK.K
1377.6100	1376.6027	1376.6129	-7.40	662	-	672	0	---	R.ELEQEAECELEK.A
1377.6146	1376.6073	1376.6129	-4.06	662	-	672	0	---	R.ELEQEAECELEK.A
1439.7164	1438.7091	1438.6940	10.5	769	-	781	0	---	R.SLDSETYLEGLGR.S
1445.7306	1444.7233	1444.7521	-19.93	896	-	907	2	---	K.SLGEQKEEEKLR.E
1510.7383	1509.7310	1509.7418	-7.15	249	-	260	2	---	K.DTEIMIKMEEK.R + Oxidation (M)
1570.8015	1569.7942	1569.8038	-6.12	378	-	389	1	---	K.YQLELKEDYITR.T
1591.7852	1590.7779	1590.7671	6.78	231	-	243	1	---	R.EVEQQLRAEMSQK.L + Oxidation (M)
1703.8214	1702.8141	1702.7719	24.8	957	-	970	2	---	K.EYESSVQEMKDKSK.S + Oxidation (M)
1723.8743	1722.8670	1722.8676	-0.31	357	-	370	1	---	R.ELTIKNIEETYDQK.L
1859.8494	1858.8421	1858.8328	5.01	952	-	966	1	---	K.LEMEKEYESSVQEMK.D
1863.9319	1862.9246	1862.8846	21.5	673	-	687	1	---	K.AFQNYHQVRSQCPTK.S
1879.9445	1878.9372	1878.9687	-16.73	356	-	370	2	---	R.RELTIKNIEETYDQK.L
1887.9023	1886.8950	1886.9342	-20.77	440	-	455	1	---	R.AQCLALTKQNHMLSEK.V + Oxidation (M)
2280.1204	2279.1131	2279.1289	-6.94	448	-	466	2	---	K.QNHMLSEKVKEMSDYSLLK.E
2296.1479	2295.1406	2295.1239	7.31	448	-	466	2	---	K.QNHMLSEKVKEMSDYSLLK.E + Oxidation (M)
2411.1907	2410.1834	2410.1877	-1.76	573	-	593	0	---	K.QTQTALNEVYPNPSHSLNLR.S
2527.2310	2526.2237	2526.1874	14.4	636	-	659	1	---	R.YPNASAEGSSPDSLEFVASTKVR.V
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 966.4929, 969.4786, 972.5046, 974.5551, 978.5240, 981.4474, 989.2700, 991.5198, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1018.5189, 1024.5028, 1025.5192, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1064.5358, 1071.5361, 1073.5377, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1149.5597, 1153.5929, 1163.5771, 1175.5867, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1443.7589, 1444.7375, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1862.9265, 1866.8857, 1868.8972, 1880.9215, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.8060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2283.1279, 2285.1169, 2292.1465, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558									

45. [E1BI42](#) Mass: 127633 Score: 18 Expect: 3.4e+002 Matches: 37

Uncharacterized protein OS=Bos taurus GN=CCDC158 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
742.4642	741.4570	741.4749	-24.14	563	-	568	0	--- K.VIEILR.Q
788.4225	787.4152	787.4188	-4.55	650	-	655	1	--- K.DIKQER.D
821.4247	820.4174	820.4113	7.50	217	-	224	0	--- R.NMASAISK.V
1032.5870	1031.5797	1031.6049	-24.36	431	-	439	1	--- R.LEALLKAMK.S + Oxidation (M)
1096.5302	1095.5239	1095.5230	-0.06	488	-	496	1	--- K.KMTLESSER.T + Oxidation (M)
1215.6246	1214.6173	1214.6255	-6.71	593	-	602	1	--- K.AQLEKEINDR.R
1231.6102	1230.6029	1230.6244	-17.48	79	-	88	0	--- R.VLEEYSHQVK.D
1275.6388	1274.6315	1274.6255	4.74	57	-	66	1	--- K.YEVELDSHRK.V
1341.6488	1340.6415	1340.6684	-20.08	407	-	418	0	--- R.DTGNSTIDHLR.R
1371.7366	1370.7293	1370.7266	2.00	593	-	603	2	--- K.AQLEKEINDRR.L
1410.6736	1409.6663	1409.6708	-3.16	687	-	698	1	--- K.SEEMETTNNKL.M
1411.6647	1410.6574	1410.6296	19.7	685	-	696	1	--- R.NKSEEMETTNNK.L
1426.6846	1425.6773	1425.6697	5.35	339	-	349	1	--- R.MYEDKIELEK.Q
1443.7589	1442.7516	1442.7729	-14.73	350	-	362	0	--- K.QLVLANSLETAR.T
1445.7306	1444.7233	1444.7521	-19.93	509	-	521	1	--- K.ERAIEATNAEITK.L
1461.7990	1460.7917	1460.7955	-2.62	728	-	740	2	--- K.VAMGMQKQITAKR.G
1524.7383	1523.7310	1523.7290	1.36	750	-	762	0	--- K.IQFLEAMTNANK.E + Oxidation (M)
1531.6953	1530.6880	1530.6798	5.39	964	-	977	1	--- R.ESTEGSKSETFSR.E
1560.7551	1559.7478	1559.7474	0.27	419	-	430	2	--- R.RELDDRNMEVQR.L
1568.7372	1567.7299	1567.7082	13.8	1087	-	1099	1	--- K.NQAMSSMIRNQEK.R + 2 Oxidation (M)
1576.7402	1575.7329	1575.7423	-5.97	419	-	430	2	--- R.RELDDRNMEVQR.L + Oxidation (M)
1604.8136	1603.8063	1603.8165	-6.36	703	-	716	1	--- K.SAQSELEQTRNTLK.S
1646.8591	1645.8518	1645.8597	-4.75	1073	-	1086	0	--- R.LESLQTLVEDLQMK.N
1721.8296	1720.8223	1720.8162	3.54	938	-	951	2	--- K.DDRVRDCITESSLR.L
1730.8199	1729.8126	1729.8231	-6.05	925	-	940	2	--- K.SEEDGRAPSLGVKDDR.V
1822.9185	1821.9112	1821.9108	0.23	667	-	681	1	--- R.NELNSLTEDYEVLKR.N
1844.8785	1843.8712	1843.8370	18.6	682	-	696	2	--- R.NFRNKSEEMETTNNK.L + Oxidation (M)
1880.9215	1879.9142	1879.9500	-19.02	89	-	103	2	--- K.DLQRRNLNESNELHEK.Q
2077.0454	2076.0381	2076.0343	1.83	110	-	126	1	--- R.QSVIDIQTLQEQMGER.D



2108.9897 2107.9824 2108.0242 -19.80 110 - 126 1 --- R.QSVIDLQTKLQEQMER.D + 2 Oxidation (M)

2203.0464 2202.0391 2202.0148 11.0 958 - 977 2 --- R.SNNSLRESTEGSKSSETFSR.E

2369.2256 2368.2183 2368.1791 16.5 488 - 508 2 --- K.KMTLESSERTVSDLTASLQEK.E + Oxidation (M)

2436.1699 2435.1626 2435.1429 8.09 717 - 739 2 --- K.SMEGSDGHAMKVAMGMQKQITAK.R

2510.2229 2509.2156 2509.2330 -6.91 489 - 510 2 --- K.MTLESSERTVSDLTASLQEKER.A

2535.2598 2534.2525 2534.2183 13.5 816 - 836 1 --- K.ASLQFAECQDIQRQEQESVR.L

2686.3572 2685.3499 2685.2963 20.0 569 - 592 1 --- R.QQIENMTQLVGQHGRTAGAMQVEK.A + 2 Oxidation (M)

3180.5432 3179.5359 3179.5624 -8.33 1073 - 1099 2 --- R.LESLQTLVEDLQMKNQAMSSMIRNQEK.R + Oxidation (M)

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1444.7375, 1454.6836, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1527.7585, 1529.7466, 1530.6902, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1563.7314, 1570.8015, 1572.8151, 1577.7395, 1578.7352, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1616.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8007, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1723.8743, 1724.8828, 1725.8090, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2012.9561, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2522.1980, 2543.1689, 2527.2310, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

46. [G3MWK4](#) Mass: 30649 Score: 18 Expect: 3.4e+002 Matches: 14

Uncharacterized protein OS=Bos taurus GN=SRSF12 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
840.4623	839.4550	839.4474	9.05	139	- 144	2	---	K.ESRRHR.F
1135.5942	1134.5869	1134.5642	20.0	248	- 256	2	---	R.SHSRRSYSR.H
1177.6178	1176.6105	1176.5921	15.7	92	- 101	2	---	K.TPGQMKSKER.H + Oxidation (M)
1179.5962	1178.5889	1178.5905	-1.30	120	- 129	2	---	R.TRSRSSWGR.N
1192.5721	1191.5648	1191.5857	-17.51	122	- 131	2	---	R.SRSSWGRNR.R
1222.5789	1221.5716	1221.5963	-20.17	212	- 222	1	---	R.SHRHSDIAR.S
1233.6571	1232.6498	1232.6361	11.2	191	- 202	1	---	K.SIGKSQSSSPQK.Q
1248.5958	1247.5885	1247.5578	24.6	102	- 111	1	---	R.HPCSPSDHRR.S
1377.6100	1376.6027	1376.6004	1.71	100	- 110	1	---	K.ERHPCSPSDHR.R
1377.6146	1376.6073	1376.6004	5.05	100	- 110	1	---	K.ERHPCSPSDHR.R
1393.7169	1392.7096	1392.6871	16.1	243	- 253	2	---	K.HSHFRSHRSR.S
1537.7804	1536.7731	1536.7380	22.9	195	- 209	1	---	K.SQSSSPQKQTSSTGK.S
1724.8828	1723.8755	1723.8740	0.86	227	- 242	2	---	K.SPKEYINSETKAQTAK.H
2077.0454	2076.0381	2076.0137	11.8	230	- 247	2	---	K.AYINSETKAQTAKSHFR.S
<b>No match to:</b> 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1178.6053, 1181.6432, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1227.6271, 1228.6411, 1229.6412, 1231.6102, 1237.6270, 1238.5917, 1244.6069, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1294.6315, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1345.6910, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1384.7109, 1386.7134, 1390.6848, 1399.6119, 1400.6588, 1406.7207, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1616.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.7805, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2012.9561, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2522.1980, 2524.1689, 2527.2310, 2541.2075, 2543.1689, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

47. [E1BLN1](#) Mass: 117436 Score: 18 Expect: 3.5e+002 Matches: 36

Uncharacterized protein OS=Bos taurus GN=SYCP1 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
745.4483	744.4410	744.4381	3.89	447	452	1	---	K.LLDEKK.Q
747.4419	746.4346	746.4174	23.1	505	510	1	---	K.TELEKK.N
904.4613	903.4540	903.4549	-0.95	795	801	1	---	R.EEKEELK.R
977.5352	976.5279	976.5375	-9.88	383	390	1	---	K.TTICNLKK.L
1001.5782	1000.5709	1000.5917	-20.72	445	452	2	---	K.QKLDEKK.Q
1051.5074	1050.5001	1050.4764	22.6	189	197	1	---	K.ETCARSAEK.T
1115.5790	1114.5717	1114.5982	-23.74	295	303	1	---	R.NKINQLEEK.T
1134.5841	1133.5768	1133.5824	-4.93	730	739	0	---	K.IAEMVALMEK.H
1158.6288	1157.6215	1157.6152	5.43	132	140	2	---	K.ENKLQENRK.I
1173.6008	1172.5935	1172.5859	6.47	372	382	0	---	K.AAHSSMVTELK.T
1203.5826	1202.5753	1202.5891	-11.45	545	554	1	---	K.QQEDINNSK.R
1216.6786	1215.6713	1215.6910	-16.18	978	987	2	---	R.WAVIAKMNRK.Q
1231.6102	1230.6029	1230.5952	6.24	546	555	1	---	K.QQEDINNSKR.Q
1294.6315	1293.6242	1293.6486	-18.82	417	427	1	---	K.SSELEEMTKL.N
1345.6910	1344.6837	1344.6885	-3.52	576	586	1	---	R.NELESVREEK.Q
1350.6704	1349.6631	1349.6497	9.95	954	966	0	---	K.TPSSLTPGSMQK.S + Oxidation (M)
1371.7366	1370.7293	1370.7445	-11.08	106	116	2	---	R.LYSKLYKEAK.I
1393.7169	1392.7096	1392.7282	-13.37	803	814	2	---	R.EMKENTVTLKGK.K + Oxidation (M)
1400.6588	1399.6515	1399.6579	-4.56	58	70	0	---	K.NGENIDSDPALQK.V
1406.7207	1405.7134	1405.6983	10.7	513	524	1	---	R.LKNTeltaSCNR.L
1421.6632	1420.6559	1420.6881	-22.67	938	949	0	---	K.DNNPPISHLCVR.T
1427.7076	1426.7003	1426.6940	4.45	318	329	0	---	K.QDHLTSELEDIK.M
1445.7306	1444.7233	1444.7157	5.26	306	317	1	---	K.LQENLKEKSEK.Q
1538.7736	1537.7663	1537.7485	11.6	847	860	2	---	R.SFPSANQSRSSKDK.R
1577.7395	1576.7322	1576.7654	-21.04	531	544	0	---	K.ELAQETSDMALELK.K
1581.8373	1580.8300	1580.8059	15.3	740	751	2	---	K.HKHQYDKIVEER.D
1703.8214	1702.8141	1702.8204	-3.71	726	739	1	---	R.CQHKIAEMVALMEK.H + Oxidation (M)
1719.8075	1718.8002	1718.8154	-8.80	726	739	1	---	R.CQHKIAEMVALMEK.H + 2 Oxidation (M)
1721.8296	1720.8223	1720.8553	-19.15	531	545	1	---	K.ELAQETSDMALELKK.Q + Oxidation (M)
1725.8090	1724.8017	1724.8443	-24.69	238	250	2	---	R.LEMHFKLKEDYEK.I + Oxidation (M)
1822.9185	1821.9112	1821.8978	7.37	935	949	1	---	K.LCKDNNPPISHLCVR.T
1984.9392	1983.9319	1983.9207	5.64	206	221	1	---	R.EETRVQVYMDLNSNIEK.M + Oxidation (M)
2059.0122	2058.0049	2058.0051	-0.11	318	334	1	---	K.QDHLTSELEDIKMSLQR.S + Oxidation (M)
2214.1145	2213.1072	2213.1287	-9.71	163	181	2	---	K.LEEGIQENKDLIKENNATR.H
2477.1301	2476.1228	2476.1686	-18.47	760	780	2	---	K.SKEQHSMMKASLETCLNLR.N
2522.1980	2521.1907	2521.2516	-24.14	330	351	1	---	K.MSLQRSVNTQMALEEDLQIATK.N + Oxidation (M)

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1032.5870, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1094.5596, 1096.5302, 1106.5431, 1110.5461, 1111.5398, 1111.5400, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1163.5771, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1211.5984, 1215.6246, 1221.5699, 1222.5789, 1227.6271, 1228.6411, 1229.6412, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1285.5864, 1299.6810, 1300.6566, 1309.6340, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1349.6838, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1399.6119, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1425.7395, 1426.6846, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.6474, 1446.7375, 1454.6836, 1461.7990, 1472.7026, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1578.7518, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1681.8087, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1723.8743, 1724.8828, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2218.1018, 2221.1035, 2223.1205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2495.0542, 2498.0898, 2510.2229, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558

48. [G3N2Q8](#) Mass: 20708 Score: 18 Expect: 3.5e+002 Matches: 9

Uncharacterized protein OS=Bos taurus GN=ISG20 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1421.6632	1420.6559	1420.6769	-14.76	170	181	1	---	R.EQRGNCFSLITP.-
1639.8157	1638.8084	1638.7962	7.48	142	156	0	---	R.IQDSVLGHNSVEDAR.A
1690.8313	1689.8240	1689.8621	-22.51	168	181	2	---	R.IREQRGNCFSLITP.-
1890.8025	1889.7952	1889.8213	-13.82	100	115	1	---	K.ENMSDYAIYDTAADR.L
2046.9839	2045.9766	2045.9364	19.7	97	114	1	---	K.ALKENMSDYAIYDTAADR.R
2181.0369	2180.0296	2180.0177	5.48	2	21	1	---	M.ARSADVVMDCMVGLGPFR.E
2203.0464	2202.0391	2202.0375	0.75	97	115	2	---	K.ALKENMSDYAIYDTAADR.L
2269.1128	2268.1055	2268.0845	9.28	22	41	1	---	R.ESGLARCLSLVDYHGSVLYDK.F
2312.0664	2311.0591	2311.0582	0.42	1	21	1	---	-.MARSADVVMDCMVGLGPFR.E

**No match to:** 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 837.4396, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 993.5112, 1001.5782, 1007.5089,

1009.5097,	1013.4454,	1015.5150,	1016.5522,	1018.5189,	1021.5313,	1024.5028,	1025.5192,	1029.5330,	1032.5870,	1033.5739,	1035.5203,
1045.5564,	1046.5759,	1051.5074,	1056.5415,	1057.6005,	1064.5358,	1071.5361,	1073.5377,	1079.5398,	1083.4637,	1086.4774,	1092.6000,
1092.6002,	1094.5596,	1096.5302,	1106.5431,	1110.5461,	1111.5398,	1111.5400,	1115.5790,	1118.5620,	1120.5724,	1123.5819,	1128.5537,
1132.5682,	1134.5841,	1135.5942,	1137.5565,	1143.5844,	1145.6155,	1149.5597,	1153.5929,	1158.6288,	1163.5771,	1173.6008,	1175.5867,
1177.6178,	1178.6053,	1179.5962,	1181.6432,	1192.5721,	1199.6315,	1203.5826,	1211.5984,	1215.6246,	1216.6786,	1221.5699,	1222.5789,
1227.6271,	1228.6411,	1229.6412,	1231.6102,	1233.6571,	1237.6270,	1238.5917,	1244.6069,	1248.5958,	1250.6042,	1255.5922,	1258.6344,
1268.6414,	1271.6490,	1275.6388,	1276.5977,	1276.6000,	1285.5864,	1294.6315,	1299.6810,	1300.6566,	1309.6340,	1320.6268,	1328.6292,
1333.7025,	1336.6038,	1338.6589,	1341.6488,	1343.6613,	1345.6910,	1349.6838,	1350.6704,	1352.6350,	1355.6870,	1357.7130,	1358.6704,
1369.7067,	1371.7366,	1374.6705,	1377.6100,	1377.6146,	1384.7109,	1386.7134,	1390.6848,	1393.7169,	1399.6119,	1400.6588,	1406.7207,
1410.6736,	1411.6647,	1416.6047,	1418.6714,	1425.7395,	1426.6846,	1427.7076,	1430.7102,	1432.6718,	1434.6552,	1438.6991,	1439.7164,
1443.7589,	1444.7375,	1445.7306,	1454.6836,	1461.7990,	1472.7026,	1475.7224,	1485.6906,	1489.7172,	1490.7058,	1493.7157,	1510.7383,
1515.7393,	1523.6987,	1524.7383,	1527.7585,	1529.7466,	1530.6902,	1531.6953,	1537.7804,	1538.7736,	1539.7621,	1541.7805,	1542.8290,
1549.6758,	1553.7277,	1555.7928,	1556.7874,	1560.7551,	1563.7314,	1568.7372,	1570.8015,	1572.8151,	1576.7402,	1577.7395,	1578.7518,
1581.8373,	1591.7852,	1600.8068,	1603.8092,	1604.8136,	1606.8130,	1608.7599,	1613.7793,	1615.8575,	1615.8600,	1624.7632,	1628.7653,
1633.7913,	1634.7969,	1635.7941,	1643.8085,	1646.8591,	1647.8268,	1651.8206,	1653.8284,	1677.8074,	1681.8087,	1688.8287,	1694.7357,
1697.8672,	1703.8214,	1706.8364,	1707.8435,	1708.3533,	1709.3307,	1710.8229,	1715.8053,	1719.8075,	1721.8296,	1723.8743,	1724.8828,
1725.8090,	1730.8199,	1748.7931,	1757.8975,	1763.7841,	1768.8075,	1771.9686,	1774.9059,	1777.8727,	1779.8081,	1786.8824,	1787.8207,
1790.8423,	1793.9556,	1796.8109,	1797.8339,	1800.8578,	1815.9008,	1819.8838,	1821.8926,	1822.9185,	1826.8450,	1829.8655,	1833.8975,
1836.9054,	1843.8765,	1844.8785,	1851.9031,	1859.8494,	1862.9265,	1863.9319,	1866.8857,	1868.8972,	1879.9445,	1880.9215,	1887.9023,
1888.8057,	1896.8954,	1901.0060,	1906.8872,	1908.8663,	1913.8895,	1916.9475,	1924.9314,	1925.9336,	1928.0060,	1931.9956,	1932.9833,
1968.8563,	1984.9392,	2008.0485,	2008.9869,	2009.9747,	2012.9506,	2015.9661,	2020.9644,	2030.0151,	2030.4648,	2047.5186,	2047.9097,
2051.9133,	2059.0122,	2064.9746,	2070.9209,	2077.0454,	2082.9409,	2085.9888,	2090.9844,	2097.9778,	2103.1526,	2108.9897,	2118.8926,
2140.0432,	2142.0310,	2142.9895,	2152.0510,	2155.0667,	2159.0752,	2160.0703,	2161.0813,	2166.0911,	2167.0676,	2174.0425,	2178.0034,
2184.0767,	2189.9133,	2194.9761,	2199.0986,	2205.9102,	2208.9729,	2211.1077,	2213.1116,	2214.1145,	2218.1018,	2221.1035,	2223.2205,
2225.1592,	2229.1064,	2233.1023,	2245.0991,	2273.0393,	2277.0576,	2279.1094,	2280.1204,	2283.1279,	2285.1169,	2292.1465,	2296.1479,
2323.1892,	2326.0947,	2334.1531,	2335.1282,	2337.1343,	2369.2256,	2372.2229,	2383.9978,	2385.2129,	2392.1528,	2400.1094,	2401.1360,
2409.1914,	2411.1907,	2414.1833,	2429.1475,	2436.1699,	2437.1758,	2440.2007,	2447.2368,	2477.1301,	2495.0542,	2498.0898,	2510.2229,
2522.1980,	2524.1689,	2527.2310,	2535.2598,	2541.2075,	2543.1907,	2544.1514,	2553.1934,	2557.2300,	2560.1125,	2569.2915,	2572.0935,
2612.1936,	2686.3572,	2788.3362,	2963.6167,	3056.4641,	3058.5842,	3180.5432,	3313.5032,	3330.6311,	3347.6077,	3511.9668,	3761.1558

49. [Q32L31](#) Mass: 23052 Score: 18 Expect: 3.5e+002 Matches: 12

High mobility group protein B3 OS=Bos taurus GN=HMGB3 PE=2 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
837.4396	836.4323	836.4214	13.0	49	55	1	---	R.WKTMGSGK.E
993.5112	992.5039	992.4862	17.9	44	50	2	---	K.KCSESRWK.T
1032.5870	1031.5797	1031.5763	3.28	140	148	1	---	K.QPYINKAAK.L
1094.5596	1093.5523	1093.5590	-6.10	49	57	2	---	R.WKTMGSGKEK.S
1096.5302	1095.5229	1095.5495	-24.24	69	76	2	---	K.VRYDREMK.D
1110.5461	1109.5388	1109.5539	-13.60	49	57	2	---	R.WKTMGSGKEK.S + Oxidation (M)
1228.6411	1227.6338	1227.6459	-9.84	113	125	0	---	K.SANPGISIGDVAK.K
1285.5864	1284.5791	1284.6020	-17.79	58	68	2	---	K.SKFDMAKADK.V + Oxidation (M)
1309.6340	1308.6267	1308.6496	-17.48	60	70	2	---	K.FDEMAKADKVR.Y
1345.6910	1344.6837	1344.6561	20.5	153	163	2	---	K.YEKDVADYKSK.G
1472.7026	1471.6953	1471.6765	12.8	71	82	2	---	R.YDREMKDYGPAK.G
1681.8087	1680.8014	1680.7752	15.6	11	24	1	---	K.GKMSAYAFFVQTCR.E + Oxidation (M)
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419, 752.3972, 754.3827, 756.3716, 758.3382, 760.3329, 764.3364, 766.3494, 767.4740, 768.3865, 770.3671, 772.4178, 779.4436, 784.3415, 787.2366, 788.4225, 790.4196, 795.4260, 799.2464, 802.4372, 805.4478, 808.4353, 811.4178, 814.4170, 819.4304, 821.4247, 822.4321, 829.4457, 840.4623, 842.5109, 854.4525, 856.5045, 858.5442, 860.4092, 863.4233, 863.9185, 869.4846, 870.5100, 872.4994, 880.4412, 904.4613, 906.4929, 908.4577, 913.5685, 919.5024, 925.5089, 927.4999, 928.5031, 940.4773, 942.4820, 950.4946, 957.5654, 960.4840, 966.4929, 969.4786, 972.5046, 974.5551, 977.5352, 978.5240, 981.4474, 989.2700, 991.5198, 1001.5782, 1007.5089, 1009.5097, 1013.4454, 1015.5150, 1016.5522, 1018.5189, 1021.5313, 1024.5028, 1025.5192, 1029.5330, 1033.5739, 1035.5203, 1045.5564, 1046.5759, 1051.5074, 1056.5415, 1057.6005, 1064.5358, 1071.5361, 1073.5377, 1079.5398, 1083.4637, 1086.4774, 1092.6000, 1092.6002, 1106.5431, 1111.5398, 1111.5400, 1115.5790, 1118.5620, 1120.5724, 1123.5819, 1128.5537, 1132.5682, 1134.5841, 1135.5942, 1137.5565, 1143.5844, 1145.6155, 1149.5597, 1153.5929, 1158.6288, 1163.5771, 1173.6008, 1175.5867, 1177.6178, 1178.6053, 1179.5962, 1181.6432, 1192.5721, 1199.6315, 1203.5826, 1211.5984, 1215.6246, 1216.6786, 1221.5699, 1222.5789, 1227.6271, 1229.6412, 1231.6102, 1233.6571, 1237.6270, 1238.5917, 1244.6069, 1248.5958, 1250.6042, 1255.5922, 1258.6344, 1268.6414, 1271.6490, 1275.6388, 1276.5977, 1276.6000, 1294.6315, 1299.6810, 1300.6566, 1320.6268, 1328.6292, 1333.7025, 1336.6038, 1338.6589, 1341.6488, 1343.6613, 1349.6838, 1350.6704, 1352.6350, 1355.6870, 1357.7130, 1358.6704, 1369.7067, 1371.7366, 1374.6705, 1377.6100, 1377.6146, 1384.7109, 1386.7134, 1390.6848, 1393.7169, 1399.6119, 1400.6588, 1406.7207, 1410.6736, 1411.6647, 1416.6047, 1418.6714, 1421.6632, 1425.7395, 1426.6846, 1427.7076, 1430.7102, 1432.6718, 1434.6552, 1438.6991, 1439.7164, 1443.7589, 1444.7375, 1445.7306, 1454.6836, 1461.7990, 1475.7224, 1485.6906, 1489.7172, 1490.7058, 1493.7157, 1510.7383, 1515.7393, 1523.6987, 1524.7383, 1527.7585, 1529.7466, 1530.6902, 1531.6953, 1537.7804, 1538.7736, 1539.7621, 1541.7805, 1542.8290, 1549.6758, 1553.7277, 1555.7928, 1556.7874, 1560.7551, 1563.7314, 1568.7372, 1570.8015, 1572.8151, 1576.7402, 1577.7395, 1578.7518, 1581.8373, 1591.7852, 1600.8068, 1603.8092, 1604.8136, 1606.8130, 1608.7599, 1613.7793, 1615.8575, 1615.8600, 1624.7632, 1628.7653, 1633.7913, 1634.7969, 1635.7941, 1639.8157, 1643.8085, 1646.8591, 1647.8268, 1651.8206, 1653.8284, 1677.8074, 1688.8287, 1690.8313, 1694.7357, 1697.8672, 1703.8214, 1706.8364, 1707.8435, 1708.3533, 1709.3307, 1710.8229, 1715.8053, 1719.8075, 1721.8296, 1723.8743, 1724.8828, 1725.8090, 1730.8199, 1748.7931, 1757.8975, 1763.7841, 1768.8075, 1771.9686, 1774.9059, 1777.8727, 1779.8081, 1786.8824, 1787.8207, 1790.8423, 1793.9556, 1796.8109, 1797.8339, 1800.8578, 1815.9008, 1819.8838, 1821.8926, 1822.9185, 1826.8450, 1829.8655, 1833.8975, 1836.9054, 1843.8765, 1844.8785, 1851.9031, 1859.8494, 1862.9265, 1863.9319, 1866.8857, 1868.8972, 1879.9445, 1880.9215, 1887.9023, 1888.8057, 1890.8025, 1896.8954, 1901.0060, 1906.8872, 1908.8663, 1913.8895, 1916.9475, 1924.9314, 1925.9336, 1928.0060, 1931.9956, 1932.9833, 1968.8563, 1984.9392, 2008.0485, 2008.9869, 2009.9747, 2012.9506, 2015.9661, 2020.9644, 2030.0151, 2030.4648, 2046.9839, 2047.5186, 2047.9097, 2051.9133, 2059.0122, 2064.9746, 2070.9209, 2077.0454, 2082.9409, 2085.9888, 2090.9844, 2097.9778, 2103.1526, 2108.9897, 2118.8926, 2140.0432, 2142.0310, 2142.9895, 2152.0510, 2155.0667, 2159.0752, 2160.0703, 2161.0813, 2166.0911, 2167.0676, 2174.0425, 2178.0034, 2181.0369, 2184.0767, 2189.9133, 2194.9761, 2199.0986, 2203.0464, 2205.9102, 2208.9729, 2211.1077, 2213.1116, 2214.1145, 2218.1018, 2221.1035, 2223.2205, 2225.1592, 2229.1064, 2233.1023, 2245.0991, 2269.1128, 2273.0393, 2277.0576, 2279.1094, 2280.1204, 2283.1279, 2285.1169, 2292.1465, 2296.1479, 2312.0664, 2323.1892, 2326.0947, 2334.1531, 2335.1282, 2337.1343, 2369.2256, 2372.2229, 2383.9978, 2385.2129, 2392.1528, 2400.1094, 2401.1360, 2409.1914, 2411.1907, 2414.1833, 2429.1475, 2436.1699, 2437.1758, 2440.2007, 2447.2368, 2477.1301, 2495.0542, 2498.0898, 2510.2229, 2522.1980, 2524.1689, 2527.2310, 2535.2598, 2541.2075, 2543.1907, 2544.1514, 2553.1934, 2557.2300, 2560.1125, 2569.2915, 2572.0935, 2612.1936, 2686.3572, 2788.3362, 2963.6167, 3056.4641, 3058.5842, 3180.5432, 3313.5032, 3330.6311, 3347.6077, 3511.9668, 3761.1558								

50. [I7EVA7](#) Mass: 23052 Score: 18 Expect: 3.5e+002 Matches: 12

HMGB3 transcript variant 1/2 OS=Bos taurus GN=HMGB3 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
837.4396	836.4323	836.4214	13.0	49	55	1	---	R.WKTMGSGK.E
993.5112	992.5039	992.4862	17.9	44	50	2	---	K.KCSESRWK.T
1032.5870	1031.5797	1031.5763	3.28	140	148	1	---	K.QPYINKAAK.L
1094.5596	1093.5523	1093.5590	-6.10	49	57	2	---	R.WKTMGSGKEK.S
1096.5302	1095.5229	1095.5495	-24.24	69	76	2	---	K.VRYDREMK.D
1110.5461	1109.5388	1109.5539	-13.60	49	57	2	---	R.WKTMGSGKEK.S + Oxidation (M)
1228.6411	1227.6338	1227.6459	-9.84	113	125	0	---	K.SANPGISIGDVAK.K
1285.5864	1284.5791	1284.6020	-17.79	58	68	2	---	K.SKFDMAKADK.V + Oxidation (M)
1309.6340	1308.6267	1308.6496	-17.48	60	70	2	---	K.FDEMAKADKVR.Y
1345.6910	1344.6837	1344.6561	20.5	153	163	2	---	K.YEKDVADYKSK.G
1472.7026	1471.6953	1471.6765	12.8	71	82	2	---	R.YDREMKDYGPAK.G

```

1681.8087 1680.8014 1680.7752 15.6 11 - 24 1 --- K.GKMSAYAFFVQTCR.E + Oxidation (M)
No match to: 724.2539, 725.2472, 728.2482, 730.2519, 732.2390, 733.2623, 739.3115, 742.4642, 743.4729, 745.4483, 747.4419,
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## Search Parameters

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Type of search      : MS/MS Ion Search
Enzyme              : Trypsin
Fixed modifications : Carbamidomethyl \(C\)
Variable modifications : Oxidation \(M\)
Mass values        : Monoisotopic
Protein Mass       : Unrestricted
Peptide Mass Tolerance : ± 25 ppm
Fragment Mass Tolerance: ± 0.5 Da
Max Missed Cleavages : 2
Instrument type     : MALDI-TOF-TOF
Query1 (724.2539,1+) : <no title>
Query2 (725.2472,1+) : <no title>
Query3 (728.2482,1+) : <no title>
Query4 (730.2519,1+) : <no title>
Query5 (732.2390,1+) : <no title>
Query6 (733.2623,1+) : <no title>
Query7 (739.3115,1+) : <no title>
Query8 (742.4642,1+) : <no title>
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Mascot: <http://www.matrixscience.com/>

# MASCOT SEARCH RESULTS

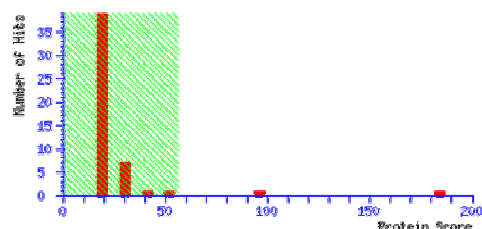
User : 3c\_(G3@11273\_12Mar2012)  
 Email : proteomics@ipatimup.pt  
 Search title : Project: Proteomica, Spot Set: Proteomica\12Jan2012, Label: G3, Spot Id: 221890, Peak List Id: 435351, MS Job Run Id: 303  
 MS data file : C:\Documents and Settings\Administrator\Desktop\xu\xu\xu\Proteomica\12Jan2012\ppw\_G3\_146796935604.txt  
 Database : OrganismSpecie Bos\_taurus\_Reference\_Proteome\_2016\_06 (24214 sequences; 12839866 residues)  
 Timestamp : 8 Jul 2016 at 10:11:59 GMT  
 Warning : **A Peptide summary report will usually give a much clearer picture of MS/MS search results.**  
 Top Score : 184 for **Q95L54**, Annexin A8 OS=Bos taurus GN=ANXA8 PE=2 SV=1

## Mascot Score Histogram

Protein score is  $-10 \cdot \log(P)$ , where P is the probability that the observed match is a random event.

Protein scores greater than 56 are significant ( $p < 0.05$ ).

Protein scores are derived from ion scores as a non-probabilistic basis for ranking protein hits.



## Protein Summary Report

Format As  [Help](#)

Significance threshold  $p < 0.05$  Max. number of hits

Preferred taxonomy

Re-Search All

## Index

Accession	Mass	Score	Description
1. <a href="#">Q95L54</a>	36992	184	Annexin A8 OS=Bos taurus GN=ANXA8 PE=2 SV=1
2. <a href="#">P19858</a>	36916	98	L-lactate dehydrogenase A chain OS=Bos taurus GN=LDHA PE=2 SV=2
3. <a href="#">P04272</a>	38873	52	Annexin A2 OS=Bos taurus GN=ANXA2 PE=1 SV=2
4. <a href="#">F1MK19</a>	26274	42	L-lactate dehydrogenase OS=Bos taurus GN=LDHC PE=3 SV=1
5. <a href="#">E1BNS9</a>	36334	34	L-lactate dehydrogenase OS=Bos taurus GN=LDHC PE=3 SV=2
6. <a href="#">E1BFB5</a>	68315	33	Uncharacterized protein OS=Bos taurus GN=KIAA0391 PE=4 SV=2
7. <a href="#">P09867</a>	34289	31	Heterogeneous nuclear ribonucleoprotein A1 OS=Bos taurus GN=HNRNPA1 PE=1 SV=2
8. <a href="#">Q32LI7</a>	30313	29	Putative uncharacterized protein MGC133880 OS=Bos taurus GN=MGC133880 PE=2 SV=1
9. <a href="#">F6QVC9</a>	36109	26	Annexin OS=Bos taurus GN=ANXA5 PE=1 SV=1
10. <a href="#">E1BFX8</a>	222520	26	Uncharacterized protein OS=Bos taurus GN=MYH7B PE=3 SV=2
11. <a href="#">Q29RH6</a>	55738	26	Chromosome 6 open reading frame 182 ortholog OS=Bos taurus GN=LOC519522 PE=2 SV=1
12. <a href="#">Q2HJF2</a>	26289	24	F-box and leucine-rich protein 22 OS=Bos taurus GN=FBXL22 PE=2 SV=1
13. <a href="#">G5E523</a>	28080	24	Uncharacterized protein OS=Bos taurus GN=STAU2 PE=4 SV=1
14. <a href="#">FINO24</a>	7899	24	Uncharacterized protein OS=Bos taurus GN=FAM19A4 PE=4 SV=1
15. <a href="#">F1MS41</a>	14310	24	Beta-synuclein OS=Bos taurus GN=SNCA PE=3 SV=2
16. <a href="#">P81287</a>	36124	24	Annexin A5 OS=Bos taurus GN=ANXA5 PE=1 SV=3
17. <a href="#">E1BM24</a>	57270	23	CCDC64B protein-like OS=Bos taurus GN=CCDC64B PE=4 SV=1
18. <a href="#">F1MHM8</a>	57999	22	Uncharacterized protein OS=Bos taurus GN=TIGD4 PE=4 SV=2
19. <a href="#">P08057</a>	24153	22	Troponin I, cardiac muscle OS=Bos taurus GN=TNNI3 PE=1 SV=2
20. <a href="#">G3X720</a>	22128	22	Uncharacterized protein OS=Bos taurus GN=C19orf81 PE=4 SV=1
21. <a href="#">Q58DU0</a>	26366	21	Multiple myeloma tumor-associated protein 2 homolog OS=Bos taurus GN=MMTAG2 PE=2 SV=1
22. <a href="#">Q28024</a>	8166	21	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-12 OS=Bos taurus GN=GNG12 PE=1 SV=2
23. <a href="#">E1BD03</a>	66968	21	Uncharacterized protein OS=Bos taurus GN=PPM1D PE=3 SV=2
24. <a href="#">F1N6S6</a>	28266	21	Placental prolactin-related protein 3 OS=Bos taurus GN=PRP3 PE=3 SV=2
25. <a href="#">F6QYE2</a>	72629	20	Uncharacterized protein OS=Bos taurus GN=CFAP100 PE=4 SV=1
26. <a href="#">G1KIU4</a>	51632	20	DNA polymerase delta subunit 3 OS=Bos taurus GN=POLD3 PE=4 SV=2
27. <a href="#">G3MX17</a>	200058	20	Uncharacterized protein OS=Bos taurus PE=3 SV=1
28. <a href="#">G3N2D2</a>	41913	20	Testis-specific serine/threonine-protein kinase 1 OS=Bos taurus GN=TSSK1B PE=3 SV=1
29. <a href="#">Q32PB1</a>	14905	20	Profilin-3 OS=Bos taurus GN=PFN3 PE=2 SV=1
30. <a href="#">G3X7E1</a>	19619	20	Histone deacetylase complex subunit SAP18 OS=Bos taurus GN=SAP18 PE=4 SV=1
31. <a href="#">Q58DQ3</a>	32727	20	60S ribosomal protein L6 OS=Bos taurus GN=RPL6 PE=2 SV=3
32. <a href="#">P80311</a>	23786	20	Peptidyl-prolyl cis-trans isomerase B OS=Bos taurus GN=PPIB PE=1 SV=4
33. <a href="#">G1K1R3</a>	40420	20	Tropomodulin-1 OS=Bos taurus GN=TMOD1 PE=4 SV=2
34. <a href="#">E1B871</a>	21420	20	Uncharacterized protein OS=Bos taurus PE=3 SV=2
35. <a href="#">A0JNC0</a>	40548	20	Tropomodulin-1 OS=Bos taurus GN=TMOD1 PE=2 SV=1
36. <a href="#">F1M200</a>	14021	19	Uncharacterized protein OS=Bos taurus GN=SNRPD3 PE=4 SV=2
37. <a href="#">A3KMZ9</a>	18849	19	SNRNP27 protein OS=Bos taurus GN=SNRNP27 PE=2 SV=1
38. <a href="#">P42B99</a>	11695	19	60S acidic ribosomal protein P2 OS=Bos taurus GN=RPLP2 PE=3 SV=1
39. <a href="#">Q0VCY7</a>	27842	19	Serine/arginine-rich splicing factor 1 OS=Bos taurus GN=SRSF1 PE=2 SV=1
40. <a href="#">Q0P5K9</a>	54202	19	Chromosome 3 open reading frame 19 ortholog OS=Bos taurus GN=C22H3ORF19 PE=2 SV=1
41. <a href="#">F1MB56</a>	24689	19	Uncharacterized protein OS=Bos taurus GN=TEX35 PE=4 SV=1
42. <a href="#">P61257</a>	17248	19	60S ribosomal protein L26 OS=Bos taurus GN=RPL26 PE=2 SV=1
43. <a href="#">Q861S4</a>	18652	19	Similar to ribosomal protein L21 (Fragment) OS=Bos taurus GN=RPL21 PE=2 SV=1
44. <a href="#">Q00361</a>	8315	19	ATP synthase subunit e, mitochondrial OS=Bos taurus GN=ATP5I PE=1 SV=2
45. <a href="#">F1N1S3</a>	20635	19	Uncharacterized protein OS=Bos taurus GN=LOC100294792 PE=4 SV=2
46. <a href="#">A5PR00</a>	44048	19	Vacuolar protein-sorting-associated protein 36 OS=Bos taurus GN=VPS36 PE=2 SV=1
47. <a href="#">A0JNH6</a>	63280	19	Coiled-coil domain-containing protein 102A OS=Bos taurus GN=CCDC102A PE=2 SV=1
48. <a href="#">G3MYC1</a>	17221	19	Uncharacterized protein OS=Bos taurus PE=3 SV=1

49. [F1MYD0](#) 90289 19 Uncharacterized protein OS=Bos taurus GN=CUL1 PE=3 SV=2  
50. [F1MHT3](#) 217593 19 Uncharacterized protein OS=Bos taurus GN=MYO5A PE=4 SV=2

## Results List

1.	<a href="#">Q95L54</a>	Mass: 36992	Score: 184	Expect: 9.6e-015	Matches: 34
Annexin A8 OS=Bos taurus GN=ANXA8 PE=2 SV=1					
Observed	Mr(expt)	Mr(calc)	ppm	Start	End Miss Ions Peptide
731.4017	730.3945	730.3834	15.1	51 -	56 1 --- K.RSNAQR.Q
772.4093	771.4020	771.3989	4.04	262 -	267 0 --- R.LYFAMK.G
815.4332	814.4260	814.4119	17.2	209 -	215 0 --- R.SATHLMR.V
869.4231	868.4158	868.4000	18.2	101 -	107 0 --- K.ELYDAMK.G
943.4289	942.4216	942.4334	-12.55	216 -	222 0 --- R.VFEEYEK.I
1023.5663	1022.5590	1022.5583	0.72	201 -	208 0 --- K.FITILCTR.S
1023.5700	1022.5627	1022.5583	4.34	201 -	208 0 37 K.FITILCTR.S
1044.5751	1043.5678	1043.5862	-17.65	284 -	292 0 --- R.SEIDLNLIK.N
1073.5902	1072.5829	1072.5877	-4.43	268 -	278 0 --- K.GAGTLDGTLIR.N
1106.5391	1105.5318	1105.5305	1.22	253 -	261 0 --- R.NLHGFAER.L
1143.6318	1142.6245	1142.6156	7.82	52 -	61 1 --- R.SNAQRQQIAK.S
1158.6685	1157.6612	1157.6591	1.87	158 -	167 0 --- R.ILVCLLQGS.RD
1199.7006	1198.6933	1198.6921	1.01	113 -	123 0 --- K.EGVIIIEILASR.T
1231.6387	1230.6314	1230.6245	5.67	6 -	16 0 --- K.AWVEQEGSVK.G
1232.6447	1231.6374	1231.6594	-17.86	124 -	133 1 --- R.TKNQLQEIMK.A
1360.6638	1359.6565	1359.6380	13.6	97 -	107 1 --- R.YEAKELYDAMK.G
1365.7379	1364.7306	1364.7526	-16.10	86 -	96 0 --- R.LIIALMYPPYR.Y + Oxidation (M)
1369.7043	1368.6970	1368.6925	3.31	216 -	226 1 --- R.VFEEYEKIANK.S
1505.8177	1504.8104	1504.8110	-0.38	52 -	64 2 --- R.SNAQRQQIAKSPK.A
1561.8401	1560.8328	1560.8511	-11.72	284 -	296 1 --- R.SEIDLNLIKNQFK.K
1571.8400	1570.8327	1570.8566	-15.22	36 -	50 0 --- K.GIGTNEQAIIIDVLTK.R
1689.9465	1688.9392	1688.9461	-4.06	284 -	297 2 --- R.SEIDLNLIKNQFK.M
1730.8931	1729.8858	1729.8558	17.5	234 -	249 0 --- K.SETHGSLEAMLTVVK.C
1774.7610	1773.7537	1773.7581	-2.44	134 -	148 0 --- K.AYEEDYGSNLEEDIK.A
1787.8188	1786.8115	1786.8162	-2.63	17 -	32 0 --- K.GSPHFNPDPDAETLYK.A
1787.8200	1786.8127	1786.8162	-1.96	17 -	32 0 85 K.GSPHFNPDPDAETLYK.A
1840.9827	1839.9754	1839.9957	-10.99	86 -	100 1 --- R.LIIALMYPPYRYEAK.E
1856.9908	1855.9835	1855.9906	-3.80	86 -	100 1 --- R.LIIALMYPPYRYEAK.E + Oxidation (M)
1933.9950	1932.9877	1932.9556	16.6	1 -	16 1 --- -.MAWWKAWVEQEGSVK.G
1949.9595	1948.9522	1948.9505	0.86	1 -	16 1 --- -.MAWWKAWVEQEGSVK.G + Oxidation (M)
1973.9845	1972.9772	1972.9420	17.8	193 -	208 1 --- K.ICGTDEMKFITILCTR.S + Oxidation (M)
2277.0823	2276.0750	2276.0983	-10.21	250 -	267 2 --- K.CTRNLHGFAERLYFAMK.G
2284.1990	2283.1917	2283.2295	-16.53	36 -	56 2 --- K.GIGTNEQAIIIDVLTKRSNAQR.Q
2767.2666	2766.2593	2766.2144	16.3	134 -	157 1 --- K.AYEEDYGSNLEEDIKADTSGYLER.I
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1086.5509, 1092.5961, 1100.6071, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1208.6415, 1216.6714, 1227.6595, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1363.7153, 1367.7319, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1563.8109, 1565.8199, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.0590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434					
2.	<a href="#">P19858</a>	Mass: 36916	Score: 98	Expect: 4.1e-006	Matches: 29
L-lactate dehydrogenase A chain OS=Bos taurus GN=LDHA PE=2 SV=2					
Observed	Mr(expt)	Mr(calc)	ppm	Start	End Miss Ions Peptide
734.4151	733.4078	733.4123	-6.05	113 -	118 0 --- R.NVNIFK.F
742.4515	741.4442	741.4497	-7.42	107 -	112 0 --- R.LNLVQR.N
768.3700	767.3627	767.3636	-1.12	172 -	177 0 25 R.YLMGER.L
768.3737	767.3664	767.3636	3.65	172 -	177 0 --- R.YLMGER.L
784.3688	783.3615	783.3585	3.82	172 -	177 0 --- R.YLMGER.L + Oxidation (M)
913.5700	912.5627	912.5756	-14.15	91 -	99 0 22 R.LVIIITAGAR.Q
913.5747	912.5674	912.5756	-9.06	91 -	99 0 --- R.LVIIITAGAR.Q
918.5050	917.4977	917.5083	-11.51	150 -	157 1 --- K.ISGFPPK.NR.V
1041.5658	1040.5585	1040.5688	-9.92	270 -	278 0 --- R.VHPITSMIK.G + Oxidation (M)
1118.5818	1117.5745	1117.5768	-2.01	319 -	328 0 --- K.SADTLWGIQK.E
1181.6819	1180.6746	1180.6750	-0.35	269 -	278 1 --- R.RVHPITSMIK.G

1197.6704	1196.6631	1196.6700	-5.71	269	-	278	1	---	R.RVHPISTMIK.G + Oxidation (M)
1248.6174	1247.6101	1247.5928	13.9	158	-	169	0	---	R.VIGSGCNLDSAR.F
1250.6554	1249.6481	1249.6554	-5.83	233	-	243	0	---	K.QVVD SAYEVIK.L
1523.7953	1522.7880	1522.7740	9.24	77	-	90	1	---	K.IVSGKDYNTANSR.L
1551.7778	1550.7705	1550.7624	5.26	158	-	171	1	---	R.VIGSGCNLDSARFR.Y
1556.8109	1555.8036	1555.8066	-1.94	100	-	112	1	---	R.QQEGESRLNLVQR.N
1557.8010	1556.7937	1556.7868	4.44	306	-	318	1	---	K.VTLTHEEEACLLK.S
1633.7985	1632.7912	1632.7752	9.80	60	-	73	0	---	K.GEMMDLQHGSLFLR.T
1677.7988	1676.7915	1676.7815	5.99	43	-	57	0	---	K.DLADEVALVDVME DK.L + Oxidation (M)
1727.8986	1726.8913	1726.9326	-23.88	91	-	106	1	---	R.LVIIITAGARQQEGESR.L
1821.9144	1820.9071	1820.9064	0.40	156	-	171	2	---	K.NRVIGSGCNLDSARFR.Y
1874.9695	1873.9622	1873.9542	4.26	58	-	73	1	---	K.LKGEMMDLQHGSLFLR.T
1880.9265	1879.9192	1879.9064	6.81	213	-	228	1	---	K.NLHPELGTADKEQWK.A
1906.9501	1905.9428	1905.9441	-0.66	58	-	73	1	---	K.LKGEMMDLQHGSLFLR.T + 2 Oxidation (M)
1918.9587	1917.9514	1917.9605	-4.73	43	-	59	1	---	K.DLADEVALVDVME DKLK.G + Oxidation (M)
1960.0034	1958.9961	1958.9706	13.0	60	-	76	1	---	K.GEMMDLQHGSLFLRTPK.I
2148.1023	2147.0950	2147.0906	2.08	150	-	169	2	---	K.ISGFPKNRVIGSGCNLDSAR.F
2233.0984	2232.0911	2232.1395	-21.66	58	-	76	2	---	K.LKGEMMDLQHGSLFLRTPK.I + 2 Oxidation (M)
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 735.4143, 741.4101, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 770.3966, 772.4093, 775.4307, 779.4308, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 916.5284, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1188.6544, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1553.8065, 1555.8101, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0272, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434									

3. [P04272](#) Mass: 38873 Score: 52 Expect: 0.17 Matches: 29

Annexin A2 OS=Bos taurus GN=ANXA2 PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
744.4171	743.4098	743.4178	-10.74	206	-	212	1	--- R.KGTDVPK.W
761.4177	760.4104	760.4191	-11.44	280	-	286	2	--- K.KGKTRDK.V
779.4308	778.4235	778.4337	-13.11	303	-	308	1	--- K.IRSEFK.K
1035.5381	1034.5308	1034.5219	8.64	213	-	220	0	--- K.WISIMTER.S
1036.5447	1035.5374	1035.5349	2.44	197	-	205	1	--- R.DLDYAGVKR.K
1051.5448	1050.5375	1050.5168	19.7	213	-	220	0	--- K.WISIMTER.S + Oxidation (M)
1086.5509	1085.5436	1085.5539	-9.49	2	-	10	0	--- M.STVHEILCK.L
1111.5615	1110.5542	1110.5458	7.59	69	-	77	0	--- R.QDIAFAYQR.R
1244.6453	1243.6380	1243.6156	18.0	136	-	145	0	--- R.TNQELQEI NR.V
1339.6637	1338.6564	1338.6416	11.1	158	-	169	1	--- K.DIVSDTSGDFRK.L
1407.7563	1406.7490	1406.7261	16.3	291	-	302	1	--- R.IMVSRSEVDMLK.I
1421.7061	1420.6988	1420.6874	8.02	314	-	324	0	--- K.SLYYYIQDDTK.G
1542.8422	1541.8349	1541.8413	-4.15	50	-	63	0	--- K.GVDEVTVINILTNR.S
1725.8300	1724.8227	1724.8230	-0.17	64	-	77	1	21 R.SNEQRQDIAFAYQR.R
1725.8346	1724.8273	1724.8230	2.50	64	-	77	1	--- R.SNEQRQDIAFAYQR.R
1769.8741	1768.8668	1768.8672	-0.20	311	-	324	1	--- K.YGKSLYYYIQDDTK.G
1777.8770	1776.8697	1776.8564	7.52	120	-	135	0	--- K.GLGTDEDSLIEIICSR.T
1844.9012	1843.8939	1843.8952	-0.69	11	-	28	0	--- K.LSLEGDSHTPPSAYGSVK.A
1867.9218	1866.9145	1866.9073	3.87	232	-	246	2	--- R.YKSYSPYDMLESIKK.E + Oxidation (M)
1908.9043	1907.8970	1907.8748	11.6	180	-	196	0	--- R.AEDGSVIDYELIDQDAR.D
1916.9923	1915.9850	1915.9601	13.0	234	-	249	2	--- K.SYSPYDMLESIKKEVK.G
1925.9573	1924.9500	1924.9378	6.35	153	-	169	2	--- K.TDLEKDIVSDTSGDFRK.L
2012.9590	2011.9517	2011.9517	-0.48	314	-	329	1	--- K.SLYYYIQDDTKGYQK.A
2064.9880	2063.9807	2063.9760	2.31	179	-	196	1	--- R.AEDGSVIDYELIDQDAR.D
2155.0950	2154.0877	2154.0593	13.2	29	-	47	1	--- K.AYTNFDAERDALNIETAIK.T
2195.0774	2194.0701	2194.0609	4.18	116	-	135	1	--- K.ASMKGLGTDEDSLIEIICSR.T
2211.1042	2210.0969	2210.0559	18.6	116	-	135	1	--- K.ASMKGLGTDEDSLIEIICSR.T + Oxidation (M)
2271.1294	2270.1221	2270.0929	12.9	228	-	245	2	--- K.VFERYKSYSPYDMLESIKK + Oxidation (M)
2501.2637	2500.2564	2500.2567	-0.09	207	-	227	2	--- K.GTDVFKNISIMTERSVCHLQK.V + Oxidation (M)

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1037.5573,

1039.5327,	1041.5658,	1044.5751,	1045.5729,	1046.5897,	1056.5658,	1057.6078,	1067.5753,	1073.5902,	1092.5961,	1100.6071,	1106.5391,
1113.5739,	1118.5818,	1120.6045,	1122.5912,	1123.5848,	1125.5823,	1132.6047,	1134.5714,	1139.5746,	1143.6318,	1144.6397,	1145.6407,
1147.6393,	1150.6108,	1155.6215,	1157.6199,	1158.6685,	1162.6182,	1163.6152,	1168.6215,	1173.6418,	1175.6089,	1178.6356,	1179.6157,
1181.6819,	1188.6544,	1197.6704,	1199.7006,	1208.6415,	1216.6714,	1227.6595,	1231.6387,	1232.6447,	1234.6672,	1235.6445,	1247.6211,
1248.6174,	1250.6554,	1256.6096,	1256.6531,	1261.6592,	1262.6453,	1266.6777,	1273.6260,	1275.6362,	1276.6345,	1277.6531,	1301.6071,
1303.7076,	1307.7042,	1308.6376,	1310.6146,	1312.6418,	1315.7098,	1320.6659,	1322.6886,	1323.6771,	1324.6964,	1328.7089,	1331.7202,
1335.7318,	1338.6581,	1349.7253,	1352.7205,	1356.7230,	1360.6638,	1363.7153,	1365.7379,	1367.7319,	1369.7043,	1377.6947,	1379.7268,
1383.7137,	1385.7534,	1388.7404,	1390.7284,	1393.7428,	1417.7010,	1422.7019,	1425.7727,	1427.7742,	1429.7365,	1431.7412,	1433.7228,
1434.7446,	1437.7584,	1461.7778,	1467.7521,	1472.7633,	1475.7632,	1477.7545,	1484.7889,	1488.7537,	1491.7965,	1493.7579,	1500.7737,
1505.8717,	1513.8079,	1515.8213,	1517.7854,	1519.7544,	1522.7811,	1523.7953,	1529.8099,	1530.7523,	1531.7472,	1537.7974,	1539.8005,
1545.8091,	1547.8051,	1549.7339,	1551.7778,	1553.8065,	1555.8101,	1556.8109,	1557.8109,	1561.8401,	1563.8109,	1565.8199,	1571.8400,
1579.7939,	1580.8077,	1583.8444,	1587.7620,	1592.8066,	1594.8335,	1604.8323,	1605.8586,	1608.8497,	1615.8754,	1624.8062,	1628.7900,
1628.7921,	1633.7985,	1640.9384,	1642.8099,	1646.8297,	1649.8447,	1657.8101,	1667.8622,	1677.7988,	1680.8746,	1689.9465,	1694.7288,
1698.9225,	1699.8862,	1704.8773,	1706.8701,	1707.8392,	1710.9279,	1716.8671,	1719.9058,	1723.9017,	1727.8986,	1730.8931,	1737.9006,
1751.8656,	1754.8580,	1765.8463,	1766.8040,	1767.8138,	1770.3567,	1772.9315,	1774.7610,	1774.9131,	1780.8777,	1783.9246,	1787.8188,
1787.8200,	1791.8137,	1793.9050,	1795.9353,	1798.9340,	1800.9336,	1804.9142,	1805.9069,	1809.8469,	1815.9044,	1821.9144,	1828.9227,
1837.9396,	1840.9827,	1843.9688,	1846.9153,	1852.9364,	1856.9908,	1861.8881,	1874.9695,	1880.9265,	1884.9417,	1891.9622,	1894.9313,
1896.9078,	1896.9100,	1900.9546,	1905.9313,	1906.9501,	1911.9130,	1912.9154,	1918.9587,	1921.9825,	1923.9718,	1928.0469,	1932.0060,
1933.9050,	1937.9630,	1939.9740,	1944.0040,	1946.9679,	1949.9595,	1954.0236,	1955.9738,	1958.9556,	1960.9034,	1968.8600,	1973.9845,
1976.9861,	1978.9910,	1981.9854,	1983.9884,	1987.9784,	1995.9408,	1998.9894,	2000.9926,	2008.0460,	2015.0104,	2017.9747,	2021.0170,
2026.0275,	2027.0256,	2031.0166,	2044.0123,	2047.4957,	2047.9515,	2052.4096,	2060.0520,	2062.0073,	2066.9873,	2094.0376,	2097.0454,
2102.0667,	2103.1641,	2111.0305,	2127.0930,	2139.0630,	2144.0493,	2148.1023,	2156.0796,	2160.0632,	2176.0664,	2190.9895,	2199.0723,
2202.1624,	2203.1221,	2208.0862,	2216.1062,	2225.1274,	2226.1272,	2229.0972,	2233.0984,	2239.0225,	2242.0435,	2268.1489,	2270.1287,
2272.0823,	2284.1990,	2292.1426,	2309.0994,	2334.1719,	2342.9915,	2350.1746,	2383.9607,	2398.2400,	2400.0862,	2413.0549,	2414.1897,
2417.0959,	2497.2800,	2511.1460,	2513.1421,	2528.1750,	2537.2012,	2541.1948,	2542.1836,	2556.2058,	2562.1487,	2612.2666,	2706.2109,
2717.0869,	2767.2666,	2888.2532,	3221.1733,	3224.2917,	3312.3306,	3916.9434					

4. [F1MK19](#) Mass: 26274 Score: 42 Expect: 1.7 Matches: 13

L-lactate dehydrogenase OS=Bos taurus GN=LDHC PE=3 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
721.4365	720.4292	720.4170	17.0	172	- 177	0	---	R.YLIGQK.L
742.4515	741.4442	741.4497	-7.42	107	- 112	0	---	R.LNLVQR.N
913.5700	912.5627	912.5756	-14.15	91	- 99	0	22	K.LVIITAGAR.Q
913.5747	912.5674	912.5756	-9.06	91	- 99	0	---	K.LVIITAGAR.Q
1248.6174	1247.6101	1247.5928	13.9	158	- 169	0	---	R.VIGSGCNLDSAR.F
1519.7544	1518.7471	1518.7725	-16.71	229	- 241	2	---	K.NIHKEVVGRAHME.-
1551.7778	1550.7705	1550.7624	5.26	158	- 171	1	---	R.VIGSGCNLDSARFR.Y
1556.8109	1555.8036	1555.8066	-1.94	100	- 112	1	---	R.QQEGESRLNLVQR.N
1615.8754	1614.8681	1614.8352	20.4	43	- 57	0	---	K.DLADELALVDVVTDK.L
1727.8986	1726.8913	1726.9326	-23.88	91	- 106	1	---	K.LVIITAGARQQEGESR.L
1777.8770	1776.8697	1776.8530	9.41	213	- 228	2	---	K.SLDPKLGSDSKDSWK.N
1856.9908	1855.9835	1856.0143	-16.56	43	- 59	1	---	K.DLADELALVDVVTDKLG
2044.0123	2043.0050	2043.0531	-23.54	150	- 169	1	---	K.LSGLPATRVIGSGCNLDSAR.F

No match to:	725.4001,	726.4063,	728.3681,	730.3848,	731.4017,	732.3573,	734.4151,	735.4143,	741.4101,	744.4171,	745.4167,
746.4169,	747.4125,	750.4153,	752.4127,	755.4100,	756.4199,	757.4313,	761.4717,	767.4266,	768.3700,	768.3737,	770.3966,
775.4307,	779.4308,	784.3688,	786.4000,	787.4221,	788.4210,	792.4376,	795.4350,	798.4351,	800.4296,	812.4388,	815.4332,
825.4540,	831.4382,	832.4557,	835.4719,	837.4463,	842.5060,	844.4760,	854.4837,	856.4911,	860.4691,	862.4852,	869.4231,
895.4955,	907.4991,	908.4929,	916.5284,	918.5050,	919.5053,	922.5070,	928.5117,	934.5172,	940.4840,	942.4854,	943.4289,
946.5259,	950.4959,	951.5076,	953.5164,	954.5388,	959.5266,	966.5410,	969.5256,	972.5305,	974.5395,	976.5310,	978.5134,
991.5409,	993.5307,	1001.5854,	1003.5496,	1011.5262,	1014.5215,	1021.5579,	1023.5663,	1023.5700,	1031.5903,	1035.5381,	1036.5447,
1037.5573,	1039.5327,	1041.5658,	1044.5571,	1045.5729,	1046.5897,	1051.5448,	1056.5658,	1057.6078,	1067.5753,	1073.5902,	1086.5505,
1092.5961,	1100.6071,	1106.5391,	1111.5615,	1113.5729,	1118.5818,	1120.6045,	1122.5912,	1123.5848,	1125.5823,	1132.6047,	1134.5714,
1139.5746,	1143.6318,	1144.6497,	1145.6407,	1147.6393,	1150.6108,	1155.6215,	1157.6199,	1158.6685,	1162.6182,	1163.6152,	1168.6215,
1173.6418,	1175.6089,	1178.6356,	1179.6517,	1181.6819,	1188.6544,	1197.6704,	1199.7006,	1208.6415,	1216.6714,	1227.6595,	1231.6387,
1232.6447,	1234.6622,	1235.6445,	1244.6453,	1247.6211,	1250.6554,	1255.6096,	1256.6531,	1261.6592,	1262.6453,	1266.6777,	1273.6260,
1275.6362,	1276.6343,	1277.6531,	1301.7079,	1303.7076,	1307.7042,	1308.6376,	1310.6146,	1312.6418,	1315.7098,	1320.6659,	1322.6886,
1323.6771,	1324.6964,	1328.7089,	1331.7202,	1335.7318,	1338.6581,	1339.6637,	1349.7253,	1352.7205,	1356.7230,	1360.6638,	1363.7153,
1365.7379,	1367.7319,	1369.7043,	1377.6947,	1379.7268,	1383.7137,	1385.7534,	1388.7404,	1390.7284,	1393.7428,	1407.7563,	1417.7010,
1421.7061,	1422.7019,	1425.7727,	1427.7742,	1429.7655,	1431.7412,	1433.7228,	1434.7446,	1437.7584,	1461.7778,	1467.7521,	1472.7633,
1475.7632,	1477.7545,	1484.7889,	1488.7537,	1491.7965,	1493.7579,	1500.7737,	1505.8177,	1513.8079,	1515.8213,	1517.7854,	1522.7811,
1523.7953,	1529.8099,	1530.7523,	1531.7472,	1537.7974,	1539.8005,	1542.8422,	1545.8091,	1547.8051,	1549.7339,	1553.8065,	1555.8011,
1557.8010,	1561.8401,	1563.8109,	1565.8199,	1571.8400,	1579.7939,	1580.8077,	1583.8444,	1587.7620,	1592.8066,	1594.8335,	1604.8323,
1605.8586,	1608.8476,	1624.8062,	1628.7900,	1628.7921,	1633.7985,	1640.9384,	1642.8099,	1646.8297,	1649.8447,	1657.8101,	1667.8622,
1677.7988,	1680.8746,	1689.9465,	1694.7288,	1698.9225,	1699.8862,	1704.8773,	1706.8071,	1707.8302,	1710.9279,	1716.8671,	1719.9058,
1723.9011,	1725.8300,	1725.8346,	1730.8931,	1737.9006,	1751.8656,	1754.8580,	1765.8463,	1766.8400,	1767.8138,	1769.8741,	1770.3567,
1772.9315,	1774.7610,	1774.9131,	1780.8777,	1783.9246,	1787.8188,	1787.8200,	1791.8137,	1793.9050,	1795.9353,	1798.9340,	1800.9336,
1804.9142,	1805.9069,	1809.8469,	1815.9044,	1821.9144,	1828.9227,	1837.9396,	1840.9827,	1843.9688,	1844.9012,	1846.9153,	1852.9364,
1861.8881,	1867.9218,	1874.9695,									

5. [E1BNS9](#) **Mass:** 36334 **Score:** 34 **Expect:** 9.6 **Matches:** 13

L-lactate dehydrogenase OS=Bos taurus GN=LDHC PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
721.4365	720.4292	720.4170	17.0	172	177	0	---	R.YLIGQK.L
742.4515	741.4442	741.4497	-7.42	107	112	0	---	R.LNLVQR.N
913.5700	912.5627	912.5756	-14.15	91	99	0	22	K.LVIITAGAR.Q
913.5747	912.5674	912.5756	-9.06	91	99	0	---	K.LVIITAGAR.Q
1248.6174	1247.6101	1247.5928	13.9	158	169	0	---	R.VIGSGCNLDSAR.F
1261.6592	1260.6519	1260.6826	-24.35	318	328	1	---	K.KSASTLWNVQK.D
1551.7778	1550.7705	1550.7624	5.26	158	171	1	---	R.VIGSGCNLDSARFR.Y
1556.8109	1555.8036	1555.8066	-1.94	100	112	1	---	R.QQEGESRLNLVQR.N
1615.8754	1614.8681	1614.8352	20.4	43	57	0	---	K.DLADELALVDVVTDK.L
1727.8986	1726.8913	1726.9326	-23.88	91	106	1	---	K.LVIITAGARQQEGESR.L
1777.8770	1776.8697	1776.8530	9.41	213	228	2	---	K.SLDPKLGSDSKDKSWK.N
1856.9908	1855.9835	1856.0143	-16.56	43	59	1	---	K.DLADELALVDVVTDKLG
2044.0123	2043.0050	2043.0531	-23.54	150	169	1	---	K.LSGLPATRVIGSGCNLDSAR.F



**No match to:** 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5266, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1250.6554, 1255.6096, 1256.6531, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7857, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1553.8065, 1555.8101, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2047.4957, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0519, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

6. [E1BFB5](#) Mass: 68315 Score: 33 Expect: 13 Matches: 21

Uncharacterized protein OS=Bos taurus GN=KIAA0391 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
837.4463	836.4390	836.4392	-0.23	220	226	0	---	R.GLIYIDR.W
972.5305	971.5232	971.5400	-17.22	387	394	1	---	K.TTPQELKR.F
1023.5663	1022.5590	1022.5583	0.73	496	503	1	---	K.FITKDLMR.D
1023.5700	1022.5627	1022.5583	4.35	496	503	1	20	K.FITKDLMR.D
1113.5729	1112.5656	1112.5913	-23.09	577	584	2	---	K.WLCLHRKT.-
1139.5746	1138.5673	1138.5441	20.4	42	50	1	---	R.NQEKCFSVK.T
1162.6182	1161.6109	1161.5924	15.9	96	105	2	---	K.KRSQMNPSSK.D
1179.6157	1178.6084	1178.6196	-9.51	220	228	1	---	R.GLIYIDRRW.E
1425.7727	1424.7654	1424.7446	14.6	208	219	1	---	K.RLESGAYTLMLR.G + Oxidation (M)
1472.7633	1471.7560	1471.7466	6.38	447	457	2	---	R.KHMLTQNSRRW.R + Oxidation (M)
1484.7889	1483.7816	1483.7579	16.0	448	458	2	---	K.HMLTQNSRRWR.V
1500.7737	1499.7664	1499.7528	9.10	448	458	2	---	K.HMLTQNSRRWR.V + Oxidation (M)
1539.8005	1538.7932	1538.7623	20.1	504	516	2	---	R.DHKACLPDAKTQR.L
1594.8335	1593.8262	1593.8014	15.6	1	13	1	---	-.MTFYFTGIRSFPPK.L
1605.8586	1604.8513	1604.8385	8.02	139	151	0	---	K.ANFENWIIQVMVK.
1783.9246	1782.9173	1782.9305	-7.38	401	416	0	---	K.YHPFDVVIDGLNVAK.M
1795.9353	1794.9280	1794.9185	5.28	191	205	1	---	K.QTSEIIDVYEIMKAR.Y
1861.8881	1860.8808	1860.9264	-24.51	80	97	2	---	K.QVSADSSHMFAGAACKKR.S
1928.0469	1927.0396	1926.9986	21.3	152	169	1	---	K.CHSSVDVAKSVLAWAAK.N
2000.9926	1999.9853	1999.9455	19.9	42	58	2	---	R.NQEKCFSVKTMQAQNTK.A
2501.2637	2500.2564	2500.3188	-24.96	170	190	1	---	K.NSGIVGYDLLVKYLYLCVPHK.Q

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1467.7521, 1475.7632, 1477.7545, 1488.7537, 1491.7965, 1493.7579, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1604.8323, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

7. [P09867](#) Mass: 34289 Score: 31 Expect: 20 Matches: 18

Heterogeneous nuclear ribonucleoprotein A1 OS=Bos taurus GN=HNRNP A1 PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
730.3848	729.3775	729.3769	0.76	48	53	1	---	R.DPNTKR.K
1312.6418	1311.6345	1311.6069	21.1	219	232	1	---	R.GGNFSGRRGGFGGSR.G
1427.7742	1426.7669	1426.7416	17.8	4	15	2	---	K.SESPKEPEQLRK.L
1437.7584	1436.7511	1436.7372	9.70	93	105	0	---	R.EDSQRPGAHLTVK.K
1547.8051	1546.7978	1546.8025	-3.01	131	144	1	---	K.IEIVIEIMTDRGSGK.K
1563.8109	1562.8036	1562.7974	3.99	131	144	1	---	K.IEIVIEIMTDRGSGK.K + Oxidation (M)
1565.8199	1564.8126	1564.8321	-12.47	93	106	1	---	R.EDSQRPGAHLTVKK.I
1580.8077	1579.8004	1579.7624	24.1	180	194	1	---	K.ALSKQEMASASSSQR.G
1628.7900	1627.7827	1627.7743	5.17	285	300	0	13	R.SSGPYGGGGQYFAKPR.N
1628.7921	1627.7848	1627.7743	6.46	285	300	0	---	R.SSGPYGGGGQYFAKPR.N
1694.7288	1693.7215	1693.6928	16.9	301	318	0	---	R.NQGGYGGSSSSSYSGSR.G
1793.9050	1792.8977	1792.8849	7.13	180	196	2	---	K.ALSKQEMASASSSQRRS.S
1809.8469	1808.8396	1808.8799	-22.25	180	196	2	---	K.ALSKQEMASASSSQRRS.S + Oxidation (M)
1983.9884	1982.9811	1982.9487	16.4	145	161	2	---	K.KRGFAVTFDDHDSVDK.I
2008.0460	2007.0387	2007.0538	-7.49	106	122	2	---	K.KIFVGGIKEDTEHHLR.D
2012.9590	2011.9517	2012.0010	-24.49	167	183	2	---	K.YHTVNGHNCEVRKALSK.Q
2537.2012	2536.1939	2536.1475	18.3	32	52	1	---	R.SHFEQGWLTLCVVMRDPNTK.R + Oxidation (M)
2706.2109	2705.2036	2705.1828	7.68	197	225	2	---	R.SGSGNFGGRRGGFGGDNFGRGGNFSGR.G
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1571.8400, 1579.7939, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

8. [Q32Li7](#) Mass: 30313 Score: 29 Expect: 32 Matches: 17

Putative uncharacterized protein MGC133880 OS=Bos taurus GN=MGC133880 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
832.4557	831.4485	831.4338	17.7	259	265	1	---	K.ALDEKEK.S
1021.5579	1020.5506	1020.5465	4.08	97	105	1	---	K.KGSFRPSSR.E
1118.5818	1117.5745	1117.5476	24.1	57	67	1	---	R.GDSPRSSSLGR.A
1143.6318	1142.6245	1142.6295	-4.36	161	171	1	---	R.KAIGEALEGQK.R
1255.6096	1254.6023	1254.6105	-6.54	240	249	1	---	K.TDDLGRWHQK.N
1383.7137	1382.7064	1382.7055	0.68	239	249	2	---	R.KTDDLGRWHQK.N
1393.7428	1392.7355	1392.7222	9.58	97	108	2	---	K.KGSFRPSSRESR.A
1519.7544	1518.7471	1518.7804	-21.90	228	239	2	---	K.SVRDLHWHGRK.T
1642.8099	1641.8026	1641.7868	9.66	246	258	1	---	R.WHQKNAMNMNLQK.A
1777.8770	1776.8697	1776.8642	3.08	145	160	0	---	K.FGSNVVDQLVSEEQAR.K
1884.9417	1883.9344	1883.9272	3.86	106	122	2	---	R.ESRASLREGAQCQAPK.E
1905.9313	1904.9240	1904.9592	-18.46	145	161	1	---	K.FGSNVVDQLVSEEQARK.A
1908.9043	1907.8970	1907.9080	-5.77	250	265	2	---	K.NAMNMNLQKALDEKEK.S + 2 Oxidation (M)
1954.0236	1953.0163	1953.0241	-3.97	214	230	2	---	K.SLMKASYTPEVIEKSVR.D + Oxidation (M)
2199.0723	2198.0650	2198.0724	-3.36	246	263	2	---	R.WHQKNAMNMNLQKALDEK.E
2239.0225	2238.0152	2238.0301	-6.66	22	41	1	---	K.EGQQDTPWRAAHSPLDTSK.L
2277.0823	2276.0750	2276.0894	-6.30	123	144	1	---	K.EDPNAGAQGGSGSSIPNNIRHK.F
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1385.7534, 1388.7404, 1390.7284, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7422, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109,								

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1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323,
1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1646.8297, 1649.8447, 1657.8101, 1667.8622,
1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058,
1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741,
1770.3567, 1772.9315, 1774.7610, 1774.9131, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340,
1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153,
1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1906.9501,
1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740,
1944.0040, 1946.9679, 1949.9595, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884,
1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166,
2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641,
2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2202.1624,
2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2242.0435, 2268.1489, 2270.1287, 2271.1294,
2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959,
2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109,
2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

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9. [F6QVC9](#) Mass: 36109 Score: 26 Expect: 58 Matches: 18

Annexin OS=Bos taurus GN=ANXA5 PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
831.4382	830.4309	830.4385	-9.20	64	- 70	0	---	R.DLLDDLK.S
854.4837	853.4764	853.4882	-13.82	202	- 208	1	---	R.SVSHLRL.V
905.4955	904.4883	904.5018	-14.97	51	- 58	0	---	R.QEIAVAFK.T
954.5388	953.5315	953.5335	-2.01	194	- 201	0	---	K.FITIFGTR.S
1001.5854	1000.5781	1000.5917	-13.54	109	- 117	0	---	K.VLTEIIASR.T
1014.5215	1013.5142	1013.5069	7.20	90	- 97	0	---	R.LDYAYELK.H
1122.5912	1121.5839	1121.5717	10.9	277	- 285	0	---	R.SEIDLINIR.K
1250.6554	1249.6481	1249.6666	-14.79	277	- 286	1	---	R.SEIDLINIRK.E
1276.6343	1275.6270	1275.6169	7.93	291	- 301	0	---	K.NFGTSLYSIMK.G + Oxidation (M)
1310.6146	1309.6073	1309.5939	10.2	7	- 18	0	---	R.GTVADFPGFDER.A
1388.7404	1387.7331	1387.7169	11.7	290	- 301	1	---	R.KNFGTSLYSIMK.G
1461.7778	1460.7705	1460.7735	-2.07	46	- 58	1	---	R.SNAQRQEIAVAFK.T
1704.8773	1703.8700	1703.8941	-14.15	30	- 45	0	---	K.GLGTDEESILTLTSR.S
1710.9279	1709.9206	1709.9247	-2.36	152	- 166	1	---	R.MLVVLLQANRDPDAR.I
2066.9873	2065.9800	2065.9705	4.61	7	- 25	1	---	R.GTVADFPGFDERADAETLR.K
2195.0774	2194.0701	2194.0655	2.13	7	- 26	2	---	R.GTVADFPGFDERADAETLRK.A
2203.1221	2202.1148	2202.0804	15.6	167	- 186	0	---	R.IDEAQVEQDAQALFQAGELK.W
2292.1426	2291.1353	2291.1144	9.14	209	- 227	1	---	R.VFDKYMTISGFQIETIDR.E
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1003.5496, 1011.5262, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6109, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1706.8701, 1707.8302, 1716.8671, 1719.9058, 1723.9011, 1725.8302, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2202.1624, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

10. [E1BPX8](#) Mass: 222520 Score: 26 Expect: 64 Matches: 54

Uncharacterized protein OS=Bos taurus GN=MYH7B PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
725.4001	724.3928	724.4092	-22.65	1850	- 1854	2	---	R.KHERR.V
747.4125	746.4052	746.4109	-7.60	666	- 671	0	---	K.LMTNLR.A
761.4177	760.4104	760.4079	3.37	1228	- 1233	1	---	K.EKSELRL.M
831.4382	830.4309	830.4498	-22.71	869	- 877	0	---	R.GALATAEAK.R
832.4557	831.4485	831.4338	17.7	1530	- 1536	0	---	K.SVQLEK.A
860.4691	859.4618	859.4763	-16.82	927	- 933	1	---	K.VKELSER.L
913.5700	912.5627	912.5756	-14.15	792	- 799	0	10	K.VLTLLQAR.S
913.5747	912.5674	912.5756	-9.06	792	- 799	0	---	K.VLTLLQAR.S
918.5050	917.4977	917.4818	17.4	1443	- 1452	0	---	R.ATSAARAALDKK.K
922.5070	921.4997	921.4920	8.37	1484	- 1491	0	---	R.SLGTEFLR.L
943.5453	942.5381	942.5498	-12.45	1819	- 1826	1	---	K.QVQKLEAK.V
966.5410	965.5337	965.5519	-18.77	1453	- 1459	2	---	K.QQRHLER.A
974.5395	973.5323	973.5556	-23.99	1792	- 1799	1	---	K.KTLEQTVR.E
1031.5903	1030.5830	1030.5658	16.7	1530	- 1538	1	---	K.SVQLEKAK.K
1041.5658	1040.5585	1040.5403	17.5	434	- 441	1	---	K.ATYDRLFR.W
1046.5897	1045.5824	1045.5767	5.44	1443	- 1453	1	---	R.ATSAARAALDKK.Q
1057.6078	1056.6005	1056.6179	-16.43	1569	- 1577	0	---	R.IQLELSQVK.A

1100.6071	1099.5998	1099.5734	24.0	1677	-	1685	1	---	R.EQAQALERR.A
1157.6199	1156.6126	1156.6312	-16.08	1140	-	1149	2	---	R.VEKQRAEAAR.E
1158.6685	1157.6612	1157.6404	18.0	1578	-	1587	2	---	K.AEVDRLKAEK.D
1275.6362	1274.6289	1274.6466	-13.86	972	-	982	2	---	K.AEKEQATENK.V
1301.7079	1300.7006	1300.7252	-18.86	275	-	285	1	---	K.SRVIFQLPGER.G
1315.7098	1314.7025	1314.7118	-7.07	356	-	367	0	---	K.IVGALLHFGNMK.F + Oxidation (M)
1320.6659	1319.6586	1319.6755	-12.78	1872	-	1882	1	---	R.MQDLVDKLQSK.V + Oxidation (M)
1437.7584	1436.7511	1436.7398	7.86	262	-	274	0	---	K.LASADIDSYLLEK.S
1529.8099	1528.8026	1528.7733	19.2	1827	-	1839	1	---	K.VRELEAELDAAEQK.K
1537.7974	1536.7901	1536.7527	24.3	1766	-	1779	1	---	K.AITDAAMMAEELKK.E + Oxidation (M)
1557.8010	1556.7937	1556.8158	-14.17	1708	-	1720	1	---	R.RLAEQELLEATER.L
1633.7985	1632.7912	1632.7889	1.41	1584	-	1596	2	---	K.LAEKDEECTNLRR.N
1649.8447	1648.8374	1648.8528	-9.30	1765	-	1779	2	---	K.KAITDAAMMAEELKK.E
1680.8746	1679.8673	1679.8730	-3.36	262	-	276	1	---	K.LASADIDSYLLEKSR.V
1699.8862	1698.8789	1698.8988	-11.69	666	-	679	1	---	K.LMTNLRATQPHFVR.C + Oxidation (M)
1716.8671	1715.8598	1715.8802	-11.87	1601	-	1616	1	---	R.AVESLQASLDAETRAR.N
1774.9131	1773.9058	1773.9407	-19.65	1868	-	1882	2	---	K.NLARMQDLVDKLQSK.V + Oxidation (M)
1791.8137	1790.8064	1790.8509	-24.83	732	-	747	0	---	R.ILNPSAIPDDTFMDSR.K
1800.9336	1799.9263	1799.9489	-12.55	1706	-	1720	2	---	R.SRRLAQEELLEATER.L
1805.9069	1804.8996	1804.9067	-3.92	1857	-	1871	2	---	K.ELAYQAEEDRKNLAR.M
1840.9827	1839.9754	1840.0166	-22.39	1643	-	1659	1	---	R.QATEAQAAATRLQQAQLK.E
1894.9313	1893.9240	1893.8955	15.0	1383	-	1398	1	---	K.YEADAIQRTTELEEA.K
1911.9130	1910.9057	1910.9156	-5.17	1626	-	1642	0	---	K.MEGDLNDLQLGHATR.Q
1981.9854	1980.9781	1980.9736	2.28	351	-	367	1	---	K.CACYKIVGALLHFGNMK.F
2031.0166	2030.0093	2030.0168	-3.66	1063	-	1081	1	---	K.LEGDLKLTQESVADAQDK.Q
2044.0123	2043.0050	2042.9756	14.4	1118	-	1134	1	---	K.ELQARAELEEELEAER.A
2052.0496	2051.0423	2051.0534	-5.41	1829	-	1846	2	---	R.ELEAEILDAAEQKHAEALK.G
2060.0520	2059.0447	2059.0922	-23.07	1492	-	1508	2	---	R.LRHSHEEALEALETLLRR.E
2064.9880	2063.9807	2064.0157	-16.95	174	-	193	1	---	R.ENQSMILITGESGAGKTVNTK.R
2111.0305	2110.0232	2110.0153	3.75	730	-	747	1	---	R.YRILNPSAIPDDTFMDSR.K
2148.1023	2147.0950	2147.0528	19.7	1230	-	1248	1	---	K.SELRMEVDLDSANVETLAR.G
2160.0632	2159.0559	2159.0481	3.64	1546	-	1565	0	---	K.SELQAALAEAEAGALEEETK.T
2270.1287	2269.1214	2269.0822	17.3	893	-	912	0	---	K.NDLALQLQAEQENLADAEER.C
2292.1426	2291.1353	2291.1678	-14.19	985	-	1004	2	---	K.NLTEEMAALDESUVRLTKEK.K + Oxidation (M)
2334.1719	2333.1646	2333.1532	4.88	1234	-	1255	2	---	R.MEVDDLDSANVETLARGKASAEK.L
2350.1746	2349.1673	2349.1482	8.16	1234	-	1255	2	---	R.MEVDDLDSANVETLARGKASAEK.L + Oxidation (M)
2706.2109	2705.2036	2705.2099	-2.33	1346	-	1367	1	---	R.HDCDDLREQHEEEAEQAELQR.L
<b>No match to:</b> 721.4365, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 916.5284, 919.5053, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 969.5256, 972.5305, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1044.5751, 1045.5729, 1051.5448, 1056.5658, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1276.6343, 1277.6531, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1530.7523, 1531.7472, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1640.9384, 1642.8099, 1646.8297, 1657.8101, 1667.8622, 1677.7988, 1689.9465, 1694.7288, 1698.9225, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1793.9050, 1795.9353, 1798.9340, 1804.9142, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2047.4957, 2047.9515, 2062.0073, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2127.0930, 2139.0630, 2144.0493, 2155.0950, 2156.0796, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2271.1294, 2277.0823, 2284.1990, 2309.0994, 2342.9915, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434									

11.	<a href="#">Q29RH6</a>	Mass: 55738	Score: 26	Expect: 68	Matches: 24	
Chromosome 6 open reading frame 182 ortholog OS=Bos taurus GN=LOC519522 PE=2 SV=1						
Observed	Mr (expt)	Mr (calc)	ppm	Start	End Miss Ions	Peptide
775.4307	774.4235	774.4309	-9.67	127	- 132 0 ---	R.CILLEK.Q
837.4463	836.4390	836.4392	-0.20	87	- 93 1 ---	R.EAAQYKK.A
860.4691	859.4618	859.4586	3.82	140	- 146 0 ---	R.MVLNVER.E
885.4465	884.4393	884.4538	-16.46	460	- 466 0 ---	R.VHNLQMK.L + Oxidation (M)
946.5259	945.5186	945.5355	-17.91	435	- 442 2 ---	K.NIKNSSRK.C
1113.5729	1112.5656	1112.5760	-9.37	257	- 265 0 ---	R.RPPQICSK.F
1162.6182	1161.6109	1161.6063	3.96	388	- 397 1 ---	K.MEIKGEQISK.L
1178.6356	1177.6283	1177.6053	19.6	266	- 275 0 ---	K.FETLPIMAEK.S
1235.6445	1234.6372	1234.6405	-2.64	186	- 196 1 ---	K.LTTTQKTAEDK.I
1255.6096	1254.6023	1254.6278	-20.32	182	- 191 1 ---	K.ECFKLTTTQK.T
1338.6581	1337.6508	1337.6245	19.7	115	- 126 0 ---	K.DISMDQLSSAQR.C + Oxidation (M)
1493.7579	1492.7506	1492.7456	3.36	161	- 172 2 ---	R.EKEQDHMKLHAK.L
1529.8099	1528.8026	1528.8184	-10.32	230	- 242 1 ---	R.ILMSSVTNPRHFK.E
1537.7974	1536.7901	1536.8221	-20.82	127	- 138 1 ---	R.CILLEKLEYTK.R
1545.8091	1544.8018	1544.8133	-7.44	230	- 242 1 ---	R.ILMSSVTNPRHFK.E + Oxidation (M)
1628.7900	1627.7827	1627.7810	1.04	312	- 324 1 ---	R.CLYKPSRTTSQCK.A
1628.7921	1627.7848	1627.7810	2.33	312	- 324 1 ---	R.CLYKPSRTTSQCK.A
1704.8773	1703.8700	1703.8590	6.45	199	- 211 2 ---	K.HLEEKLEEHEHOR.K

1706.8701	1705.8628	1705.8781	-8.94	112	-	126	2	---	K.QKKDISMQLSSAQSR.C
1769.8741	1768.8668	1768.8890	-12.53	392	-	406	1	---	K.GEQISKLMQHQSVR.K
1933.9950	1932.9877	1933.0269	-20.25	213	-	229	1	---	K.LFPDKASQLQTGLEISR.I
2271.1294	2270.1221	2270.1511	-12.75	388	-	406	2	---	K.MEIKGEQISKLMQHQSVR.K
2497.2800	2496.2727	2496.2213	20.6	149	-	168	2	---	K.NMIEQQQAQLQREKEQDHMK.L
2528.1750	2527.1677	2527.1496	7.15	28	-	49	0	---	R.SDESSQTHYSVNLLELTSSQMLR.S + Oxidation (M)

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 842.5060, 844.4760, 854.4837, 856.4911, 862.4852, 869.4231, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1530.7523, 1531.7472, 1539.8005, 1542.8422, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1770.3567, 1772.9315, 1774.7610, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2166.0796, 2169.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2501.2637, 2511.1460, 2513.1421, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

12. [Q2HJF2](#) Mass: 26289 Score: 24 Expect: 88 Matches: 13

F-box and leucine-rich protein 22 OS=Bos taurus GN=FBXL22 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
943.5453	942.5381	942.5359	2.32	178	-	186	1	--- R.NVSAAGLRR.L
946.5259	945.5186	945.5144	4.41	212	-	221	0	--- R.GHPAPGAALR.K
959.5266	958.5193	958.5308	-11.95	21	-	28	2	--- K.DSRKNLAR.L
1057.6078	1056.6005	1056.5862	13.5	189	-	197	1	--- R.AACPRLTLR.A
1145.6407	1144.6334	1144.6240	8.20	57	-	66	0	--- K.DNFLSPALR.S
1352.7205	1351.7132	1351.7142	-0.76	142	-	152	1	--- R.LRALHLENCAR.V
1551.7778	1550.7705	1550.7511	12.5	198	-	211	0	--- R.AEHSAAIMPDLQPR.G + Oxidation (M)
1553.8065	1552.7992	1552.7892	6.45	144	-	156	1	--- R.ALHLENCARVTNR.T
1844.9012	1843.8939	1843.8887	2.84	98	-	112	0	--- R.HESLVNDFLLQVCDR.C
1925.9573	1924.9500	1924.9294	10.7	138	-	152	2	--- R.CCPRLRALHLENCAR.V
1932.0060	1930.9987	1930.9935	2.72	77	-	92	1	--- R.VQVCISIEDWLKSAIQR.N
2008.0460	2007.0387	2007.0248	6.96	9	-	24	2	--- R.ECLLHLFSFLDKDSRK.N
2284.1990	2283.1917	2283.2018	-4.43	167	-	186	2	--- R.AQLTLHVDFCRNVSAAGLRR.L

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 950.4959, 951.5076, 953.5164, 954.5388, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7939, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1928.0469, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2201.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

13. [G5E523](#) Mass: 28080 Score: 24 Expect: 94 Matches: 22

Uncharacterized protein OS=Bos taurus GN=STAU2 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
788.4210	787.4137	787.4235	-12.48	197	-	202	2	--- R.GMPRRR.E + Oxidation (M)



1036.5447	1035.5374	1035.5535	-15.55	202	-	209	1	---	R.REFVMOVK.V
1056.5658	1055.5585	1055.5335	23.7	1	-	8	1	---	-,RYHCPVPK.I
1113.5729	1112.5656	1112.5509	13.3	29	-	38	1	---	R.QAARHNAAMK.A + Oxidation (M)
1163.6152	1162.6079	1162.6056	1.98	84	-	93	0	---	R.NMPVSFEVIK.E
1179.6157	1178.6084	1178.6005	6.69	84	-	93	0	---	R.NMPVSFEVIK.E + Oxidation (M)
1208.6415	1207.6342	1207.6496	-12.69	201	-	209	2	---	R.RREFVMQVK.V + Oxidation (M)
1335.7318	1334.7245	1334.7016	17.1	83	-	93	1	---	K.RNMPVSFEVIK.E + Oxidation (M)
1437.7584	1436.7511	1436.7333	12.4	228	-	240	0	---	K.NAAEAMLLQLGYK.A + Oxidation (M)
1472.7633	1471.7560	1471.7242	21.6	94	-	106	1	---	K.ESGPPHMKSFVTR.V
1477.7545	1476.7472	1476.7460	0.84	185	-	196	1	---	K.KEKEDYVLLSER.G
1488.7537	1487.7464	1487.7191	18.4	94	-	106	1	---	K.ESGPPHMKSFVTR.V + Oxidation (M)
1565.8199	1564.8126	1564.8283	-9.99	227	-	240	1	---	K.KNAAEAMLLQLGYK.A + Oxidation (M)
1605.8586	1604.8513	1604.8409	6.47	184	-	196	2	---	K.KEKEDYVLLSER.G
1624.8062	1623.7989	1623.7740	15.3	107	-	122	1	---	R.VSVGFSAEGEGNSKK.L
1677.7988	1676.7915	1676.8192	-16.49	187	-	200	1	---	K.EPDYVLLSERGMPR.R + Oxidation (M)
1918.9587	1917.9514	1917.9618	-5.41	185	-	200	2	---	K.KEKEDYVLLSERGMPR.R
1933.9950	1932.9877	1932.9727	7.76	158	-	175	1	---	K.TIVKAGPEYQGGMNPISR.L + Oxidation (M)
2027.0256	2026.0183	2026.0016	8.26	84	-	101	1	---	R.NMPVSFEVIKESGPPHMK.S
2062.0073	2061.0000	2061.0208	-10.06	9	-	26	0	---	K.IFYVQLTVGNNEFFGEGK.T
2199.0723	2198.0650	2198.0976	-14.82	83	-	101	2	---	K.RNMPVSFEVIKESGPPHMK.S + Oxidation (M)
2501.2637	2500.2564	2500.2856	-11.67	162	-	184	2	---	K.AGPEYQGGMNPISRLAQIQAKK.E + Oxidation (M)
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1461.7778, 1467.7521, 1475.7632, 1484.7889, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2064.9880, 2066.9873, 2094.0376, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2220.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434									

14. [F1N024](#) Mass: 7899 Score: 24 Expect: 1e+002 Matches: 6

Uncharacterized protein OS=Bos taurus GN=FAM19A4 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
885.4465	884.4393	884.4464	-8.09	2	-	9	0	M.SASSQHRLR.G
1014.5215	1013.5142	1013.5155	-1.28	10	-	18	0	R.GHTGHHQIK.Q
1255.6096	1254.6023	1254.6139	-9.24	19	-	29	0	K.QGTCVAVVHR.C
1880.9265	1879.9192	1879.9514	-17.10	2	-	18	1	M.SASSQHRLRGHTGHHQIK.Q
2511.1460	2510.1387	2510.2006	-24.65	36	-	57	2	R.IEERSQTVKSCSPFGQVAGITTR.A
2767.2666	2766.2593	2766.2313	10.1	45	-	69	1	K.CSCFPQGQVAGITTRAQPSCEVAANWL.-
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 905.4959, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930,								



2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

15. [F1MS41](#) Mass: 14310 Score: 24 Expect: 1e+002 Matches: 9

Beta-synuclein OS=Bos taurus GN=SNCB PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
784.3688	783.3615	783.3659	-5.63	1 - 6	0	---	---	-.MEVFMK.G
951.5076	950.5004	950.5073	-7.30	35 - 43	0	---	---	K.EGVLYVVGSK.T
1208.6415	1207.6342	1207.6561	-18.10	35 - 45	1	---	---	K.EGVLYVVGSKTR.E
1256.6531	1255.6458	1255.6304	12.2	2 - 12	1	---	---	M.EVFMKGLSMAK.E + Oxidation (M)
1390.7284	1389.7211	1389.7463	-18.14	22 - 34	2	---	---	K.TKQGVTEAAEKTK.E
1529.8099	1528.8026	1528.8209	-11.97	44 - 58	1	---	---	K.TREGVVQGVASVAEK.T
1689.9465	1688.9392	1688.9131	15.5	7 - 23	2	---	---	K.GLISMAKEGVVAAAEKTK.Q
2127.0930	2126.0857	2126.0751	4.98	2 - 21	2	---	---	M.EVFMKGLSMAKEGVVAAAEK.T + 2 Oxidation (M)
2226.1272	2225.1199	2225.1258	-2.63	1 - 21	2	---	---	-.MEVFMKGLSMAKEGVVAAAEK.T
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0406, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

16. [P81287](#) Mass: 36124 Score: 24 Expect: 1e+002 Matches: 17

Annexin A5 OS=Bos taurus GN=ANXA5 PE=1 SV=3

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
831.4382	830.4309	830.4385	-9.20	64	-	70	0	R.DLLDDLK.S
854.4837	853.4764	853.4882	-13.82	202	-	208	1	R.SVSHLRR.V
905.4955	904.4883	904.5018	-14.97	51	-	58	0	R.QEIAVAFK.T
954.5388	953.5315	953.5335	-2.01	194	-	201	0	K.FITIFGTR.S
1001.5854	1000.5781	1000.5917	-13.54	109	-	117	0	K.VLTEIIASR.T
1014.5215	1013.5142	1013.5069	7.20	90	-	97	0	R.LYDAYELK.H
1122.5912	1121.5839	1121.5717	10.9	277	-	285	0	R.SEIDLNIIR.K
1250.6554	1249.6481	1249.6666	-14.79	277	-	286	1	R.SEIDLYNIRK.E
1276.6343	1275.6270	1275.6169	7.93	291	-	301	0	K.NFGTSLYSMIK.G + Oxidation (M)
1310.6146	1309.6073	1309.5939	10.2	7	-	18	0	R.GTVADFPGFDER.A
1388.7404	1387.7331	1387.7169	11.7	290	-	301	1	R.KNFGTSLYSMIK.G
1461.7778	1460.7705	1460.7735	-2.07	46	-	58	1	R.SNAQRQEIAVAFK.T
1710.9279	1709.9206	1709.9247	-2.36	152	-	166	1	R.MLVLLQANRPDPAR.I
2066.9873	2065.9800	2065.9705	4.61	7	-	25	1	R.GTVADFPGFDERADAETLR.K
2195.0774	2194.0701	2194.0655	2.13	7	-	26	2	R.GTVADFPGFDERADAETLRK.A
2203.1221	2202.1148	2202.0804	15.6	167	-	186	0	R.IDEAQVEQDQAQLFQAGELK.W
2292.1426	2291.1353	2291.1144	9.14	209	-	227	1	R.VFDKYMITSFGQIETIDR.E
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 959.5266, 966.5410, 969.5266, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1003.5496, 1011.5262, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465								

1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2199.0723, 2202.1624, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

17. [E1BM24](#) Mass: 57270 Score: 23 Expect: 1.3e+002 Matches: 23

CCDC64B protein-like OS=Bos taurus GN=CCDC64B PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
972.5305	971.5232	971.5036	20.2	214	221	0	---	R.QDLEAQIR.G
1045.5729	1044.5656	1044.5563	8.89	225	233	2	---	R.EELEKGRGK.L
1158.6685	1157.6612	1157.6656	-3.74	414	423	0	---	K.VLESLSLELSR.V
1328.7089	1327.7016	1327.7208	-14.42	383	392	2	---	R.EELQRQKELR.V
1338.6581	1337.6508	1337.6575	-4.99	336	346	1	---	R.SPEERLEPPR.K
1365.7379	1364.7306	1364.7272	2.47	249	259	2	---	R.REHGLELERAR.S
1484.7889	1483.7816	1483.7743	4.95	124	136	1	---	R.DVEALRAQLGEGR.S
1553.8065	1552.7992	1552.8038	-2.97	490	504	0	---	R.LSPGPAGGFFSTLFR.R
1804.9142	1803.9069	1803.8897	9.54	199	213	1	---	R.LESLQGENQMLQSR.R + Oxidation (M)
1846.9153	1845.9080	1845.9506	-23.04	408	423	1	---	R.DEAMNKVLESLSLELSR.V
1874.9695	1873.9622	1873.9390	12.4	367	382	0	---	R.LQVEMAMQQAELQSLR.E
1905.9313	1904.9240	1904.9374	-7.02	197	212	1	---	R.TRLESLQGENQMLQSR.R + Oxidation (M)
1906.9501	1905.9428	1905.9288	7.36	367	382	0	---	R.LQVEMAMQQAELQSLR.E + 2 Oxidation (M)
1908.9043	1907.8970	1907.9085	-6.02	90	104	1	---	R.AEREEQLQGENHELR.R
1973.9845	1972.9772	1972.9311	23.4	130	146	2	---	R.AQLGEGRSEQQDSGRER.A
1983.9884	1982.9811	1983.0286	-23.92	106	123	2	---	R.GLAARGAEWEARAVELER.D
2015.0104	2014.0031	2013.9967	3.20	390	407	1	---	K.ELRVQDPPEALSSALSDDR.D
2047.9515	2046.9442	2046.9818	-18.35	316	335	0	---	R.SGGALTTLSPETQEASSQQR.S
2062.0073	2061.0000	2061.0385	-18.67	197	213	2	---	R.TRLESLQGENQMLQSR.R + Oxidation (M)
2064.9880	2063.9807	2064.0096	-14.00	90	105	2	---	R.AEREEQLQGENHELR.R.G
2199.0723	2198.0650	2198.1079	-19.52	111	129	2	---	R.GAEWEARAVELERDVEALR.A
2271.1294	2270.1221	2270.1502	-12.37	388	407	2	---	R.QKELRVQDPPEALSSALSDDR.D
2284.1990	2283.1917	2283.2083	-7.28	469	489	1	---	R.QQELSAATSAPRPAPTRFSLR.L
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1331.7202, 1335.7318, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2052.0496, 2060.0520, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2199.0723, 2202.1624, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2277.0823, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

18. [F1MHM8](#) Mass: 57999 Score: 22 Expect: 1.6e+002 Matches: 18

Uncharacterized protein OS=Bos taurus GN=ITGD4 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
953.5164	952.5091	952.4866	23.7	338	346	0	---	K.FLSSVEGSK.E
1023.5663	1022.5590	1022.5430	15.7	50	58	1	---	K.KNSLSSIMK.N + Oxidation (M)
1023.5700	1022.5627	1022.5430	19.3	50	58	1	9	K.KNSLSSIMK.N + Oxidation (M)
1188.6544	1187.6471	1187.6397	6.22	473	483	0	---	K.NEAITALDTLK.T
1772.9315	1771.9242	1771.9390	-8.33	1	17	1	---	-.MAEAPVDASTLPVTVKK.K + Oxidation (M)
1793.9050	1792.8977	1792.9359	-21.31	61	75	2	---	K.DKVLAEAFESLRDPK.R
1828.9227	1827.9154	1827.9189	-1.89	79	93	1	---	R.LRTAFYTDLEALMR.W
1844.9012	1843.8939	1843.9138	-10.78	79	93	1	---	R.LRTAFYTDLEALMR.W + Oxidation (M)
1916.9923	1915.9850	1915.9502	18.2	241	256	1	---	R.CPKFGQSLPVYYEANK.M
2000.9926	1999.9853	2000.0149	-14.79	78	93	2	---	K.LRRTAFYTDLEALMR.W + Oxidation (M)
2017.9747	2016.9674	2016.9649	1.26	191	208	1	---	R.MLPNTTFAPKGETCSIGK.L + Oxidation (M)
2064.9880	2063.9807	2063.9775	1.58	81	96	1	---	R.TAFYTDLEALMRWYR.I
2094.0376	2093.0303	2092.9901	19.2	121	137	2	---	K.LGHNDKFCNSGNLDRFK.S

2176.0664 2175.0591 2175.1108 -23.76 301 - 319 1 --- K.SIELAFFPSCSLSKFIAMK.Q  
2203.1221 2202.1148 2202.1190 -1.90 94 - 111 1 --- R.WYRIAQCCLNVVNGPMLR.L + Oxidation (M)  
2284.1990 2283.1917 2283.1470 19.6 238 - 256 2 --- R.NPRCFKGIQSLPYYEANK.M  
2334.1719 2333.1646 2333.1626 0.86 79 - 96 2 --- R.LRTAFYTDLEELMRWYR.I  
2350.1746 2349.1673 2349.1575 4.16 79 - 96 2 --- R.LRTAFYTDLEELMRWYR.I + Oxidation (M)  
**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1774.7610, 1775.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1837.9396, 1840.9827, 1843.9688, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2008.0460, 2012.9590, 2015.0104, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2066.9873, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2292.1426, 2309.0994, 2342.9915, 2382.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2427.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

19. [P08057](#) Mass: 24153 Score: 22 Expect: 1.7e+002 Matches: 13

Troponin I, cardiac muscle OS=Bos taurus GN=TNNT3 PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
746.4169	745.4096	745.3970	16.9	167	-	172	0	K.ETLDL.R.A
966.5410	965.5337	965.5406	-7.15	101	-	108	1	R.QLHARVDK.V
1434.7446	1433.7373	1433.7296	5.37	196	-	208	2	K.NIDALSGMEGRKK.K + Oxidation (M)
1565.8199	1564.8126	1564.7846	17.9	5	-	21	0	R.SGGSTAGDTVPAPPPV.R
1594.8335	1593.8262	1593.8223	2.46	101	-	113	2	R.QLHARVDKVDDEER.Y
1680.8746	1679.8673	1679.8366	18.3	109	-	122	2	K.VDEERYDVEAKVTK.N
1793.9050	1792.8977	1792.8856	6.77	24	-	39	2	R.SSANYRAYATEPHAKK.K
1821.9144	1820.9071	1820.8917	8.45	23	-	38	2	R.SSANYRAYATEPHAKK.K
1874.9695	1873.9622	1873.9978	-18.99	148	-	164	2	R.RVRISADAMMQALLGAR.A + Oxidation (M)
1933.9950	1932.9877	1933.0237	-18.61	149	-	166	2	R.VRISADAMMQALLGARAK.E + 2 Oxidation (M)
2195.0774	2194.0701	2194.0913	-9.66	1	-	22	2	-MADRSGGSTAGDTVPAPPPV.R
2203.1221	2202.1148	2202.1314	-7.51	53	-	70	2	K.TLMLQIAKLELREAEER.R + Oxidation (M)
2211.1042	2210.0969	2210.0862	4.84	1	-	22	2	-MADRSGGSTAGDTVPAPPPV.R + Oxidation (M)

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1429.7365, 1431.7412, 1433.7228, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2066.9873, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2199.0723, 2202.1624, 2208.0862, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2342.9915, 2382.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2427.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

20. [G3X720](#) Mass: 22128 Score: 22 Expect: 1.7e+002 Matches: 12

Uncharacterized protein OS=Bos taurus GN=C19orf81 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
787.4221	786.4148	786.4058	11.5	64	-	69	0	R.ELPCIR.K

1519.7544	1518.7471	1518.7096	24.7	30	-	42	1	---	R.ETPEEMQARSLGR.S + Oxidation (M)
1624.8062	1623.7989	1623.7610	23.4	119	-	132	1	---	R.FENMNVICGTAGRR.D
1680.8746	1679.8673	1679.8454	13.1	133	-	145	1	---	R.DRWLIMVDFQTR.S
1852.9364	1851.9291	1851.9414	-6.62	132	-	145	2	---	R.RDRWLIMVDFQTR.S + Oxidation (M)
1911.9130	1910.9057	1910.8839	11.4	119	-	134	2	---	R.FENMNVICGTAGRRDR.W + Oxidation (M)
1923.9718	1922.9645	1922.9785	-7.27	133	-	147	2	---	R.DRWLIMVDFQTRSR.L
1939.9740	1938.9667	1938.9734	-3.45	133	-	147	2	---	R.RDRWLIMVDFQTRSR.L + Oxidation (M)
2000.9926	1999.9853	1999.9633	11.0	21	-	38	1	---	R.DAGALLVDRETPEEMQAR.S
2027.0256	2026.0183	2025.9724	22.7	114	-	131	1	---	R.VSSIRFENMNVICGTAGR.R + Oxidation (M)
2203.1221	2202.1148	2202.1466	-14.45	53	-	70	2	---	R.QVIAEYEALDRELPCIRK.F
2414.1897	2413.1824	2413.2019	-8.09	21	-	42	2	---	R.DAGALLVDRETPEEMQARSLGR.S
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2324.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434									

21. [Q58DU0](#) Mass: 26366 Score: 21 Expect: 1.8e+002 Matches: 12

Multiple myeloma tumor-associated protein 2 homolog OS=Bos taurus GN=MMTAG2 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
761.4177	760.4104	760.4079	3.37	168	-	173	1	--- K.LRSEEK.V
922.5070	921.4997	921.4781	23.5	2	-	10	1	--- M.FGSSRGGVR.G
1199.7006	1198.6933	1198.7034	-8.37	86	-	96	2	--- K.NVKKQPTGLSK.E
1322.6886	1321.6813	1321.6891	-5.88	45	-	55	2	--- K.GRDLTWYAKGR.A
1522.7811	1521.7738	1521.7497	15.9	72	-	85	0	--- R.QAEQEALMAALGYK.N
1551.7778	1550.7705	1550.7994	-18.61	42	-	53	2	--- R.WQKGRDLTWYAK.G
1565.8199	1564.8126	1564.8474	-22.22	138	-	151	1	--- K.EAAKLGLSVFTHHR.V
1804.9142	1803.9069	1803.9050	1.08	26	-	41	1	--- K.QRENYLGNSLMAPVGR.W
1978.9910	1977.9837	1977.9731	5.39	28	-	44	1	--- R.ENYLGNSLMAPVGRWQK.G + Oxidation (M)
2008.0460	2007.0387	2007.0459	-3.55	72	-	89	2	--- R.QAEQEALMAALGYKNVKK.Q + Oxidation (M)
2176.0664	2175.0591	2175.1007	-19.12	28	-	46	2	--- R.ENYLGNSLMAPVGRWQKGR.D
2417.0959	2416.0886	2416.0999	-4.65	208	-	229	1	--- R.LDSSLAPAPIQHSDSSTCCCK.R
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2324.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

22. [Q28024](#) Mass: 8166 Score: 21 Expect: 1.8e+002 Matches: 10

Guanine nucleotide-binding protein G(i)/G(s)/G(o) subunit gamma-12 OS=Bos taurus GN=GNG12 PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
735.4143	734.4070	734.3997	9.96	67	-	72	1	--- K.KTCTIL.-
978.5314	977.5241	977.5216	2.59	65	-	72	2	--- K.DKKTCTIL.-
1092.5961	1091.5888	1091.5645	22.3	23	-	31	1	--- R.MEASIERIK.V + Oxidation (M)
1579.7939	1578.7866	1578.7784	5.23	1	-	15	1	--- -.MSSKTAStNNIAQAR.R
1604.8323	1603.8250	1603.8390	-8.71	2	-	16	2	--- M.SSKTAStNNIAQARR.T
1751.8656	1750.8583	1750.8744	-9.18	1	-	16	2	--- -.MSSKTAStNNIAQARR.T + Oxidation (M)
1772.9315	1771.9242	1771.8815	24.1	49	-	64	0	--- R.NDPLLMGIPTSENPFK.D
2160.0632	2159.0559	2159.0932	-17.28	49	-	67	2	--- R.NDPLLMGIPTSENPFKDKK.T + Oxidation (M)
2195.0774	2194.0701	2194.0510	8.70	30	-	48	2	--- R.IKVSKASADLMSYCEEHAR.N
2211.1042	2210.0969	2210.0459	23.1	30	-	48	2	--- R.IKVSKASADLMSYCEEHAR.N + Oxidation (M)
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2176.0664, 2190.9895, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

23. [E1BD03](#) Mass: 66968 Score: 21 Expect: 1.8e+002 Matches: 26

Uncharacterized protein OS=Bos taurus GN=PPM1D PE=3 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide																																																																																																																																																								
1044.5751	1043.5678	1043.5876	-18.97	239	-	247	1 ---	K.SGVNRVVVK.R																																																																																																																																																								
1045.5729	1044.5656	1044.5763	-10.23	358	-	364	2 ---	R.WRQRLR.A																																																																																																																																																								
1073.5902	1072.5829	1072.5877	-4.42	459	-	469	0 ---	R.GNVQAIVSSK.D																																																																																																																																																								
1157.6199	1156.6126	1156.6393	-23.06	118	-	126	1 ---	R.EHLWGIKK.Q																																																																																																																																																								
1188.6544	1187.6471	1187.6332	11.7	512	-	522	1 ---	K.NVKISSPGQMK.A																																																																																																																																																								
1335.7318	1334.7245	1334.6942	22.7	126	-	137	2 ---	K.KQRGFTSSEPAK.V																																																																																																																																																								
1433.7228	1432.7155	1432.7231	-5.32	537	-	549	1 ---	R.TLEESNSGPLMKK.H																																																																																																																																																								
1461.7778	1460.7705	1460.7421	19.5	145	-	156	1 ---	K.GFLACHLAMWKK.L																																																																																																																																																								
1477.7545	1476.7472	1476.7370	6.93	145	-	156	1 ---	K.GFLACHLAMWKK.L + Oxidation (M)																																																																																																																																																								
1605.8586	1604.8513	1604.8319	12.1	144	-	156	2 ---	R.KGFLACHLAMWKK.L + Oxidation (M)																																																																																																																																																								
1615.8754	1614.8681	1614.8325	22.0	558	-	573	1 ---	R.SSGAQPSLPTTSQRK.N																																																																																																																																																								
1633.7985	1632.7912	1632.8253	-20.90	228	-	243	1 ---	R.IEGLGGSVMNKGSGVNR.V + Oxidation (M)																																																																																																																																																								
1840.9827	1839.9754	1839.9479	14.9	2	-	19	1 ---	M.AGLYSLGSVSVSDQGGRK.Y																																																																																																																																																								
1900.9546	1899.9473	1899.9836	-19.10	512	-	528	2 ---	K.NVKISSPGQMKAEVER.T																																																																																																																																																								
1916.9923	1915.9850	1915.9785	3.39	512	-	528	2 ---	K.NVKISSPGQMKAEVER.T + Oxidation (M)																																																																																																																																																								
1918.9587	1917.9514	1917.9690	-9.18	226	-	243	2 ---	R.ERIEGLGGSVMNKGSGVNR.V + Oxidation (M)																																																																																																																																																								
1932.0060	1930.9987	1930.9982	0.27	590	-	605	2 ---	K.IGNPLLHQHRTVCVC.-																																																																																																																																																								
1987.9784	1986.9711	1986.9833	-6.14	1	-	19	1 ---	-.MAGLYSLGSVSVSDQGGRK.Y + Oxidation (M)																																																																																																																																																								
2015.0104	2014.0031	2014.0192	-7.96	553	-	572	1 ---	R.NGLSRSSGAQPSLPTTSQRK																																																																																																																																																								
2066.9873	2065.9800	2065.9534	12.9	74	-	93	2 ---	R.EARAAPPDAGASAPAGRCRR																																																																																																																																																								
2102.0667	2101.0594	2101.0777	-8.68	54	-	76	2 ---	R.SPPPPAGGEVAGRGAAGAAREAR.A																																																																																																																																																								
2148.1023	2147.0950	2147.0954	-0.20	138	-	155	2 ---	K.VCAAIRKGLFLACHLAMWK.K + Oxidation (M)																																																																																																																																																								
2202.1624	2201.1551	2201.1278	12.4	145	-	162	2 ---	K.GFLACHLAMWKKLAEWPK.T + Oxidation (M)																																																																																																																																																								
2233.0984	2232.0911	2232.1208	-13.31	529	-	548	2 ---	R.TPPANFKRTLEESNSGLPMK.K + Oxidation (M)																																																																																																																																																								
2398.2400	2397.2327	2397.2363	-1.47	182	-	204	1 ---	R.GLKMYVAHVGDGSGVVLGIQDDPK.D																																																																																																																																																								
2414.1897	2413.1824	2413.2312	-20.20	182	-	204	1 ---	R.GLKMYVAHVGDGSGVVLGIQDDPK.D + Oxidation (M)																																																																																																																																																								
No match to:	721.4365,	725.4001,	726.4063,	728.3681,	730.3848,	731.4017,	732.3573,	734.4151,	735.4143,	741.4101,	742.4515,	744.4171,	745.4167,	746.4169,	747.4125,	750.4153,	752.4127,	755.4100,	756.4199,	757.4313,	761.4177,	767.4266,	768.3700,	768.3737,	770.3966,	772.4093,	775.4307,	779.4308,	784.3688,	786.4000,	787.4221,	788.4210,	792.4376,	795.4350,	798.4351,	800.4296,	812.4388,	815.4332,	822.4482,	825.4540,	831.4382,	832.4557,	835.4719,	837.4463,	842.5060,	844.4760,	854.4837,	856.4911,	860.4691,	862.4852,	869.4231,	885.4465,	905.4955,	907.4991,	908.4929,	913.5700,	913.5747,	916.5284,	918.5050,	919.5053,	922.5070,	928.5117,	934.5172,	940.4840,	942.4854,	943.4289,	943.5453,	946.5259,	950.4959,	951.5076,	953.5164,	954.5388,	959.5266,	966.5410,	969.5256,	972.5305,	974.5395,	976.5310,	978.5314,	979.5442,	991.5409,	993.5307,	1001.5854,	1003.5496,	1011.5262,	1014.5215,	1021.5579,	1023.5663,	1023.5700,	1031.5903,	1035.5381,	1036.5447,	1037.5573,	1039.5327,	1041.5658,	1046.5897,	1051.5448,	1056.5658,	1057.6078,	1067.5753,	1086.5509,	1092.5961,	1100.6071,	1106.5391,	1111.5615,	1113.5729,	1118.5818,	1120.6045,	1122.5912,	1123.5848,	1125.5823,	1132.6047,	1134.5714,	1139.5746,	1143.6318,	1144.6497,	1145.6407,	1147.6393,	1150.6108,	1155.6215,	1158.6685,	1162.6182,	1163.6152,	1168.6215,	1173.6418,	1175.6089,	1178.6356,	1179.6157,	1181.6819,	1197.6704,	1199.7006,	1208.6415,	1216.6714,	1227.6595,	1231.6387,	1232.6447,	1234.6672,	1235.6445,	1244.6453,	1247.6211,	1248.6174,	1250.6554,	1255.6096,	1256.6531,	1261.6592,	1262.6453,	1266.6777,	1273.6260,	1275.6362,	1276.6343,	1277.6531,	1301.7079,	1303.7076,	1307.7042,	1308.6376,	1310.6146,	1312.6418,	1315.7098,	1320.6659,	1322.6886,



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1323.6771, 1324.6964, 1328.7089, 1331.7202, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379,
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1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010,
1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1608.8497,
1624.8062, 1628.7900, 1628.7921, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465,
1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346,
1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610,
1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142,
1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881,
1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1905.9313, 1906.9501, 1908.9043, 1911.9130,
1912.9154, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236,
1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1995.9408, 1998.9894, 2000.9926,
2008.0460, 2012.9590, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520,
2062.0073, 2064.9880, 2094.0376, 2097.0454, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2155.0950, 2156.0796, 2160.0632,
2176.0664, 2190.9895, 2195.0774, 2199.0723, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2239.0225,
2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607,
2400.0862, 2413.0549, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058,
2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

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24. [F1N6S6](#) Mass: 28266 Score: 21 Expect: 2.1e+002 Matches: 13

Placental prolactin-related protein 3 OS=Bos taurus GN=PRP3 PE=3 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
745.4167	744.4094	744.3919	23.6	2	-	8	0	--- M.APAPSF.R.G
1349.7253	1348.7180	1348.7503	-23.95	172	-	182	0	--- R.QFSQVIYPVIR.T
1360.6638	1359.6565	1359.6427	10.1	212	-	221	1	--- K.LFMCLYRDSR.K
1488.7537	1487.7464	1487.7377	5.86	212	-	222	2	--- K.LFMCLYRDSRK.L
1547.8051	1546.7978	1546.7773	13.3	109	-	121	2	--- R.EKALRMNNDLSK.W
1563.8109	1562.8036	1562.7722	20.1	109	-	121	2	--- R.EKALRMNNDLSK.W + Oxidation (M)
1751.8656	1750.8583	1750.8323	14.8	206	-	218	1	--- R.HSAFYKLFMCLYR.D + Oxidation (M)
1867.9218	1866.9145	1866.9244	-5.31	140	-	156	1	--- K.DLQSMKEVSDTILSSAK.E + Oxidation (M)
1921.9825	1920.9752	1920.9727	1.32	157	-	171	2	--- K.ENMRKIEELQAFIER.Q + Oxidation (M)
1923.9718	1922.9645	1922.9374	14.1	189	-	205	0	--- R.IYWSQLSLVSDNEDV.R.H
1983.9884	1982.9811	1982.9864	-2.64	2	-	18	1	--- M.APAPSF.RGHQWTYNPVR.G
2094.0376	2093.0303	2092.9975	15.7	206	-	221	2	--- R.HSAFYKLFMCLYRDSR.K
2414.1897	2413.1824	2413.1465	14.9	140	-	160	2	--- K.DLQSMKEVSDTILSSAKENMR.K + 2 Oxidation (M)
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1352.7205, 1356.7230, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1434.7446, 1437.7584, 1467.7521, 1472.7633, 1475.7632, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1561.8401, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9133, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1995.9408, 1998.9894, 2000.9926, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0033, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

25. [F6QYE2](#) Mass: 72629 Score: 20 Expect: 2.5e+002 Matches: 25

Uncharacterized protein OS=Bos taurus GN=CFAP100 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
788.4210	787.4137	787.4300	-20.75	167	-	172	1	--- K.RSEIQR.L
916.5284	915.5211	915.5185	2.87	588	-	594	2	--- R.GRRILVCR.S
943.5453	942.5381	942.5610	-24.34	554	-	560	2	--- R.LRLREEK.A
950.4959	949.4886	949.4902	-1.73	219	-	226	2	--- K.ESKAKMEK.I
976.5310	975.5237	975.5059	18.3	489	-	496	0	--- K.LLESINCK.V
1031.5903	1030.5830	1030.5845	-1.39	224	-	231	1	--- K.MEKILEIR.E
1173.6418	1172.6345	1172.6400	-4.71	541	-	550	2	--- R.IEQAEKAKEK.E
1175.6089	1174.6016	1174.6194	-15.09	292	-	302	0	--- K.ESLLSSVGD.R.A
1199.7006	1198.6933	1198.6782	12.6	575	-	585	2	--- R.AQARAQAQEVKK.K
1248.6174	1247.6101	1247.5890	17.0	1	-	11	0	--- -.MSENLPMPVSK.S + Oxidation (M)
1488.7537	1487.7464	1487.7467	-0.18	462	-	474	1	--- K.EEETAAELELKR.V
1500.7737	1499.7664	1499.7516	9.87	155	-	166	0	--- R.QMFLIQYALDMK.R
1513.8079	1512.8006	1512.8372	-24.18	73	-	84	2	--- K.SLLDREQKQQLR.V
1531.7472	1530.7399	1530.7096	19.8	604	-	615	2	--- K.EQSKHELMKDR.E + Oxidation (M)
1539.8005	1538.7932	1538.8165	-15.11	292	-	305	1	--- K.ESLLSSVGDRAHR.L
1565.8199	1564.8126	1564.7879	15.8	208	-	221	2	--- R.SSVQALRMADKESK.A + Oxidation (M)
1587.7620	1586.7547	1586.7787	-15.12	173	-	186	0	--- R.LESLAQAEAEELER.A
1594.8335	1593.8262	1593.8185	4.88	85	-	98	2	--- R.VHEKMTYSKVS.AK.H



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1719.9058 1718.8985 1718.8562 24.6 124 - 137 1 --- R.SFHEQVAVKMLAMTR.E + Oxidation (M)
1777.8770 1776.8697 1776.9080 -21.54 2 - 17 1 --- M.SENLPPMVSKSVTFNK.H
1793.9050 1792.8977 1792.9029 -2.90 2 - 17 1 --- M.SENLPPMVSKSVTFNK.H + Oxidation (M)
1955.9738 1954.9665 1954.9432 12.0 303 - 318 1 --- R.AHRLWEVQQLSEQSCR.L
1976.9861 1975.9788 1975.9938 -7.57 124 - 139 2 --- R.SFHEQVAVKMLAMTREK.K + Oxidation (M)
2270.1287 2269.1214 2269.1711 -21.88 155 - 172 2 --- R.QMFLIQVALDMKRSEIQ.R.L
2513.1421 2512.1348 2512.1789 -17.56 99 - 118 2 --- K.HTSLRRELQLEDETEDQEER.A
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515,
744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737,
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1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318,
1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268,
1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365,
1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1491.7965, 1493.7579,
1505.8177, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1537.7974, 1542.8422, 1545.8091, 1547.8051,
1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1571.8400, 1579.7939, 1580.8077, 1583.8444,
1592.8066, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297,
1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302,
1710.9279, 1716.8671, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040,
1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353,
1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012,
1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100,
1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469,
1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1958.9556, 1960.0034, 1968.8600, 1973.9845,
1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170,
2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376,
2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664,
2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984,
2239.0225, 2242.0435, 2268.1489, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607,
2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2528.1750, 2537.2012, 2541.1948, 2542.1836,
2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

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26. [G1K1U4](#) Mass: 51632 Score: 20 Expect: 2.5e+002 Matches: 21

DNA polymerase delta subunit 3 OS=Bos taurus GN=POLD3 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
775.4307	774.4235	774.4422	-24.15	241	-	247	1	--- K.AAMNKLK.V
919.5053	918.4980	918.4957	2.53	292	-	298	2	--- R.MQQKEKK.R
993.5307	992.5234	992.5179	5.61	363	-	371	0	--- K.TEPEPPPPV.K
1001.5854	1000.5781	1000.5665	11.6	283	-	291	2	--- K.SSKKAEPVR.M
1045.5729	1044.5656	1044.5750	-8.96	440	-	450	2	--- K.GPKKGTAAMGK.A
1086.5509	1085.5436	1085.5651	-19.82	287	-	295	1	--- K.AEPPVMQQK.E
1120.6045	1119.5972	1119.5818	13.7	443	-	453	2	--- K.KGTAAAMGKANR.Q + Oxidation (M)
1134.5714	1133.5641	1133.5387	22.5	216	-	226	0	--- K.EVMNASSVGPK.A + Oxidation (M)
1360.6638	1359.6565	1359.6493	5.34	39	-	48	1	--- K.QMLYDYVERK.R + Oxidation (M)
1433.7228	1432.7155	1432.7157	-0.15	203	-	215	2	--- K.AQDANKETKTEAK.E
1500.7737	1499.7664	1499.7554	7.32	39	-	49	2	--- K.QMLYDYVERKR.K
1515.8213	1514.8140	1514.8457	-20.89	92	-	105	0	--- K.LAVTASVHVYSIQK.A
1547.8051	1546.7978	1546.7661	20.5	212	-	226	1	--- K.TEAEVMNASSVGPK.A
1615.8754	1614.8681	1614.8518	10.1	25	-	38	0	--- K.WLSYTLGVHVNQAK.Q
1783.9246	1782.9173	1782.9597	-23.74	417	-	432	2	--- K.MKTSSVHRPPAMAVKK.E + Oxidation (M)
1900.9546	1899.9473	1899.9474	-13.19	212	-	230	2	--- K.TEAEVMNASSVGPKAPGK.G
1905.9313	1904.9240	1904.9513	-14.32	209	-	226	2	--- K.ETKTEAEVMNASSVGPK.A
1916.9923	1915.9850	1915.9673	9.25	212	-	230	2	--- K.TEAEVMNASSVGPKAPGK.G + Oxidation (M)
1921.9825	1920.9752	1920.9462	15.1	209	-	226	2	--- K.ETKTEAEVMNASSVGPK.A + Oxidation (M)
1925.9573	1924.9500	1924.9499	0.09	190	-	208	2	--- K.GIMGMFASKAASKAQDANK.E
2102.0667	2101.0594	2101.0071	24.9	384	-	401	2	--- R.VLKSKTFDEEGCMVTEK.V

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 978.5314, 979.5442, 991.5409, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1505.8177, 1513.8079, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1592.8066, 1604.8323, 1605.8586, 1608.8497, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796,

2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

27. [G3MX17](#) Mass: 200058 Score: 20 Expect: 2.5e+002 Matches: 53

Uncharacterized protein OS=Bos taurus PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
745.4167	744.4094	744.4017	10.3	1218	- 1223	0	---	K.INELEK.K
767.4266	766.4194	766.4337	-18.73	1598	- 1603	1	---	K.KTYSLR.S
812.4388	811.4316	811.4188	15.7	738	- 744	1	---	K.TKTYSGR.K
832.4557	831.4485	831.4490	-0.66	1359	- 1364	1	---	K.KWLEEK.M
854.4837	853.4764	853.4658	12.5	1590	- 1597	0	---	K.VSIHPSSK.K
916.5284	915.5211	915.5138	8.02	140	- 147	1	---	K.DLLKGQSR.L
951.5076	950.5004	950.4929	7.85	1365	- 1372	0	---	K.MMLITQAK.E + Oxidation (M)
1001.5854	1000.5781	1000.5916	-13.51	1218	- 1225	2	---	K.INELEKKK.N
1011.5262	1010.5189	1010.4954	23.3	1643	- 1651	0	---	K.IIETMSSSK.F + Oxidation (M)
1118.5818	1117.5745	1117.5655	8.07	1302	- 1310	0	---	R.LATELEEWK.E
1123.5848	1122.5775	1122.5920	-12.93	1311	- 1319	2	---	K.EKYKDLEAK.H
1125.5823	1124.5750	1124.5938	-16.69	1696	- 1704	1	---	K.ESDHQILKR.R
1139.5746	1138.5673	1138.5903	-20.22	1642	- 1651	1	---	K.KIETMSSSK.F + Oxidation (M)
1147.6393	1146.6320	1146.6397	-6.68	677	- 686	1	---	K.FNQVKAELAK.T
1175.6089	1174.6016	1174.5982	2.91	1151	- 1159	1	---	R.NWQETEK.LK.E
1199.7006	1198.6933	1198.7173	-19.96	577	- 586	1	---	K.LLDLIEDLKK.L
1216.6714	1215.6641	1215.6645	-0.31	897	- 906	1	---	K.LMQAKIDELR.R
1232.6447	1231.6374	1231.6594	-17.86	897	- 906	1	---	K.LMQAKIDELR.R + Oxidation (M)
1367.7319	1366.7246	1366.7568	-23.57	1587	- 1598	2	---	K.EQKVSIIHPSSKK.T
1377.6947	1376.6874	1376.6936	-4.46	201	- 211	1	---	R.EYLRSLSPDQKE.E
1388.7404	1387.7331	1387.7605	-19.75	897	- 907	2	---	K.LMQAKIDELRR.L + Oxidation (M)
1434.7446	1433.7373	1433.7514	-9.84	176	- 187	0	---	R.TLNVLFDSLQER.L
1467.7521	1466.7448	1466.7365	5.67	762	- 775	0	---	K.GLTHSPAITEQK.K
1488.7537	1487.7464	1487.7198	17.9	437	- 448	0	---	K.LTHYFQSFNGK.G
1519.7544	1518.7471	1518.7824	-23.21	865	- 876	2	---	K.SINQEQKERIMK.L + Oxidation (M)
1624.8062	1623.7989	1623.7740	15.4	747	- 760	0	---	R.LNENELQQDEPPAK.K
1642.8099	1641.8026	1641.8223	-11.98	1404	- 1417	1	---	K.GQLAEKDGNLQQWR.E
1699.8862	1698.8789	1698.9100	-18.28	192	- 204	2	---	K.MNLKPHRSREYLR.L
1707.8302	1706.8229	1706.8475	-14.38	1174	- 1187	2	---	K.ADLQRKEEDYAE.LK.E
1719.9058	1718.8985	1718.8951	1.98	1652	- 1666	1	---	K.FSNVEVSKEVSRPK.R
1723.9011	1722.8938	1722.9264	-18.92	761	- 776	2	---	K.KGLTHSPAITEQKK.S
1751.8656	1750.8583	1750.8624	-2.35	1180	- 1194	2	---	K.EEDYAE.LKKE.LADAK.K
1774.9131	1773.9058	1773.8931	7.20	1395	- 1409	1	---	K.QQNEMEILKGQLAEK.D + Oxidation (M)
1777.8770	1776.8697	1776.9039	-19.26	872	- 886	2	---	K.ERIMKLSEIEIETAGR.N + Oxidation (M)
1780.8777	1779.8704	1779.8751	-2.62	746	- 760	1	---	K.RLNENELQQDEPPAK.K
1793.9050	1792.8977	1792.8703	15.3	996	- 1009	2	---	K.DYTNNENRLKIEER.E
1815.9044	1814.8971	1814.8655	17.4	1390	- 1403	1	---	R.EHCLKQQNEMEILK.G + Oxidation (M)
1821.9144	1820.9071	1820.9057	0.79	315	- 329	1	---	K.DLQWQVSDAKEAYR.L
1896.9078	1895.9005	1895.8723	14.9	1551	- 1565	2	---	K.SHEMEEDFVKFENKK.N
1896.9100	1895.9027	1895.8723	16.0	1550	- 1564	2	---	R.KSHEMEEDFVKFENK.K
1905.9313	1904.9240	1904.9302	-3.24	102	- 118	2	---	R.LSEKSSGQMAQKFSFK.V + Oxidation (M)
1912.9154	1911.9081	1911.8672	21.4	1551	- 1565	2	---	K.SHEMEEDFVKFENKK.N + Oxidation (M)
1916.9923	1915.9850	1916.0156	-15.95	1625	- 1641	1	---	K.FGDFLQHSPTILQSKAK.K
1921.9825	1920.9752	1920.9761	-0.43	1365	- 1380	2	---	K.MMLITQAKEAENLRN.K.E + 2 Oxidation (M)
1944.0040	1942.9967	1943.0211	-12.54	1020	- 1035	2	---	K.EKDSLIQQLKEEVQEK.T
1954.0236	1953.0163	1953.0176	-0.66	1528	- 1545	2	---	R.MAVKHPGCTSPVTVKTPK.A + Oxidation (M)
1987.9784	1986.9711	1986.9541	8.57	1098	- 1114	1	---	R.NLNECQANLKDSIQNAR.D
2017.9747	2016.9674	2017.0058	-19.00	434	- 450	2	---	R.ESKLTHYFQSFNGKKG.I
2021.0170	2020.0097	2020.0112	-0.75	201	- 217	2	---	R.EYLRSLSPDQKEEVASK.S
2062.0073	2061.0000	2060.9506	24.0	1072	- 1088	2	---	K.KDECSSHAKLEQEIEMK.E
2097.0454	2096.0381	2096.0134	11.8	1342	- 1358	2	---	K.LQDELQEQSEKHEAERK.K
2216.1062	2215.0989	2215.1444	-20.53	877	- 896	1	---	K.LSEIEIETAGR.NITNNVSQIK.L
3916.9434	3915.9361	3915.9312	1.25	40	- 73	2	---	R.EFSLIASSTEANSESKDYLVCLLRVPFTQPEK.E

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 815.4332, 822.4482, 825.4540, 831.4382, 835.4719, 837.4463, 842.5060, 844.4760, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1003.5496, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1120.6045, 1122.5912, 1132.6047, 1134.5714, 1143.6318, 1144.6497, 1145.6407, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1208.6415, 1227.6595, 1231.6387, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1369.7043, 1379.7268, 1383.7137, 1385.7534, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1437.7584, 1461.7778, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1491.7965, 1493.7579, 1500.7777, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8432, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1704.8773, 1706.8701, 1710.9279, 1716.8671, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1900.9546, 1906.9501, 1908.9043, 1911.9130, 1918.9587, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1946.9679, 1949.9595, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2064.9880, 2066.9873, 2094.0376, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294,

2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306

28. [G3N2D2](#) Mass: 41913 Score: 20 Expect: 2.5e+002 Matches: 17  
Testis-specific serine/threonine-protein kinase 1 OS=Bos taurus GN=TSSK1B PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
731.4017	730.3945	730.3861	11.4	2	-	8	0	M.DDAAVLK.R
953.5164	952.5091	952.4978	11.9	28	-	35	1	K.SAYSERLK.F
1056.5658	1055.5585	1055.5400	17.6	152	-	160	1	K.LSDFGFSKR.C
1073.5902	1072.5829	1072.5989	-14.87	276	-	286	1	K.ARGLSAAVNK.E
1134.5714	1133.5641	1133.5360	24.8	160	-	168	2	K.RCLRDDSGR.L
1158.6685	1157.6612	1157.6557	4.80	116	-	125	1	K.KFHLQSSAIK.Y
1517.7854	1516.7781	1516.7562	14.5	147	-	159	1	K.DFNIKLSDFGFSK.R
1561.8401	1560.8328	1560.8664	-21.51	47	-	59	2	K.KAPTDFLEKFLPR.E
1719.9058	1718.8985	1718.8774	12.3	238	-	251	2	R.SKHLTGCKCDLIYR.M
1730.8931	1729.8858	1729.8774	4.86	71	-	85	1	R.SIIKTYEIFETSDGK.V
1815.9044	1814.8971	1814.9236	-14.61	11	-	27	1	R.GYIMGINLGEFSYAKVK.S + Oxidation (M)
1874.9695	1873.9622	1873.9509	6.05	261	-	275	0	R.LHIDEILSHCWVQPK.A
1884.9417	1883.9344	1883.9676	-17.59	9	-	25	2	K.RRGYIMGINLGEFSYAK.V
1900.9546	1899.9473	1899.9625	-7.98	9	-	25	2	K.RRGYIMGINLGEFSYAK.V + Oxidation (M)
2027.0256	2026.0183	2026.0007	8.70	293	-	311	2	R.AAEPFWTPEPSSDKKSATK.L
2031.0166	2030.0093	2030.0520	-21.02	260	-	275	1	R.RLHIDEILSHCWVQPK.A
2102.0667	2101.0594	2101.0891	-14.12	261	-	277	1	R.RLHIDEILSHCWVQPKAR.G

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1057.6078, 1067.5753, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1880.9265, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9733, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2044.0123, 2047.4957, 2047.9515, 2052.0446, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

29. [Q32PB1](#) Mass: 14905 Score: 20 Expect: 2.5e+002 Matches: 8

Profilin-3 OS=Bos taurus GN=PFN3 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
746.4169	745.4096	745.4082	1.80	90	-	96	1	R.TKGLEDGR.A
1379.7268	1378.7195	1378.7027	12.2	57	-	69	0	R.STFLQAGLCVAGR.R
1579.7939	1578.7866	1578.7937	-4.45	124	-	137	1	K.TMHELIHGLRSQGT.-
1737.9006	1736.8933	1736.9104	-9.85	90	-	105	2	R.TKGLEDGRAICVGHSTPR.A
1809.8469	1808.8396	1808.8765	-20.41	14	-	29	1	R.DQRIDDAIVVGHSDNKR.C
1894.9313	1893.9240	1893.9519	-14.74	1	-	16	2	-.MGDWKGYISAVLRDQR.I
2208.0862	2207.0789	2207.1295	-22.89	76	-	96	2	R.DHLLAEGDGVLDARTKGLEDGR.A
2398.2400	2397.2327	2397.1893	18.1	71	-	91	2	R.CCVIRDHLLAEGDGVLDARTK.G

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5184, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1504.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7439, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1558.8101, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1728.8986, 1729.8986, 1730.8931, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1815.9044, 1821.9144, 1828.9227,

1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2273.1023, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

30. [G3X7E1](#) Mass: 19619 Score: 20 Expect: 2.5e+002 Matches: 11  
Histone deacetylase complex subunit SAP18 OS=Bos taurus GN=SAP18 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
974.5395	973.5323	973.5444	-12.44	26	33	1	---	R.VTQEEIKK.E
976.5310	975.5237	975.5284	-4.73	18	25	2	---	R.RKMAVESE.R.V
991.5409	990.5336	990.5134	20.4	94	101	1	---	K.EVYPEARK.K
1175.6089	1174.6016	1174.5764	21.4	1	12	0	---	-.MLAAGVGGQSER.L
1232.6447	1231.6374	1231.6132	19.7	162	172	1	---	R.APPTSGRMRPY.-
1248.6174	1247.6101	1247.6081	1.64	162	172	1	---	R.APPTSGRMRPY.- + Oxidation (M)
1310.6146	1309.6073	1309.5820	19.3	134	145	0	---	K.GTDDSMTLQSQK.F
1338.6581	1337.6508	1337.6701	-14.43	51	61	1	---	R.VFTTNNGRHHR.M
1519.7544	1518.7471	1518.7712	-15.83	20	32	1	---	K.MAVESRVTQEEIK.K
1737.9006	1736.8933	1736.9250	-18.24	102	116	1	---	K.KGTHFNFAIVFTDLK.R
1793.9050	1792.8977	1792.9366	-21.69	117	132	2	---	K.RPGYRVKEIGSTMSGR.K
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.5429, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 978.5314, 979.5442, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8019, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

31. [Q58DQ3](#) Mass: 32727 Score: 20 Expect: 2.5e+002 Matches: 14

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
60S ribosomal protein L6 OS=Bos taurus GN=RPL6 PE=2 SV=3								
788.4210	787.4137	787.4076	7.77	6	12	0	---	K.AEKPDTK.E
969.5256	968.5183	968.4974	21.6	38	45	1	---	K.KGKPHCSR.N
1045.5729	1044.5656	1044.5451	19.6	6	14	1	---	K.AEKPDTKEK.K
1057.6078	1056.6005	1056.6040	-3.26	251	259	1	---	K.AVDSQILRR.I
1144.6497	1143.6424	1143.6400	2.09	262	271	0	---	K.AVPQLQGYLR.S
1248.6174	1247.6101	1247.6080	1.66	56	65	2	---	R.YRSAMYSRK.A
1320.6659	1319.6586	1319.6391	14.8	1	12	1	---	-.MAGEKAEKPDTK.E + Oxidation (M)
1323.6771	1322.6698	1322.6830	-9.95	237	246	2	---	R.EKYEITEQRK.V
1363.7153	1362.7080	1362.6820	19.1	207	217	0	---	K.IPEHLTDITYFK.F
1491.7965	1490.7892	1490.7769	8.26	207	218	1	---	K.IPEHLTDITYFKK.K
1519.7544	1518.7471	1518.7361	7.25	52	64	2	---	R.GIGRYSRSAMYSR.K + Oxidation (M)
1667.8622	1666.8549	1666.8137	24.7	111	123	2	---	K.MPRYYPTEDVPRK.L + Oxidation (M)
1998.9894	1997.9821	1997.9919	-4.88	223	238	2	---	R.KPRHQEJEFIDTEREK.Y
2537.2012	2536.1939	2536.1830	4.32	226	245	2	---	R.HQEGEJFDTEREKYEITEQR.K
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.5429, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8019, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738								

1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

32. [P80311](#) Mass: 23786 Score: 20 Expect: 2.6e+002 Matches: 11  
Peptidyl-prolyl cis-trans isomerase B OS=Bos taurus GN=PP1B PE=1 SV=4

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
812.4388	811.4316	811.4228	10.8	46	-	51	0	--- K.VYFDLR.I
1120.6045	1119.5972	1119.5884	7.89	181	-	190	2	--- R.KVESTKTDGR.D
1145.6407	1144.6334	1144.6274	5.24	172	-	181	1	--- K.VLEGMDVVRK.V
1162.6182	1161.6109	1161.6288	-15.37	2	-	10	2	--- M.LRLSERNMK.I + Oxidation (M)
1277.6531	1276.6458	1276.6743	-22.34	1	-	10	2	--- -.MLRLSERNMK.I
1642.8099	1641.8026	1641.8185	-9.67	96	-	109	1	--- R.VIKDFMIQGGDFTR.G + Oxidation (M)
1667.8622	1666.8549	1666.8315	14.1	46	-	59	1	--- K.VYFDLRIGDEIDGR.V
1689.9465	1688.9392	1688.9131	15.5	172	-	186	2	--- K.VLEGMDVVRKVESTK.T
1916.9923	1915.9850	1915.9680	8.89	72	-	89	1	--- K.TVDNFVALATGEKFGGYK.D
2199.0723	2198.0650	2198.0790	-6.38	96	-	116	2	--- R.VIKDFMIQGGDFTRGDGTGGK.S
2229.0972	2228.0899	2228.1114	-9.63	146	-	165	1	--- K.DTNGSQFFIITVKTAWLDGK.H
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7512, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8109, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1646.8297, 1649.8447, 1657.8101, 1677.7988, 1680.8746, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1898.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

33. [G1K1R3](#) Mass: 40420 Score: 20 Expect: 2.7e+002 Matches: 17  
Tropomodulin-1 OS=Bos taurus GN=TMOD1 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
728.3681	727.3608	727.3435	23.8	1	-	5	1	--- -.MSYRR.E + Oxidation (M)
745.4167	744.4094	744.3919	23.6	57	-	63	0	--- K.APTGPFRR.R
750.4153	749.4081	749.4072	1.20	74	-	79	1	--- K.QAKEFK.D
779.4308	778.4235	778.4337	-13.14	229	-	235	0	--- K.FSIVGTR.S
837.4463	836.4390	836.4392	-0.20	6	-	11	1	--- R.ELEKYR.D
993.5307	992.5234	992.5403	-16.99	5	-	11	2	--- R.RELEKYR.D
1021.5579	1020.5506	1020.5352	15.1	74	-	81	2	--- K.QAKEFKDR.E
1125.5823	1124.5750	1124.5713	3.29	65	-	73	0	--- R.EELLDHLEK.Q
1323.6771	1322.6698	1322.6461	17.9	298	-	308	0	--- K.VEMEIVSMLEK.N + Oxidation (M)
1339.6637	1338.6564	1338.6411	11.5	298	-	308	0	--- K.VEMEIVSMLEK.N + 2 Oxidation (M)
1421.7061	1420.6988	1420.6834	10.8	80	-	91	1	--- K.DREDLVPTGTEK.R
1491.7965	1490.7892	1490.7729	11.0	82	-	94	2	--- R.EDLVPTGTEKRGK.V
1608.8497	1607.8424	1607.8631	-12.84	64	-	76	2	--- R.EEELLDHLEKQAK.E
1765.8463	1764.8390	1764.8359	1.77	327	-	341	2	--- R.ASNAMNNNDLVRKR.R + 2 Oxidation (M)
1846.9153	1845.9080	1845.9301	-11.97	325	-	340	2	--- R.LRASNAMNNNDLVRKR.R
1856.9908	1855.9835	1855.9679	8.40	65	-	79	2	--- R.EEELLDHLEKQAKEFK.D
2008.0460	2007.0387	2007.0537	-7.48	57	-	73	2	--- K.APTGPFRRREELLDHLEK.Q
No match to: 721.4365, 725.4001, 726.4063, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 746.4169, 747.4125, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929,								



913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1852.9364, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

34. [E1B871](#) Mass: 21420 Score: 20 Expect: 2.7e+002 Matches: 11

Uncharacterized protein OS=Bos taurus PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
741.4101	740.4028	740.4115	-11.78	38	-	43	1	--- K.GMHIRK.A
757.4313	756.4241	756.4065	23.3	38	-	43	1	--- K.GMHIRK.A + Oxidation (M)
832.4557	831.4485	831.4450	4.15	177	-	184	1	--- K.KQTLTAGN.-
835.4719	834.4646	834.4599	5.58	87	-	93	0	--- K.SAEFLLR.M
860.4691	859.4618	859.4413	23.9	129	-	135	1	--- R.TYRAHGR.I
1057.6078	1056.6005	1056.5862	13.5	38	-	46	2	--- K.GMHIRKATK.Y + Oxidation (M)
1522.7811	1521.7738	1521.7861	-8.06	141	-	153	0	--- R.SSPCHIEIILPEK.E
1549.7339	1548.7266	1548.7606	-21.94	1	-	13	1	--- -.MVRYSLDPENPTK.S
1793.9050	1792.8977	1792.8778	11.1	2	-	16	2	--- M.VRYSLDPENPTKCK.S
2103.1641	2102.1568	2102.1484	4.01	106	-	124	1	--- K.GLDVDSLVIEHIQVKNKAPR.M
2413.0549	2412.0476	2412.0998	-21.63	56	-	76	2	--- K.QCVPFRCRYNGVGGCAQKQR.G
<b>No match to:</b> 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1852.9364, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2414.1897, 2417.0959, 2427.0823, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434								

35. [A0JNCO](#) Mass: 40548 Score: 20 Expect: 2.7e+002 Matches: 17

Tropomodulin-1 OS=Bos taurus GN=TMOD1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
728.3681	727.3608	727.3435	23.8	1	-	5	1	--- -.MSYRR.E + Oxidation (M)
745.4167	744.4094	744.3919	23.6	57	-	63	0	--- K.APTGPFRR.R
750.4153	749.4081	749.4072	1.20	74	-	79	1	--- K.QAKEFK.D
779.4308	778.4235	778.4337	-13.14	229	-	235	0	--- K.FSIVGTR.S
837.4463	836.4390	836.4392	-0.20	6	-	11	1	--- R.ELEKYR.D
993.5307	992.5234	992.5403	-16.99	5	-	11	2	--- R.RELEKYR.D
1021.5579	1020.5506	1020.5352	15.1	74	-	81	2	--- K.QAKEFKDR.E
1125.5823	1124.5750	1124.5713	3.29	65	-	73	0	--- R.EELLDHLEK.Q
1323.6771	1322.6698	1322.6461	17.9	298	-	308	0	--- K.VEMEIVSMLEK.N + Oxidation (M)
1339.6637	1338.6564	1338.6411	11.5	298	-	308	0	--- K.VEMEIVSMLEK.N + 2 Oxidation (M)
1421.7061	1420.6988	1420.6834	10.8	80	-	91	1	--- K.DREDLVPTGTEK.R



1491.7965 1490.7892 1490.7729 11.0 82 - 94 2 --- R.EDLVPYTGKGRGK.V  
 1608.8497 1607.8424 1607.8631 -12.84 64 - 76 2 --- R.REELLDHLEKQAK.E  
 1765.8463 1764.8390 1764.8359 1.77 328 - 342 2 --- R.ASNAMMNNNDLVRRK.R + 2 Oxidation (M)  
 1846.9153 1845.9080 1845.9301 -11.97 326 - 341 2 --- R.LRASNAMMNNNDLVRRK.R  
 1856.9908 1855.9835 1855.9679 8.40 65 - 79 2 --- R.EELLDHLEKQAKFEK.D  
 2008.0460 2007.0387 2007.0537 -7.48 57 - 73 2 --- K.APTGPFRRREELLDHLEK.Q

**No match to:** 721.4365, 725.4001, 726.4063, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 746.4169, 747.4125, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 784.3688, 786.4000, 787.4210, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1741.8565, 1754.8580, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1775.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1852.9364, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2272.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

36. [F1MZ00](#) Mass: 14021 Score: 19 Expect: 2.8e+002 Matches: 10

Uncharacterized protein OS=Bos taurus GN=SNRPD3 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
844.4760	843.4687	843.4888	-23.79	1	8	0	---	-MSIGVPIK.V
862.4852	861.4779	861.4821	-4.85	119	125	1	---	R.GNIFQKR.R
1035.5381	1034.5308	1034.5252	5.40	79	87	1	---	K.NAPMLKSMK.N + Oxidation (M)
1051.5448	1050.5375	1050.5202	16.5	79	87	1	---	K.NAPMLKSMK.N + 2 Oxidation (M)
1123.5848	1122.5775	1122.5604	15.2	115	124	1	---	R.GMGGRGNIFQK.R + Oxidation (M)
1261.6592	1260.6519	1260.6682	-12.91	79	89	2	---	K.NAPMLKSMKNNK.N
1277.6531	1276.6458	1276.6631	-13.54	79	89	2	---	K.NAPMLKSMKNNK.N + Oxidation (M)
1320.6659	1319.6586	1319.6881	-22.31	113	124	2	---	R.GMGGRGNIFQK.R
1427.7742	1426.7669	1426.8004	-23.48	90	104	2	---	K.NQGSGAGRGKAAIILK.A
2414.1897	2413.1824	2413.1332	20.4	9	29	0	---	K.VLHEAEGHIVTCTNTGGEVYR.G

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 854.4837, 856.4911, 860.4691, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1754.8580, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1775.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1849.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2272.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

37. [A3KMZ9](#) Mass: 18849 Score: 19 Expect: 2.8e+002 Matches: 9

SNRNP27 protein OS=Bos taurus GN=SNRNP27 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
731.4017	730.3945	730.3834	15.1	35	39	2	---	R.ERDRR.R
745.4167	744.4094	744.3990	13.9	22	26	2	---	R.ERERR.R

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800.4296 799.4223 799.4413 -23.72 8 - 13 2 --- R.SPRRER.R
950.4959 949.4886 949.5080 -20.45 77 - 84 2 --- K.ETKETKSK.E
978.5314 977.5241 977.5002 24.4 16 - 23 2 --- R.SRSTSRER.E
1111.5615 1110.5542 1110.5530 1.09 57 - 66 1 --- R.HRSTSPSPSR.L
1352.7205 1351.7132 1351.7320 -13.91 57 - 68 2 --- R.HRSTSPSPSR.LK.E
2027.0256 2026.0183 2026.0207 -1.16 139 - 155 2 --- R.QYMNKGGFNRP.LDFIA.-
2541.1948 2540.1875 2540.1484 15.4 97 - 118 2 --- K.TEEETEMMKLGMGFASFDSTKGK.K + 2 Oxidation (M)
No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171,
746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093,
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1100.6071, 1106.5391, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318,
1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089,
1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672,
1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362,
1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771,
1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319,
1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019,
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1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335,
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1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040,
1767.8138, 1769.8417, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137,
1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827,
1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313,
1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718,
1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556,
1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460,
2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073,
2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950,
2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274,
2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1902, 2292.1426, 2309.0994,
2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460,
2513.1421, 2528.1750, 2537.2012, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733,
3224.2917, 3312.3306, 3916.9434

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38. [P42899](#) Mass: 11695 Score: 19 Expect: 2.8e+002 Matches: 7

60S acidic ribosomal protein P2 OS=Bos taurus GN=RPLP2 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1256.6531	1255.6458	1255.6772	-24.99	50	-	61	0	--- K.NIEDVIAQGIGK.L
1417.7010	1416.6937	1416.6732	14.5	26	-	38	0	--- K.IILDSVGIEADDDR.L
1545.8091	1544.8018	1544.7682	21.8	25	-	38	1	--- K.KILDSVGIEADDDR.L
1772.9315	1771.9242	1771.8952	16.4	26	-	41	1	--- K.IILDSVGIEADDDR.LNK.V
1900.9546	1899.9473	1899.9901	-22.54	25	-	41	2	--- K.KILDSVGIEADDDR.LNK.V
2156.0796	2155.0723	2155.1095	-17.26	1	-	21	1	--- -.MRYVASYLALGNGNSSPSAK.D
2225.1274	2224.1201	2224.1739	-24.18	3	-	24	1	--- R.YVASYLALGNGNSSPSAKDIK.K

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8400, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8417, 1770.3567, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1898.9100, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1902, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

39. [Q0VCY7](#) Mass: 27842 Score: 19 Expect: 2.8e+002 Matches: 12

Serine/arginine-rich splicing factor 1 OS=Bos taurus GN=SRSF1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
832.4557	831.4485	831.4351	16.1	112	-	118	1	--- R.YGPPSR.R.S
916.5284	915.5211	915.5290	-8.65	84	-	90	1	--- R.LRVFPR.S
1021.5579	1020.5506	1020.5716	-20.56	174	-	181	2	--- R.KLDNTKFR.S
1045.5729	1044.5656	1044.5577	7.59	110	-	118	2	--- R.GRYGPPSR.R.S

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1162.6182 1161.6109 1161.6003 9.16 231 - 240 2 --- R.SRGSPPRYSPR.H
1163.6152 1162.6079 1162.6346 -22.94 39 - 48 1 --- K.YGAIRDIDLK.N
1216.6714 1215.6641 1215.6836 -16.04 84 - 93 2 --- R.LRVEFPSPRSG.G
1256.6531 1255.6458 1255.6230 18.1 165 - 174 2 --- R.KEDMTYAVRK.L + Oxidation (M)
1433.7228 1432.7155 1432.7171 -1.11 194 - 206 2 --- K.VDGRSPSPYGRSR.S
2155.0950 2154.0877 2154.1069 -8.92 119 - 138 1 --- R.SENRVVVVSGLPPSGWSQDLK.D
2208.0862 2207.0789 2207.1157 -16.68 123 - 142 1 --- R.VVVSGLPPSGWSQDLKDHMR.E
2541.1948 2540.1875 2540.1608 10.5 52 - 74 1 --- R.GGPPFAFVEFEDPRDAEDAVYGR.D

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515,
744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737,
770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388,
815.4332, 822.4482, 825.4540, 831.4382, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231,
885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854,
943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310,
978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1023.5663, 1023.5700, 1031.5903, 1035.5381,
1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509,
1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714,
1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1168.6215, 1173.6418, 1175.6089,
1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445,
1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531,
1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089,
1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043,
1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727,
1427.7742, 1429.7365, 1431.7412, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537,
1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523,
1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010,
1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586,
1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622,
1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058,
1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741,
1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353,
1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012,
1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9648, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1898.9100,
1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469,
1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600,
1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104,
2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880,
2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2156.0796, 2160.0632,
2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984,
2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746,
2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012,
2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

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40. [Q0P5K9](#) Mass: 54202 Score: 19 Expect: 2.8e+002 Matches: 20

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Chromosome 3 open reading frame 19 ortholog OS=Bos taurus GN=C22H30RF19 PE=2 SV=1

Observed Mr(expt) Mr(calc) ppm Start End Miss Ions Peptide
775.4307 774.4235 774.4123 14.4 84 - 89 1 --- R.EKLEEK.A
916.5284 915.5211 915.5137 8.05 282 - 288 2 --- R.ENIKEKR.K
974.5395 973.5323 973.5444 -12.41 84 - 91 2 --- R.EKLEEKAK.L
1046.5897 1045.5824 1045.5702 11.7 258 - 265 2 --- K.ELRNQKMK.T
1092.5961 1091.5888 1091.5645 22.3 203 - 211 1 --- K.TLLEDMRK.E
1106.5391 1105.5318 1105.5364 -4.10 272 - 280 1 --- R.EQTDDQRTK.R
1262.6453 1261.6380 1261.6375 0.44 272 - 281 2 --- R.EQTDDQRTKR.E
1339.6637 1338.6564 1338.6350 16.0 124 - 135 1 --- K.EMEAIASRGYR.K
1407.7563 1406.7490 1406.7374 8.30 261 - 271 2 --- R.NQKMTLEMLR.E + Oxidation (M)
1467.7521 1466.7448 1466.7299 10.1 124 - 136 2 --- K.EMEAIASRGYRK.T
1477.7545 1476.7472 1476.7150 21.8 367 - 378 2 --- R.GKDFSFGYWSRK.Q
1545.8091 1544.8018 1544.7682 21.8 65 - 77 2 --- R.AEKDAEQKIEQK.T
1706.8701 1705.8628 1705.8491 8.06 118 - 132 2 --- K.MIDKQKEMEAIASR.G
1719.9058 1718.8985 1718.8601 22.4 353 - 366 1 --- K.DTRPGVPHVREWRD.G
1884.9417 1883.9344 1883.9775 -22.84 178 - 193 2 --- R.KDLPDLLEMDKNLQGR.L
1900.9546 1899.9473 1899.9724 -13.19 178 - 193 2 --- R.KDLPDLLEMDKNLQGR.L + Oxidation (M)
1949.9595 1948.9522 1948.9928 -20.81 194 - 210 1 --- R.LFVSPANETKTLLEDMRK.K
1955.9738 1954.9665 1955.0000 -17.13 318 - 336 0 --- R.DGDVIGPLPPEPEVIPAPR.T
1958.9556 1957.9483 1957.9210 13.9 387 - 402 1 --- R.DPEFAPPSYFVDQKR.T
2094.0376 2093.0303 2093.0827 -25.00 194 - 211 2 --- R.LFVSPANETKTLLEDMRK.E + Oxidation (M)

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515,
744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737,
770.3966, 772.4093, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332,
822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231,
885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854,
943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 976.5310, 978.5314,
979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381,
1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509,
1100.6071, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318,
1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089,
1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672,
1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1266.6777, 1273.6260, 1275.6362, 1276.6343,
1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964,
1328.7089, 1331.7202, 1335.7318, 1338.6581, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043,
1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742,
1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1472.7633, 1475.7632, 1484.7889, 1488.7537, 1491.7965, 1493.7579,
1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974,
1539.8005, 1542.8422, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199,
1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062,
1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465,
1694.7288, 1698.9225, 1699.8862, 1704.8773, 1707.8302, 1710.9279, 1716.8671, 1725.8300, 1725.8346, 1727.8986, 1730.8931,
1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770,
1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469,
1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218,
1874.9695, 1890.9265, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923,
1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1954.0236,
1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460,
2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520,

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2062.0073, 2064.9880, 2066.9873, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

41. [F1MB56](#) Mass: 24689 Score: 19 Expect: 2.9e+002 Matches: 11

Uncharacterized protein OS=Bos taurus GN=TEX53 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
775.4307	774.4235	774.4123	14.4	61	66	1	---	R.EELKEK.M
976.5310	975.5237	975.5059	18.3	72	79	1	---	K.QIKDVMDK.D
1045.5729	1044.5656	1044.5750	-8.94	1	9	2	---	-MSAKRVEPK.K
1073.5902	1072.5829	1072.5950	-11.30	102	110	0	---	K.MDVLINIQK.N
1118.5818	1117.5745	1117.5914	-15.06	119	127	1	---	R.GLKMQQLR.L + Oxidation (M)
1421.7061	1420.6988	1420.7119	-9.19	61	71	2	---	R.EELKEKMEEIK.Q + Oxidation (M)
1657.8101	1656.8028	1656.8069	-2.46	80	92	1	---	K.DFDLKLQEFVEIMK.E + Oxidation (M)
1707.8302	1706.8229	1706.8219	0.61	97	110	1	---	K.DMDEKMDVLINIQK.N + Oxidation (M)
1918.9587	1917.9514	1917.9414	5.25	194	211	0	---	K.LPHYHAWASFSPASGPAF.-
2021.0170	2020.0097	2019.9969	6.36	97	113	2	---	K.DMDEKMDVLINIQKNSK.F
2208.0862	2207.0789	2207.0636	6.96	93	110	2	---	K.EMQKMDMDEKMDVLINIQK.N

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0660, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

42. [P61257](#) Mass: 17248 Score: 19 Expect: 2.9e+002 Matches: 9

60S ribosomal protein L26 OS=Bos taurus GN=RPL26 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
747.4125	746.4052	746.4109	-7.60	46	51	1	---	R.SMPIRK.D + Oxidation (M)
752.4127	751.4054	751.4228	-23.11	131	136	2	---	K.EKGKYYK.E
862.4852	861.4779	861.4630	17.3	29	36	0	---	K.IMSSPLSK.E
1039.5327	1038.5254	1038.5233	2.05	135	142	1	---	K.YKEETIEK.M
1234.6672	1233.6599	1233.6479	9.74	18	27	1	---	R.HFNAPSHIRR.K
1390.7284	1389.7211	1389.7490	-20.06	17	27	2	---	K.RHFNAPSHIRR.K
1407.7563	1406.7490	1406.7452	2.70	40	50	2	---	R.QKYNVRSMPIR.K + Oxidation (M)
1425.7727	1424.7654	1424.7412	17.0	2	13	2	---	M.KFNPFVTSDRSK.N
1556.8109	1555.8036	1555.7817	14.1	1	13	2	---	-MKFNPFVTSDRSK.N

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 750.4153, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469,

1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

43. [Q861S4](#) Mass: 18652 Score: 19 Expect: 2.9e+002 Matches: 12

Similar to ribosomal protein L21 (Fragment) OS=Bos taurus GN=RPL21 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
951.5076	950.5004	950.4967	3.81	1	-	8	2	---
1231.6387	1230.6314	1230.6332	-1.41	13	-	21	1	---
1247.6211	1246.6138	1246.6281	-11.44	13	-	21	1	---
1417.7010	1416.6937	1416.7085	-10.41	10	-	20	1	---
1433.7228	1432.7155	1432.7034	8.47	10	-	20	1	---
1545.8091	1544.8018	1544.8034	-1.03	10	-	21	2	---
1561.8401	1560.8328	1560.7983	22.1	10	-	21	2	---
1604.8323	1603.8250	1603.8604	-22.03	36	-	50	2	---
1677.7988	1676.7915	1676.8007	-5.48	147	-	160	0	---
1804.9142	1803.9069	1803.9492	-23.45	131	-	146	2	---
2027.0256	2026.0183	2026.0340	-7.73	37	-	55	2	---
2094.0376	2093.0303	2093.0027	13.2	143	-	160	1	---

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

44. [Q00361](#) Mass: 8315 Score: 19 Expect: 2.9e+002 Matches: 7

ATP synthase subunit e, mitochondrial OS=Bos taurus GN=ATP5I PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
831.4382	830.4309	830.4358	-5.95	51	-	56	2	---
916.5284	915.5211	915.5389	-19.41	43	-	50	2	---
953.5164	952.5091	952.5130	-4.13	30	-	36	0	---
1073.5902	1072.5829	1072.5625	19.1	52	-	59	2	---
1547.8051	1546.7978	1546.7966	0.80	16	-	29	1	---
1563.8109	1562.8036	1562.7915	7.76	16	-	29	1	---
1723.9011	1722.8938	1722.8801	7.97	30	-	42	2	---

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1495.7974, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1598.8444, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0



1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2166.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

45. [F1N1S3](#) Mass: 20635 Score: 19 Expect: 2.9e+002 Matches: 10

Uncharacterized protein OS=Bos taurus GN=LOC100294792 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
770.3966	769.3893	769.4010	-15.18	45	-	50	0	--- K.AEYFLK.W
772.4093	771.4020	771.3875	18.8	107	-	113	0	--- R.DAADKPR.G
922.5070	921.4997	921.4953	4.71	6	-	13	1	--- K.TTLQKMGK.K + Oxidation (M)
928.5117	927.5044	927.4886	17.1	106	-	113	1	--- K.RDAADKPR.G
1056.5658	1055.5585	1055.5836	-23.71	105	-	113	2	--- K.KRDAADKPR.G
1197.6704	1196.6631	1196.6626	0.48	107	-	117	1	--- R.DAADKPRGLVR.G
1322.6886	1321.6813	1321.7024	-15.92	2	-	13	2	--- M.ASNKTTTLQKMGK.K + Oxidation (M)
1437.7584	1436.7511	1436.7479	2.23	1	-	13	2	--- -.MASNKTTTLQKMGK.K
1646.8297	1645.8224	1645.8087	8.37	21	-	34	0	--- K.IVEEAPEEEFVVEK.V
2350.1746	2349.1673	2349.1708	-1.50	118	-	139	1	--- R.GLDPERIIGATDGSGLMFLMK.W

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9344, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2166.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

46. [A5PK00](#) Mass: 44048 Score: 19 Expect: 2.9e+002 Matches: 18

Vacuolar protein-sorting-associated protein 36 OS=Bos taurus GN=VPS36 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1199.7006	1198.6933	1198.7107	-14.52	293	-	302	1	--- K.MLEALKPLR.L + Oxidation (M)
1356.7230	1355.7157	1355.7198	-2.97	35	-	46	0	--- K.FDPGPTLLSLTH.R.L
1363.7153	1362.7080	1362.7363	-20.75	345	-	356	1	--- K.LMGMSVLLAKER.L + Oxidation (M)
1379.7268	1378.7195	1378.7312	-8.48	345	-	356	1	--- K.LMGMSVLLAKER.L + 2 Oxidation (M)
1505.8177	1504.8104	1504.8357	-16.77	184	-	196	2	--- K.LMVKAKEMVELSK.S
1519.7544	1518.7471	1518.7162	20.4	204	-	216	1	--- K.DKQGDITFETIR.F
1537.7974	1536.7901	1536.7970	-4.47	219	-	232	0	--- K.SYLLSMGIANPVTR.E + Oxidation (M)
1551.7778	1550.7705	1550.7576	8.30	206	-	218	1	--- K.QQGDITFETIRF.K.S
1563.8109	1562.8036	1562.8337	-19.27	188	-	201	2	--- K.AKEMVELSKSIANK.I + Oxidation (M)
1605.8586	1604.8513	1604.8807	-18.30	190	-	203	2	--- K.EMVELSKSIANKIK.D + Oxidation (M)
1704.8773	1703.8700	1703.8553	8.66	305	-	319	0	--- R.VFDSGVMVIELQSHK.E + Oxidation (M)
1723.9011	1722.8938	1722.8862	4.43	173	-	187	1	--- K.NISEAFEDLSKLMVK.A
1725.8300	1724.8227	1724.8104	7.12	169	-	183	1	--- K.ETDKNISEAFEDLSK.L
1725.8346	1724.8273	1724.8104	9.79	169	-	183	1	--- K.ETDKNISEAFEDLSK.L
1918.9587	1917.9514	1917.9288	11.8	276	-	292	1	--- R.ARGMELLSPELVNACK.M + Oxidation (M)
2144.0493	2143.0420	2143.0905	-22.60	335	-	354	1	--- K.GSLTSEEFALMGMSVLLAK.E + 2 Oxidation (M)
2292.1426	2291.1353	2291.1229	5.41	131	-	150	1	--- R.WENMPVPQSLQTNRGPFQGR.I
2309.0994	2308.0921	2308.1018	-4.20	112	-	129	2	--- K.EHGQIEFYRRLSEEMTOR.R

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146,



1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253,  
 1352.7205, 1360.6638, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563,  
 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521,  
 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1513.8079, 1515.8213, 1517.7854, 1522.7811,  
 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1553.8065, 1555.8101, 1556.8109,  
 1557.8010, 1561.8401, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1608.8497,  
 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988,  
 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1727.8986, 1730.8931,  
 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770,  
 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469,  
 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218,  
 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130,  
 1912.9154, 1916.9923, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679,  
 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784,  
 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123,  
 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305,  
 2127.0930, 2139.0630, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221,  
 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294,  
 2277.0823, 2284.1990, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2427.2800,  
 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869,  
 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

47. [A0JNH6](#) Mass: 63280 Score: 19 Expect: 3e+002 Matches: 24

Coiled-coil domain-containing protein 102A OS=Bos taurus GN=CCDC102A PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
747.4125	746.4052	746.4109	-7.57	344	-	349	1	--- R.KMAELR.G
768.3700	767.3627	767.3701	-9.61	299	-	304	0	--- K.YEELSK.T
768.3737	767.3664	767.3701	-4.85	299	-	304	0	--- K.YEELSK.T
787.4221	786.4148	786.4097	6.60	162	-	169	1	--- R.GARGGVDR.T
953.5164	952.5091	952.4978	11.9	181	-	188	0	--- R.EQEPVPVR.D
972.5305	971.5232	971.5287	-5.65	9	-	17	0	--- R.LAESPQLSK.G
1031.5903	1030.5830	1030.5672	15.4	108	-	115	2	--- K.WSKVRAER.N
1057.6078	1056.6005	1056.5788	20.6	135	-	143	2	--- K.ELAGARRER.Q
1308.6376	1307.6303	1307.6438	-10.29	85	-	95	2	--- R.ARAAQMEKTM.R.W + Oxidation (M)
1323.6771	1322.6698	1322.6434	19.9	339	-	349	2	--- R.SSMDRKMAELR.G
1339.6637	1338.6564	1338.6384	13.5	339	-	349	2	--- R.SSMDRKMAELR.G + Oxidation (M)
1352.7205	1351.7132	1351.7208	-5.59	450	-	460	2	--- R.RVEQHEAEVKK.L
1427.7742	1426.7669	1426.7528	9.89	385	-	397	1	--- R.AQVGDLEELARR.R
1433.7228	1432.7155	1432.7344	-13.15	276	-	287	2	--- R.EDKMALSRNIEK.L
1542.8422	1541.8349	1541.8161	12.2	73	-	84	2	--- R.EELRLRELEEAR.A
1583.8444	1582.8371	1582.8539	-10.61	385	-	398	2	--- R.AQVGDLEELARRR.R
1642.8099	1641.8026	1641.8283	-15.65	299	-	311	2	--- K.YEELSKTKQEMLK.Q + Oxidation (M)
1821.9144	1820.9071	1820.9203	-7.23	1	-	17	1	--- -.MSHGSPRLAESPQLSK.G
1837.9396	1836.9323	1836.9152	9.32	1	-	17	1	--- -.MSHGSPRLAESPQLSK.G + Oxidation (M)
1995.9408	1994.9335	1994.9406	-3.55	162	-	180	2	--- R.GARGGVDRTPDGPETEPER.E
2066.9873	2065.9800	2065.9664	6.59	471	-	488	1	--- K.ELAQAEDDELDEAHNQARK.L
2148.1023	2147.0950	2147.1044	-4.38	279	-	296	2	--- K.MALSRNIEKLEGEISQWK.I + Oxidation (M)
2195.0774	2194.0701	2194.0688	0.60	400	-	419	1	--- R.QTASALDCDLRASQAALFEK.N
2400.0862	2399.0789	2399.0659	5.43	318	-	338	1	--- K.EAHQDELGRMSDELDELGAR.S

No match to: 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515,  
 744.4171, 745.4167, 746.4169, 750.4153, 752.4127, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 770.3966, 772.4093, 775.4307,  
 779.4308, 784.3688, 786.4000, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382,  
 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991,  
 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5453,  
 946.5259, 950.4959, 951.5076, 954.5388, 959.5266, 966.5410, 969.5256, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307,  
 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658,  
 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615,  
 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407,  
 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157,  
 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453,  
 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531,  
 1301.7079, 1303.7076, 1307.7042, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1324.6964, 1328.7089, 1331.7202, 1335.7318,  
 1338.6581, 1349.7253, 1360.6638, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563,  
 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521,  
 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1513.8079, 1515.8213, 1517.7854, 1522.7811,  
 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1553.8065, 1555.8101, 1556.8109,  
 1557.8010, 1561.8401, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1608.8497,  
 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988,  
 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1727.8986, 1730.8931,  
 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770,  
 1780.8777, 1783.9246, 1787.8188, 1787.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469,  
 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218,  
 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130,  
 1912.9154, 1916.9923, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679,  
 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784,  
 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123,  
 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305,  
 2127.0930, 2139.0630, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221,  
 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294,  
 2277.0823, 2284.1990, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2427.2800,  
 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869,  
 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

48. [G3MYC1](#) Mass: 17221 Score: 19 Expect: 3e+002 Matches: 9

Uncharacterized protein OS=Bos taurus PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
747.4125	746.4052	746.4109	-7.60	46	-	51	1	--- R.SMPIRK.D + Oxidation (M)
752.4127	751.4054	751.4228	-23.11	131	-	136	2	--- K.EKGK.YK.E
862.4852	861.4779	861.4630	17.3	29	-	36	0	--- K.IMSSPLSK.E
1039.5327	1038.5254	1038.5233	2.05	135	-	142	1	--- K.YKEETIEK.M
1057.6078	1056.6005	1056.6080	-7.06	77	-	84	1	--- K.KHVYIIEK.V
1234.6672	1233.6599	1233.6479	9.74	18	-	27	1	--- R.HFNAPSHIRR.K
1390.7284	1389.7211	1389.7490	-20.06	17	-	27	2	--- K.RHFNAPSHIRR.K

1407.7563 1406.7490 1406.7452 2.70 40 - 50 2 --- R.QKYNVRSMPPIR.K + Oxidation (M)  
 1555.8101 1554.8028 1554.7977 3.32 1 - 13 2 --- -.MKFNPFVTSNRSK.N

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 750.4153, 755.4100, 756.4199, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 787.4221, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 943.5452, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 972.5305, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1003.5496, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1100.6071, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1143.6318, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1162.6182, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1199.7006, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1324.6964, 1328.7089, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1393.7428, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1437.7584, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1477.7545, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1580.8077, 1583.8444, 1587.7620, 1592.8066, 1594.8335, 1604.8323, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1640.9384, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1676.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1725.8346, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1789.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1884.9417, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573, 1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1944.0040, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2008.0460, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2027.0256, 2031.0166, 2044.0123, 2047.9515, 2047.9517, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2144.0493, 2148.1023, 2155.0950, 2156.0796, 2160.0632, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2324.1719, 2342.9915, 2350.1746, 2383.9607, 2398.2400, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2511.1460, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2767.2666, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

49. [F1MYD0](#) Mass: 90289 Score: 19 Expect: 3e+002 Matches: 28

Uncharacterized protein OS=Bos taurus GN=CUL1 PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
756.4199	755.4126	755.4218	-12.14	671	-	676	0	--- K.LYLGYK.N
787.4221	786.4148	786.4235	-11.06	268	-	273	0	--- R.LLEEQR.R
943.5453	942.5381	942.5246	14.3	268	-	274	1	--- R.LLEEQR.R.V
972.5305	971.5232	971.5287	-5.67	329	-	334	0	--- R.IQDGLGELK.K
1003.5496	1002.5423	1002.5419	0.38	752	-	759	0	--- K.CIDILIEK.E
1035.5381	1034.5308	1034.5509	-19.39	26	-	34	0	--- R.AGIQQVYTR.R
1100.6071	1099.5998	1099.6237	-21.72	329	-	338	1	--- R.IQDGLGELKK.L
1143.6318	1142.6245	1142.6270	-2.17	465	-	473	2	--- K.FYAKMLAKR.L + Oxidation (M)
1162.6182	1161.6109	1161.5965	12.5	169	-	177	0	--- R.DCLFRPLNK.Q
1199.7006	1198.6933	1198.6856	6.45	680	-	689	1	--- K.LRVNINVPKM.T + Oxidation (M)
1324.6964	1323.6891	1323.6643	18.7	2	-	13	1	--- M.SSNRSQNPHGLK.Q
1328.7089	1327.7016	1327.6806	15.9	425	-	435	2	--- R.YCDSLLKSSK.N
1437.7584	1436.7511	1436.7446	4.55	504	-	515	1	--- K.LQRMFDIGVSK.D + Oxidation (M)
1580.8077	1579.8004	1579.8140	-8.62	26	-	39	1	--- R.AGIQQVYTRQSMAS.S
1587.7620	1586.7547	1586.7511	2.28	494	-	506	1	--- K.QACGFYTSKLQR.M
1604.8323	1603.8250	1603.8432	-11.34	460	-	472	2	--- K.DVFQKFYAKMLAK.R + Oxidation (M)
1640.9384	1639.9311	1639.9621	-18.87	178	-	191	2	--- K.QVTNAVLKLEKER.N
1793.9050	1792.8977	1792.9036	-3.26	455	-	468	2	--- K.YIEDKQVDFQFYAK.M
1828.9227	1827.9154	1827.9301	-8.05	492	-	506	2	--- K.LKQACGFYTSKLQR.M
1884.9417	1883.9344	1883.8973	19.7	694	-	708	2	--- K.QEQETHHKNEEDRK.L
1944.0040	1942.9967	1942.9861	5.48	274	-	289	1	--- R.RVQVYLHSTQDELAR.K
2008.0460	2007.0387	2007.0789	-20.03	72	-	90	2	--- K.SKKGQTPGGAQFVGLLEYK.R
2027.0256	2026.0183	2026.0193	-0.51	507	-	523	2	--- R.MFQDIGVSKDLNEQFKK.H
2144.0493	2143.0420	2143.0579	-7.40	474	-	493	1	--- R.LVHQNSASDDAEASMSKLLK.Q
2160.0632	2159.0559	2159.0528	1.44	474	-	493	1	--- R.LVHQNSASDDAEASMSKLLK.Q + Oxidation (M)
2398.2400	2397.2327	2397.1958	15.4	682	-	701	2	--- R.VNINVPKMQEQKQETTHK.N + Oxidation (M)
2511.1460	2510.1387	2510.1788	-15.95	243	-	262	1	--- R.FYTRESTFLQQNPVTEYMK.K
2767.2666	2766.2593	2766.2119	17.1	106	-	127	1	--- K.DGEDLMDESVLKFTYQQWEDYR.F

**No match to:** 721.4365, 725.4001, 726.4063, 728.3681, 730.3848, 731.4017, 732.3573, 734.4151, 735.4143, 741.4101, 742.4515, 744.4171, 745.4167, 746.4169, 747.4125, 750.4153, 752.4127, 755.4100, 757.4313, 761.4177, 767.4266, 768.3700, 768.3737, 770.3966, 772.4093, 775.4307, 779.4308, 784.3688, 786.4000, 788.4210, 792.4376, 795.4350, 798.4351, 800.4296, 812.4388, 815.4332, 822.4482, 825.4540, 831.4382, 832.4557, 835.4719, 837.4463, 842.5060, 844.4760, 854.4837, 856.4911, 860.4691, 862.4852, 869.4231, 885.4465, 905.4955, 907.4991, 908.4929, 913.5700, 913.5747, 916.5284, 918.5050, 919.5053, 922.5070, 928.5117, 934.5172, 940.4840, 942.4854, 943.4289, 946.5259, 950.4959, 951.5076, 953.5164, 954.5388, 959.5266, 966.5410, 969.5256, 974.5395, 976.5310, 978.5314, 979.5442, 991.5409, 993.5307, 1001.5854, 1011.5262, 1014.5215, 1021.5579, 1023.5663, 1023.5700, 1031.5903, 1035.5381, 1036.5447, 1037.5573, 1039.5327, 1041.5658, 1044.5751, 1045.5729, 1046.5897, 1051.5448, 1056.5658, 1057.6078, 1067.5753, 1073.5902, 1086.5509, 1092.5961, 1106.5391, 1111.5615, 1113.5729, 1118.5818, 1120.6045, 1122.5912, 1123.5848, 1125.5823, 1132.6047, 1134.5714, 1139.5746, 1144.6497, 1145.6407, 1147.6393, 1150.6108, 1155.6215, 1157.6199, 1158.6685, 1163.6152, 1168.6215, 1173.6418, 1175.6089, 1178.6356, 1179.6157, 1181.6819, 1188.6544, 1197.6704, 1208.6415, 1216.6714, 1227.6595, 1231.6387, 1232.6447, 1234.6672, 1235.6445, 1244.6453, 1247.6211, 1248.6174, 1250.6554, 1255.6096, 1256.6531, 1261.6592, 1262.6453, 1266.6777, 1273.6260, 1275.6362, 1276.6343, 1277.6531, 1301.7079, 1303.7076, 1307.7042, 1308.6376, 1310.6146, 1312.6418, 1315.7098, 1320.6659, 1322.6886, 1323.6771, 1331.7202, 1335.7318, 1338.6581, 1339.6637, 1349.7253, 1352.7205, 1356.7230, 1360.6638, 1363.7153, 1365.7379, 1367.7319, 1369.7043, 1377.6947, 1379.7268, 1383.7137, 1385.7534, 1388.7404, 1390.7284, 1393.7428, 1407.7563, 1417.7010, 1421.7061, 1422.7019, 1425.7727, 1427.7742, 1429.7365, 1431.7412, 1433.7228, 1434.7446, 1461.7778, 1467.7521, 1472.7633, 1475.7632, 1484.7889, 1488.7537, 1491.7965, 1493.7579, 1500.7737, 1505.8177, 1513.8079, 1515.8213, 1517.7854, 1519.7544, 1522.7811, 1523.7953, 1529.8099, 1530.7523, 1531.7472, 1537.7974, 1539.8005, 1542.8422, 1545.8091, 1547.8051, 1549.7339, 1551.7778, 1553.8065, 1555.8101, 1556.8109, 1557.8010, 1561.8401, 1563.8109, 1565.8199, 1571.8400, 1579.7939, 1583.8444, 1592.8066, 1594.8335, 1605.8586, 1608.8497, 1615.8754, 1624.8062, 1628.7900, 1628.7921, 1633.7985, 1642.8099, 1646.8297, 1649.8447, 1657.8101, 1667.8622, 1677.7988, 1680.8746, 1689.9465, 1694.7288, 1698.9225, 1699.8862, 1704.8773, 1706.8701, 1707.8302, 1710.9279, 1716.8671, 1719.9058, 1723.9011, 1725.8300, 1727.8986, 1730.8931, 1737.9006, 1751.8656, 1754.8580, 1765.8463, 1766.8040, 1767.8138, 1769.8741, 1770.3567, 1772.9315, 1774.7610, 1774.9131, 1777.8770, 1780.8777, 1783.9246, 1787.8188, 1789.8200, 1791.8137, 1793.9050, 1795.9353, 1798.9340, 1800.9336, 1804.9142, 1805.9069, 1809.8469, 1815.9044, 1821.9144, 1828.9227, 1837.9396, 1840.9827, 1843.9688, 1844.9012, 1846.9153, 1852.9364, 1856.9908, 1861.8881, 1867.9218, 1874.9695, 1880.9265, 1891.9622, 1894.9313, 1896.9078, 1896.9100, 1900.9546, 1905.9313, 1906.9501, 1908.9043, 1911.9130, 1912.9154, 1916.9923, 1918.9587, 1921.9825, 1923.9718, 1925.9573,

1928.0469, 1932.0060, 1933.9950, 1937.9630, 1939.9740, 1946.9679, 1949.9595, 1954.0236, 1955.9738, 1958.9556, 1960.0034, 1968.8600, 1973.9845, 1976.9861, 1978.9910, 1981.9854, 1983.9884, 1987.9784, 1995.9408, 1998.9894, 2000.9926, 2012.9590, 2015.0104, 2017.9747, 2021.0170, 2026.0275, 2031.0166, 2044.0123, 2047.4957, 2047.9515, 2052.0496, 2060.0520, 2062.0073, 2064.9880, 2066.9873, 2094.0376, 2097.0454, 2102.0667, 2103.1641, 2111.0305, 2127.0930, 2139.0630, 2148.1023, 2155.0950, 2156.0796, 2176.0664, 2190.9895, 2195.0774, 2199.0723, 2202.1624, 2203.1221, 2208.0862, 2211.1042, 2216.1062, 2225.1274, 2226.1272, 2229.0972, 2233.0984, 2239.0225, 2242.0435, 2268.1489, 2270.1287, 2271.1294, 2277.0823, 2284.1990, 2292.1426, 2309.0994, 2334.1719, 2342.9915, 2350.1746, 2383.9607, 2400.0862, 2413.0549, 2414.1897, 2417.0959, 2497.2800, 2501.2637, 2513.1421, 2528.1750, 2537.2012, 2541.1948, 2542.1836, 2556.2058, 2562.1487, 2612.2666, 2706.2109, 2717.0869, 2888.2532, 3221.1733, 3224.2917, 3312.3306, 3916.9434

50. [F1MHT3](#) Mass: 217593 Score: 19 Expect: 3e+002 Matches: 55

Uncharacterized protein OS=Bos taurus GN=MYO5A PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
726.4063	725.3990	725.3894	13.2	836	-	840	1	--- R.YKIMR.T + Oxidation (M)
732.3573	731.3500	731.3450	6.91	938	-	943	0	--- K.VDEQNK.D
746.4169	745.4096	745.4082	1.80	1422	-	1427	1	--- K.QDKTVR.K
767.4266	766.4194	766.4086	14.1	1041	-	1046	0	--- K.EVLNHR.I
792.4376	791.4303	791.4258	5.75	900	-	905	2	--- R.RMMAKR.E
795.4350	794.4277	794.4221	7.07	829	-	834	1	--- R.MYVARR.R
825.4540	824.4467	824.4578	-13.49	710	-	715	1	--- R.YRVLMK.Q + Oxidation (M)
832.4557	831.4485	831.4450	4.15	718	-	724	1	--- K.DVLSDRK.Q
885.4465	884.4393	884.4392	0.05	741	-	747	1	--- K.DKYQFGK.T
905.4955	904.4883	904.4767	12.8	692	-	700	0	--- R.ISAAGFPSP.R
916.5284	915.5211	915.5324	-12.32	931	-	937	1	--- K.IMLQQRK.V
951.5076	950.5004	950.5232	-24.04	829	-	835	2	--- R.MYVARRR.Y
959.5266	958.5193	958.5196	-0.24	912	-	919	1	--- K.IEARSVER.Y
972.5305	971.5232	971.5301	-7.06	633	-	640	1	--- K.KTVGHQFR.N
978.5314	977.5241	977.5182	6.06	754	-	762	0	--- R.AGQVAYLEK.L
1056.5658	1055.5585	1055.5359	21.4	1192	-	1199	0	--- K.EEERPQIR.G
1106.5391	1105.5318	1105.5404	-7.73	249	-	257	0	--- R.VVFQAEER.N
1113.5729	1112.5656	1112.5913	-23.07	809	-	816	2	--- R.CYAKFLRR.T
1134.5714	1133.5641	1133.5677	-3.12	598	-	609	0	--- K.AISPTSATSSGR.T
1162.6182	1161.6109	1161.6393	-24.46	1308	-	1318	0	--- K.GEIAQAYIGLK.E
1173.6418	1172.6345	1172.6401	-4.73	1323	-	1332	0	--- R.LLESQQLSQK.R
1178.6356	1177.6283	1177.6417	-11.34	1150	-	1159	0	--- K.VPLDMSLFILK.L + Oxidation (M)
1188.6544	1187.6471	1187.6557	-7.21	1807	-	1815	2	--- R.TIQMRLRDR.K
1208.6415	1207.6342	1207.6422	-6.56	622	-	632	1	--- K.GRPQGTAKHK.K
1231.6387	1230.6314	1230.6455	-11.47	1031	-	1040	1	--- K.EENTLLKQEK.E
1247.6211	1246.6138	1246.5942	15.8	1010	-	1019	1	--- K.SIEEHADRYK.Q
1250.6554	1249.6481	1249.6778	-23.78	912	-	921	2	--- K.IEARSVERYK.K
1261.6592	1260.6519	1260.6384	10.8	1816	-	1826	1	--- R.KDSPQLMDAK.H + Oxidation (M)
1320.6659	1319.6586	1319.6873	-21.77	1401	-	1410	1	--- K.YQSYRISLYK.R
1338.6581	1337.6508	1337.6775	-19.93	877	-	886	2	--- R.GWLARTCYRR.S
1417.7010	1416.6937	1416.7170	-16.44	503	-	514	0	--- K.LGILLDLDEECK.M
1421.7061	1420.6988	1420.7054	-4.62	1411	-	1421	1	--- K.RMIDLMEQLEK.Q + Oxidation (M)
1472.7633	1471.7560	1471.7823	-17.88	220	-	231	2	--- R.FGKYIEIGFDR.Y
1513.8079	1512.8006	1512.7896	7.30	1068	-	1079	1	--- K.QLELDLNDERLR.Y
1531.7472	1530.7399	1530.7388	0.73	1474	-	1485	2	--- K.EKDFQGMLEYKK.E + Oxidation (M)
1561.8401	1560.8328	1560.8624	-18.92	754	-	767	2	--- R.AGQVAYLEKLRAK.L
1579.7939	1578.7866	1578.8253	-24.50	1018	-	1030	1	--- R.YKQETEQLVSNLK.E
1646.8297	1645.8224	1645.8158	4.00	968	-	981	1	--- R.SDLERLQLSEEEAK.I
1680.8746	1679.8673	1679.8916	-14.45	1304	-	1318	2	--- K.MKDKEIAQAYIGLK.E + Oxidation (M)
1707.8302	1706.8229	1706.8397	-9.81	1289	-	1303	0	--- K.NTMTDSTILLEDVQK.M
1710.9279	1709.9206	1709.9069	8.04	923	-	936	1	--- K.LHIGMENKIMQLQR.K
1725.8300	1724.8227	1724.8589	-21.00	1099	-	1113	0	5 K.EEMTLMVNVKPGHK.R + Oxidation (M)
1725.8346	1724.8273	1724.8589	-18.33	1099	-	1113	0	--- K.EEMTLMVNVKPGHK.R + Oxidation (M)
1840.9827	1839.9754	1840.0029	-14.92	232	-	246	2	--- R.YRIIGANMRTYLLEK.S
1856.9908	1855.9835	1855.9978	-7.68	232	-	246	2	--- R.YRIIGANMRTYLLEK.S + Oxidation (M)
1944.0040	1942.9967	1942.9847	6.18	1062	-	1077	1	--- K.LVEETKQLDLNDER.L
1976.9861	1975.9788	1976.0070	-14.28	1412	-	1427	2	--- R.MIDLMEQLEKQDKTVR.K
1998.9894	1997.9821	1997.9649	8.60	1289	-	1305	1	--- K.NTMTDSTILLEDVQKMK.D + 2 Oxidation (M)
2026.0275	2025.0202	2025.0638	-21.52	1406	-	1421	2	--- R.ISLYKRMIDLMEQLEK.Q + Oxidation (M)
2097.0454	2096.0381	2096.0902	-24.83	241	-	257	2	--- R.TYLLEKSRVVFQAEER.N
2176.0664	2175.0591	2175.0807	-9.92	1192	-	1209	1	--- K.EEERPQIRGALEYESLK.R
2226.1272	2225.1199	2225.1263	-2.85	641	-	659	0	--- R.NSLHLLMETLNNATPHYVR.C + Oxidation (M)
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2242.0435	2241.0362	2241.0868	-22.58	1289	-	1307	2	--- K.NTMTDSTILLEDVQKMKD.G + 2 Oxidation (M)
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## Search Parameters

Type of search : MS/MS Ion Search  
 Enzyme : Trypsin  
 Fixed modifications : [Carbamidomethyl \(C\)](#)  
 Variable modifications : [Oxidation \(M\)](#)  
 Mass values : Monoisotopic  
 Protein Mass : Unrestricted  
 Peptide Mass Tolerance :  $\pm 25$  ppm  
 Fragment Mass Tolerance :  $\pm 0.5$  Da  
 Max Missed Cleavages : 2  
 Instrument type : MALDI-TOF-TOF

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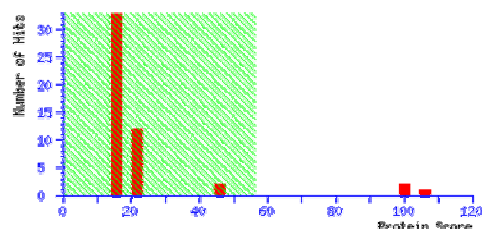
Mascot: <http://www.matrixscience.com/>

# MASCOT SEARCH RESULTS

User : lw\_(F23@11273\_12Mar2012)  
 Email : proteomics@ipatimup.pt  
 Search title : Project: Proteomica, Spot Set: Proteomica\12Jan2012, Label: F23, Spot Id: 221886, Peak List Id: 435348, MS Job Run Id: 30  
 MS data file : C:\Documents and Settings\Administrator\Desktop\xu\xu\xu\Proteomica\12Jan2012\ppw\_F23\_146796935502.txt  
 Database : OrganismSpecie Bos\_taurus\_Reference\_Proteome\_2016\_06 (24214 sequences; 12839866 residues)  
 Timestamp : 8 Jul 2016 at 10:05:41 GMT  
 Warning : **A Peptide summary report will usually give a much clearer picture of MS/MS search results.**  
 Top Score : 106 for **E1B198**, Uncharacterized protein OS=Bos taurus GN=COL6A1 PE=1 SV=1

## Mascot Score Histogram

Protein score is  $-10 \times \log(P)$ , where P is the probability that the observed match is a random event.  
 Protein scores greater than 56 are significant ( $p < 0.05$ ).  
 Protein scores are derived from ions scores as a non-probabilistic basis for ranking protein hits.



## Protein Summary Report

Format As  [Help](#)

Significance threshold  $p < 0.05$  Max. number of hits

Preferred taxonomy

Re-Search All

## Index

Accession	Mass	Score	Description
1. <a href="#">E1B198</a>	109744	106	Uncharacterized protein OS=Bos taurus GN=COL6A1 PE=1 SV=1
2. <a href="#">P02459</a>	142825	101	Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=1 SV=4
3. <a href="#">F1MSR8</a>	134858	101	Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=4 SV=2
4. <a href="#">F1MKG2</a>	110451	45	Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=1 SV=2
5. <a href="#">G3MKU3</a>	25162	45	Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=4 SV=1
6. <a href="#">Q32L17</a>	30313	24	Putative uncharacterized protein MGC133880 OS=Bos taurus GN=MGC133880 PE=2 SV=1
7. <a href="#">P46171</a>	4789	23	Beta-defensin 13 OS=Bos taurus GN=DEFB13 PE=1 SV=1
8. <a href="#">Q0VC96</a>	22800	21	Thymocyte nuclear protein 1 OS=Bos taurus GN=THYN1 PE=2 SV=1
9. <a href="#">P62935</a>	18086	20	Peptidyl-prolyl cis-trans isomerase A OS=Bos taurus GN=PPIA PE=1 SV=2
10. <a href="#">Q29RM9</a>	23940	20	Regulator of G-protein signaling 4 OS=Bos taurus GN=RGS4 PE=2 SV=1
11. <a href="#">Q28024</a>	8166	20	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-12 OS=Bos taurus GN=GNG12 PE=1 SV=2
12. <a href="#">P46170</a>	4445	20	Beta-defensin 12 OS=Bos taurus GN=DEFB12 PE=1 SV=1
13. <a href="#">Q29R24</a>	49390	19	Zinc finger protein 2 OS=Bos taurus GN=ZNF2 PE=2 SV=1
14. <a href="#">A7Z060</a>	81637	19	RNF219 protein OS=Bos taurus GN=RNF219 PE=2 SV=1
15. <a href="#">P48427</a>	12756	19	Tubulin-specific chaperone A OS=Bos taurus GN=TBCA PE=1 SV=3
16. <a href="#">Q3ZBD3</a>	12035	19	Pterin-4-alpha-carbinolamine dehydratase OS=Bos taurus GN=PCBD1 PE=3 SV=2
17. <a href="#">F1MK70</a>	59648	19	Uncharacterized protein OS=Bos taurus GN=SPATS2 PE=4 SV=2
18. <a href="#">Q5EAC6</a>	45065	18	Hsp90 co-chaperone Cdc37 OS=Bos taurus GN=CDC37 PE=2 SV=1
19. <a href="#">Q2HJG7</a>	16553	18	Protein Churchill OS=Bos taurus GN=CHURC1 PE=2 SV=2
20. <a href="#">Q0VCG0</a>	10705	18	LYR motif-containing protein 4 OS=Bos taurus GN=LYRM4 PE=3 SV=1
21. <a href="#">G3N0J4</a>	6707	18	Uncharacterized protein OS=Bos taurus PE=4 SV=1
22. <a href="#">F1N2B6</a>	97976	18	Uncharacterized protein OS=Bos taurus GN=AR PE=3 SV=2
23. <a href="#">A8QW39</a>	16136	18	Protein FAM183A OS=Bos taurus GN=FAM183A PE=2 SV=1
24. <a href="#">Q0VCW1</a>	42846	18	Speckle-type POZ protein OS=Bos taurus GN=SPOP PE=2 SV=1
25. <a href="#">Q95106</a>	28555	17	Brain-derived neurotrophic factor OS=Bos taurus GN=BDNF PE=2 SV=2
26. <a href="#">G5E620</a>	21503	17	Uncharacterized protein OS=Bos taurus GN=LOC101904345 PE=4 SV=1
27. <a href="#">Q0II95</a>	50922	17	Inositol hexakisphosphate kinase 1 OS=Bos taurus GN=IP6K1 PE=2 SV=1
28. <a href="#">F6QWT9</a>	13281	17	Uncharacterized protein OS=Bos taurus GN=FAM229A PE=4 SV=1
29. <a href="#">A4FV50</a>	40277	17	MGC142792 protein OS=Bos taurus GN=MGC142792 PE=2 SV=1
30. <a href="#">G3MKX8</a>	36525	17	Uncharacterized protein OS=Bos taurus GN=SCRT1 PE=4 SV=1
31. <a href="#">G5E5D2</a>	21544	17	Uncharacterized protein OS=Bos taurus GN=TNNI2 PE=4 SV=1
32. <a href="#">Q2YDE5</a>	22966	17	Uncharacterized protein C14orf53 homolog OS=Bos taurus PE=2 SV=1
33. <a href="#">F1N7K1</a>	24749	17	Ropporin-1-like protein OS=Bos taurus GN=ROPN1L PE=4 SV=1
34. <a href="#">F1N1Y9</a>	49406	17	Zinc finger protein 2 OS=Bos taurus GN=ZNF2 PE=4 SV=2
35. <a href="#">P79136</a>	34176	17	F-actin-capping protein subunit beta OS=Bos taurus GN=CAPZB PE=1 SV=1
36. <a href="#">Q0VC77</a>	19543	17	CCDC49 protein OS=Bos taurus GN=CCDC49 PE=2 SV=1
37. <a href="#">F1MHL1</a>	40868	17	Hsp90 co-chaperone Cdc37 OS=Bos taurus GN=CDC37 PE=1 SV=2
38. <a href="#">F1MQW7</a>	14077	16	Uncharacterized protein OS=Bos taurus GN=C15H11orf97 PE=4 SV=2
39. <a href="#">E1B9E7</a>	17216	16	Uncharacterized protein OS=Bos taurus GN=LOC783279 PE=4 SV=2
40. <a href="#">E1BA70</a>	34295	16	Uncharacterized protein OS=Bos taurus PE=4 SV=1
41. <a href="#">F1MR52</a>	116761	16	Uncharacterized protein OS=Bos taurus PE=4 SV=2
42. <a href="#">E1B705</a>	50364	16	Uncharacterized protein OS=Bos taurus GN=RASSF9 PE=4 SV=2
43. <a href="#">E1BDB7</a>	30920	16	Uncharacterized protein OS=Bos taurus GN=CEBPE PE=4 SV=1
44. <a href="#">Q0P584</a>	23768	16	Uncharacterized protein OS=Bos taurus GN=ZMAT2 PE=2 SV=1
45. <a href="#">F1MH60</a>	51585	16	Uncharacterized protein OS=Bos taurus GN=SPRED1 PE=4 SV=2
46. <a href="#">Q3ZCHO</a>	73981	16	Stress-70 protein, mitochondrial OS=Bos taurus GN=HSPA9 PE=2 SV=1
47. <a href="#">Q0P571</a>	19114	16	Myosin regulatory light chain 2, skeletal muscle isoform OS=Bos taurus GN=MYLPF PE=2 SV=1
48. <a href="#">G3N0L1</a>	8718	16	Uncharacterized protein OS=Bos taurus GN=FGF12 PE=3 SV=1

49. [G3MYV8](#) 6868 16 Uncharacterized protein OS=Bos taurus PE=4 SV=1  
50. [A2VDP3](#) 30659 16 RASD family, member 2 OS=Bos taurus GN=RASD2 PE=2 SV=1

## Results List

1. [E1B198](#) Mass: 109744 Score: 106 Expect: 6.1e-007 Matches: 41

Uncharacterized protein OS=Bos taurus GN=COL6A1 PE=1 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
801.4280	800.4207	800.4140	8.32	957	963	0	---	K.AVQEAQR.A
882.4470	881.4397	881.4468	-7.96	425	433	1	---	R.GGPGGERGPR.G
887.4295	886.4222	886.4145	8.74	864	871	0	---	R.TDPGQDVR.V
905.4763	904.4690	904.4614	8.49	928	936	1	---	R.EASSNAAKK.R
949.5244	948.5171	948.5141	3.20	311	319	2	---	K.GSRGPKGYK.G
957.5792	956.5719	956.5655	6.76	723	731	0	---	R.IALVITDGR.S
978.5352	977.5279	977.5043	24.2	976	983	0	---	R.QVNEPHVR.V
1006.5120	1005.5047	1005.4879	16.7	69	76	0	---	R.FIDNLNDR.Y
1021.5762	1020.5689	1020.5716	-2.63	714	722	0	---	R.LLPPTPNNR.I
1046.6058	1045.5985	1045.5920	6.23	1005	1013	0	---	R.VPSYQALLR.G
1056.5575	1055.5502	1055.5400	9.68	1014	1022	0	---	R.GVFYQTVSRK.K
1156.5652	1155.5579	1155.5594	-1.28	126	135	1	---	K.GTYIDCAIKK.G
1178.6371	1177.6298	1177.6428	-11.05	431	442	2	---	R.GPRGTPGARGPR.G
1184.6431	1183.6358	1183.6350	0.73	1014	1023	1	---	R.GVFYQTVSRK.V
1216.7178	1215.7105	1215.6976	10.7	964	975	0	---	R.AGVEIFAVVVG.R
1264.7139	1263.7066	1263.7047	1.49	712	722	1	---	R.SRLLPPTPNNR.I
1289.7029	1288.6956	1288.6775	14.0	200	210	0	---	R.LSIIATDHTYR.R
1445.7913	1444.7840	1444.7786	3.73	200	211	1	---	R.LSIIATDHTYRR.N
1475.7615	1474.7542	1474.7562	-1.34	102	114	2	---	R.GLTRMPSGRDELK.S + Oxidation (M)
1488.7366	1487.7293	1487.7157	9.16	69	79	1	---	R.FIDNLNDRIYR.C
1516.7281	1515.7208	1515.6954	16.8	476	490	1	---	K.GYRGDEGPPGTEGPK.G
1562.8008	1561.7935	1561.7849	5.53	858	871	1	---	R.FLTASRTDPGQDVR.V
1580.8580	1579.8507	1579.8358	9.42	186	199	0	---	K.VFSVAITPDHLEPR.L
1580.8600	1579.8527	1579.8358	10.7	186	199	0	46	K.VFSVAITPDHLEPR.L
1632.8120	1631.8047	1631.7726	19.7	491	508	0	---	K.GAPGAPGPPGDPGLMGER.G
1651.8369	1650.8296	1650.8076	13.4	122	135	2	---	K.YFGKGTITDCAIKK.G
1718.9094	1717.9021	1717.8669	20.5	106	121	2	---	R.MPSGRDELKSSVDAVK.Y
1722.9003	1721.8930	1721.9312	-22.15	136	151	1	---	K.GLEELLVGSSHLKKNK.Y
1724.9030	1723.8957	1723.9216	-15.04	678	692	2	---	R.DPNIRNAQDLKEAIK.K
1774.9300	1773.9227	1773.9122	5.93	872	887	0	46	R.VAVVQYSGTGQQRPER.A
1774.9319	1773.9246	1773.9122	7.00	872	887	0	---	R.VAVVQYSGTGQQRPER.A
1932.0068	1930.9995	1931.0000	-0.24	938	956	0	---	R.LLLFSDBGNSQGATPAAIEK.A
1997.8479	1996.8406	1996.8190	10.8	241	256	0	---	K.NNVEQVCCSFECQPAR.G
2015.9694	2014.9621	2014.9571	2.49	694	711	0	---	K.LQWMMGGGFTTGEALQYTR.S
2088.1033	2087.0960	2087.1011	-2.43	937	956	1	---	K.RLLFLSDBGNSQGATPAAIEK.A
2144.0559	2143.0486	2143.0521	-1.60	693	711	1	---	K.KLQWMMGGGFTTGEALQYTR.S
2199.1150	2198.1077	2198.1121	-1.94	83	101	0	---	R.NLVWNAGALHYSDEVEIIR.G
3070.3745	3069.3672	3069.4217	-17.76	509	540	1	---	R.GEDGPPGNGTEGFPFGPGYPSGRGPPGPGINGTK.G
3159.5210	3158.5137	3158.5230	-2.95	152	180	1	---	K.YLVVVTDGHPLEGYKEPCGGLEDVANEAK.H
3380.5210	3379.5137	3379.5189	-1.53	371	406	1	---	K.QQKGEPPGADGEPGRGPGTGPPGDEGEPEGPPGPEK.G
3427.6099	3426.6026	3426.6189	-4.75	443	478	2	---	R.GDGPGEAGPGQDQGREGPGVGPDPGPEAGIPGPKGYR.G

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 883.4816, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 950.5168, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1007.5640, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1054.5287, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1180.6443, 1182.6539, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1479.8038, 1483.7579, 1484.7480, 1487.7650, 1493.7556, 1500.7393, 1500.7393, 1504.7648, 1504.7708, 1514.7063, 1519.7705, 1522.7722, 1524.8038, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1568.7620, 1572.7245, 1578.8058, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1721.8976, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8219, 1761.8734, 1765.8154, 1772.0012, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8518, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9551, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2687.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3291.6216, 3344.4895, 3347.5515, 3348.5020, 3396.5195, 3412.5801, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6927, 3489.7246, 3505.6919, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

2. [P02459](#) Mass: 142825 Score: 101 Expect: 1.9e-006 Matches: 36

Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=1 SV=4

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
828.4415	827.4342	827.4250	11.2	335 -	344	0	---	R.TGPAGAAGAR.G
868.4412	867.4339	867.4199	16.1	384 -	392	0	---	R.GPEGAQGPR.G
949.5244	948.5171	948.5029	15.0	1164 -	1174	0	---	R.GPPGPVGPSPGK.D
1041.5637	1040.5564	1040.5475	8.55	333 -	344	1	---	R.GRTGPAGAAGAR.G
1126.6241	1125.6168	1125.6183	-1.29	276 -	287	0	---	R.GFPGTPGLPGVK.G
1143.5592	1142.5519	1142.5720	-17.60	516 -	527	0	---	R.GFPGQDGLAGPK.G
1150.6226	1149.6153	1149.5931	19.4	1334 -	1342	2	---	K.KNWWSKSK.D
1227.6459	1226.6386	1226.6156	18.8	288 -	299	1	---	K.GHRGYPLDGA.K
1293.6760	1292.6687	1292.6473	16.6	804 -	818	0	---	K.GEVGPPGPAGTAGAR.G
1349.6729	1348.6656	1348.6445	15.7	1230 -	1240	1	---	R.EKGDPDLQYMR.A + Oxidation (M)
1423.7096	1422.7023	1422.6964	4.17	926 -	940	2	---	K.DGPKGARGDSPPGR.A
1503.7648	1502.7575	1502.7325	16.7	1116 -	1130	2	---	R.GDKGETGEAGERGLK.G
1526.7924	1525.7851	1525.7711	9.19	1445 -	1456	2	---	K.WGKTMIEYRSQK.T
1551.7465	1550.7392	1550.7260	8.55	1089 -	1106	0	---	R.GEAGAQGPMGPAGPAGAR.G
1553.7668	1552.7595	1552.7706	-7.13	1119 -	1133	2	---	K.GETGEAGERGLKGHR.G
1625.7886	1624.7813	1624.7805	0.50	765 -	781	2	---	K.GDRGDVGEKGPEGAPGK.D
1650.8429	1649.8356	1649.8710	-21.43	327 -	344	2	---	R.GLPGERGRTPAGAAGAR.G
1664.8490	1663.8417	1663.8026	23.5	375 -	392	1	---	K.GEAGPTGARGPEGAQGPR.G
1682.8409	1681.8336	1681.8020	18.8	768 -	785	2	---	R.GDVGEKGPEGAPGKDGR.G
1710.8904	1709.8831	1709.8485	20.2	516 -	533	1	---	R.GFPGQDGLAGPKGAPGER.G
1829.8527	1828.8454	1828.8205	13.6	191 -	209	0	---	K.AGGAQMGMVQMGPMPGPR.G
1845.8363	1844.8290	1844.8154	7.38	191 -	209	0	---	K.AGGAQMGMVQMGPMPGPR.G + Oxidation (M)
1861.8531	1860.8458	1860.8103	19.1	191 -	209	0	---	K.AGGAQMGMVQMGPMPGPR.G + 2 Oxidation (M)
1973.9971	1972.9898	1972.9425	24.0	1232 -	1249	1	---	K.GPDPQLQYMRADAAGNLR.Q
2007.9500	2006.9427	2006.9341	4.31	1085 -	1106	1	101	K.QGDRGEAGAQGPMGPAGPAGAR.G
2007.9532	2006.9459	2006.9341	5.91	1085 -	1106	1	---	K.QGDRGEAGAQGPMGPAGPAGAR.G
2023.9482	2022.9409	2022.9290	5.90	1085 -	1106	1	---	K.QGDRGEAGAQGPMGPAGPAGAR.G + Oxidation (M)
2029.9972	2028.9899	2028.9726	8.55	120 -	140	2	---	K.GPPGPQGPAGEQGRGDRGDK.G
2082.9822	2081.9749	2081.9549	9.63	1107 -	1127	2	---	R.GMPGPQGRGDKGETGEAGER.G
2143.0237	2142.0164	2142.0276	-5.24	732 -	755	0	---	K.GAAGPAGPPGAQGPGLQGMPPER.G + Oxidation (M)
2283.1606	2282.1533	2282.1114	18.4	597 -	620	2	---	R.QPGVMGFPKPGKANGEPKGAGEK.G + Oxidation (M)
2400.0532	2399.0459	2399.0596	-5.70	1313 -	1333	0	---	K.VFCNMETGETCVYPNPASVPK.K
2844.3398	2843.3325	2843.3951	-22.01	1017 -	1048	1	---	R.GPPGPVGPPLGLTGPAGEPGREGSPGADGPPGR.D
3023.3674	3022.3601	3022.3992	-12.93	210 -	242	0	---	R.GPPGPAGAPGPQGFQGNPEGPEGVSGPMGPR.G + Oxidation (M)
3321.6216	3320.6143	3320.6763	-18.67	1128 -	1163	2	---	R.GLKGHRGFTGLQGLPGLPGPPSGDQASGPAGPSGPR.G
3869.7393	3868.7320	3868.8056	-19.03	1346 -	1379	0	---	K.HIWFGETINGGFHFSYGDNDLAPNTANVQMTFLR.L

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1145.6373, 1148.6318, 1149.6230, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7516, 1500.7393, 1500.7400, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1666.7892, 1679.8091, 1680.8357, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2026.9529, 2027.5033, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 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2927.4434, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3476.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3876.6707, 3885.6946

3. [F1MSR8](#) Mass: 134858 Score: 101 Expect: 1.9e-006 Matches: 36

Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
828.4415	827.4342	827.4250	11.2	266 -	275	0	---	R.TGPAGAAGAR.G
868.4412	867.4339	867.4199	16.1	315 -	323	0	---	R.GPEGAQGPR.G
949.5244	948.5171	948.5029	15.0	1095 -	1105	0	---	R.GPPGPVGPSPGK.D
1041.5637	1040.5564	1040.5475	8.55	264 -	275	1	---	R.GRTGPAGAAGAR.G

1126.6241	1125.6168	1125.6183	-1.29	207	-	218	0	---	R.GFPPTGTLPGVK.G
1143.5592	1142.5519	1142.5720	-17.60	447	-	458	0	---	R.GFPQDGLAGPK.G
1150.6226	1149.6153	1149.5931	19.4	1265	-	1273	2	---	K.KNWWSSKSK.D
1227.6459	1226.6386	1226.6156	18.8	219	-	230	1	---	K.GHRGYPGLDGAK.G
1293.6760	1292.6687	1292.6473	16.6	735	-	749	0	---	K.GEVGPPGAGTAGAR.G
1349.6729	1348.6656	1348.6445	15.7	1161	-	1171	1	---	R.EKGPDPLQYMR.A + Oxidation (M)
1423.7096	1422.7023	1422.6964	4.17	857	-	871	2	---	K.DGPKGARGDSPPGR.A
1503.7648	1502.7575	1502.7325	16.7	1047	-	1061	2	---	R.GDKGETGEAGERGLK.G
1526.7924	1525.7851	1525.7711	9.19	1376	-	1387	2	---	K.WGKTMIEYRSQK.T
1551.7465	1550.7392	1550.7260	8.55	1020	-	1037	0	---	R.GEAGAQGPMGPAGPAGAR.G
1553.7668	1552.7595	1552.7706	-7.13	1050	-	1064	2	---	K.GETGEAGERGLKHGR.G
1625.7886	1624.7813	1624.7805	0.50	696	-	712	2	---	K.GDRGDVGKEGPEGAPGK.D
1650.8429	1649.8356	1649.8710	-21.43	258	-	275	2	---	R.GLPGERGRTGPAGAAGAR.G
1664.8490	1663.8417	1663.8026	23.5	306	-	323	1	---	K.GEAGPTGARGPEGAQGPR.G
1682.8409	1681.8336	1681.8020	18.8	699	-	716	2	---	R.GDVGEKGPGEAPGKDGGR.G
1710.8904	1709.8831	1709.8485	20.2	447	-	464	1	---	R.GFPQDGLAGPKGAPGER.G
1829.8527	1828.8454	1828.8205	13.6	122	-	140	0	---	K.AGGAQMGMVQGMGPMGPR.G
1845.8363	1844.8290	1844.8154	7.38	122	-	140	0	---	K.AGGAQMGMVQGMGPMGPR.G + Oxidation (M)
1861.8531	1860.8458	1860.8103	19.1	122	-	140	0	---	K.AGGAQMGMVQGMGPMGPR.G + 2 Oxidation (M)
1973.9971	1972.9898	1972.9425	24.0	1163	-	1180	1	---	K.GPDPLQYMRADAAAGNL.R.Q
2007.9500	2006.9427	2006.9341	4.31	1016	-	1037	1	101	K.QGDRGEAGAQGPMGPAGPAGAR.G
2007.9532	2006.9459	2006.9341	5.91	1016	-	1037	1	---	K.QGDRGEAGAQGPMGPAGPAGAR.G
2023.9482	2022.9409	2022.9290	5.90	1016	-	1037	1	---	K.QGDRGEAGAQGPMGPAGPAGAR.G + Oxidation (M)
2029.9972	2028.9899	2028.9726	8.55	51	-	71	2	---	K.GPPPGQGPAGEQGPGRDGRDK.G
2082.9822	2081.9749	2081.9549	9.63	1038	-	1058	2	---	R.GMPGPQGPGRDKGETGEAGER.G
2143.0237	2142.0164	2142.0276	-5.24	663	-	686	0	---	K.GAAGPAGPPGAQGPPLQGMPPER.G + Oxidation (M)
2283.1606	2282.1533	2282.1114	18.4	528	-	551	2	---	R.QQPGVMGFPKPGKANGEPGKAGEK.G + Oxidation (M)
2400.0532	2399.0459	2399.0596	-5.70	1244	-	1264	0	---	K.VFCNMETGETCVYPNPASVPK.K
2844.3398	2843.3325	2843.3951	-22.01	948	-	979	1	---	R.GPPGPVGPPLTGPAGEPGREGSPGADGPPGR.D
3023.3674	3022.3601	3022.3992	-12.93	141	-	173	0	---	R.GPPGPAGAPGQPGQGNPGEPEPGVSGPMGPR.G + Oxidation (M)
3321.6216	3320.6143	3320.6763	-18.67	1059	-	1094	2	---	R.GLKGRHGFGLQLGLPFPSPGSDQGASGAPGSPGR.G
3869.7393	3868.7320	3868.8056	-19.03	1277	-	1310	0	---	K.HIWFGETINGGFHFSYGGDNLNPANTANVQMTFL.R.L

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1145.6373, 1148.6318, 1149.6230, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1666.7892, 1679.8091, 1680.8357, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1748.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2026.9529, 2027.5033, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2895, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3876.6707, 3885.6946

4. [F1MKG2](#) Mass: 110451 Score: 45 Expect: 0.77 Matches: 39

Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
829.4508	828.4435	828.4453	-2.18	204	-	210	0 ---	K.LNEQGRLR.D
830.4513	829.4440	829.4406	4.14	188	-	194	1 ---	R.AREEGIR.L
860.4262	859.4189	859.4035	17.8	747	-	753	0 ---	R.DDDLNLRL.A
967.4963	966.4891	966.5108	-22.44	381	-	389	1 ---	K.GDPGRPGRR.G
972.5023	971.4950	971.4825	12.9	852	-	859	0 ---	R.LGEQNFHK.V
998.5833	997.5760	997.5960	-20.05	195	-	203	0 ---	R.LFAVPPNLK.L
1024.5542	1023.5469	1023.5349	11.8	129	-	137	0 ---	K.SLQSISSFR.R
1043.5297	1042.5224	1042.5043	17.4	876	-	884	1 ---	R.KDDDFLNAR.V
1057.6187	1056.6114	1056.6080	3.22	885	-	894	0 ---	R.VALLQFGGPR.E
1057.6200	1056.6127	1056.6080	4.45	885	-	894	0 39	R.VALLQFGGPR.E
1074.6162	1073.6089	1073.5982	10.0	644	-	652	0 ---	K.NFVINVVNR.L
1076.6190	1075.6117	1075.6026	8.47	733	-	742	0 ---	R.VFAVVITDGR.H



1145.6373	1144.6300	1144.6241	5.22	996	-	1006	0	---	K.ISLGDPAAVFR.E
1177.6421	1176.6348	1176.6363	-1.29	862	-	870	2	---	R.RFVEEVSRR.L
1180.6443	1179.6370	1179.6360	0.87	129	-	138	1	---	K.SLQSISSFR.R
1227.6459	1226.6386	1226.6520	-10.90	852	-	861	1	---	R.LGEQNFHKVR.R
1328.6799	1327.6726	1327.6520	15.5	211	-	221	0	---	R.DIANTPHLYR.N
1333.7430	1332.7357	1332.7514	-11.77	731	-	742	1	---	K.TRVFAVVTIDGR.H
1365.6619	1364.6546	1364.6433	8.31	743	-	753	1	---	R.HDRPDDDLNLR.A
1383.7347	1382.7274	1382.7531	-18.57	852	-	862	2	---	R.LGEQNFHKVRR.F
1514.7063	1513.6990	1513.6693	19.6	245	-	256	1	---	K.VMKHEAYGECYK.V
1530.7058	1529.6985	1529.6787	13.0	1009	-	1021	0	---	K.DYDSLQAPGFFDR.F
1555.7836	1554.7763	1554.8114	-22.57	327	-	343	2	---	K.GAPGLAGKNGTDGQKG.L
1655.8147	1654.8074	1654.8210	-8.18	344	-	359	2	---	K.LGRIGPPGCKGDTGDR.G
1743.9005	1742.8932	1742.8992	-3.40	701	-	716	0	---	K.NLEWIAGGTWTPSALK.F
1774.9300	1773.9227	1773.8983	13.8	381	-	398	2	---	K.GDPGRPPRRGPPGENGAK.G
1774.9319	1773.9246	1773.8983	14.9	381	-	398	2	---	K.GDPGRPPRRGPPGENGAK.G
1787.8407	1786.8334	1786.8162	9.63	1007	-	1021	1	---	R.EKDYDSLQAPGFFDR.F
1809.0583	1808.0510	1808.0308	11.2	195	-	210	1	---	R.LFVPPNKLNEQGLR.D
1810.0460	1809.0387	1809.0261	7.00	188	-	203	2	---	R.AREGIRLFAVPPNKL.L
1932.0068	1930.9995	1930.9973	1.13	474	-	493	2	---	K.GDRGLPPRGPPQGTGVEPGK.Q
1947.9314	1946.9241	1946.9082	8.15	441	-	461	2	---	K.GGPGSDGPKGKGDPPGEGPR.G
2174.0508	2173.0435	2173.0222	9.82	775	-	792	0	---	K.HESENLYSIACDPKQQVR.N
2277.0642	2276.0569	2276.0894	-14.28	483	-	506	2	---	R.PGQGTVEGFGKQSGRDPGDAGPR.G
2392.1594	2391.1521	2391.1343	7.46	668	-	688	0	---	R.VGVVQYSHEGTFAIQLDDER.I
2755.2700	2754.2627	2754.2266	13.1	581	-	607	0	---	R.GAPGPEGEFPPGDPGLTECDVMTYVR.E
2771.2400	2770.2327	2770.2215	4.06	581	-	607	0	---	R.GAPGPEGEFPPGDPGLTECDVMTYVR.E + Oxidation (M)
2864.3188	2863.3115	2863.3421	-10.70	248	-	272	2	---	K.HEAYGECYKVSCLIPPGPKGYR.G
3023.3674	3022.3601	3022.4268	-22.07	662	-	688	1	---	K.SETGTRVGVVQYSHEGTFAIQLDDER.I
<b>No match to:</b> 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1068.5790, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1178.6371, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1779.9012, 1781.8585, 1783.8062, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1936.9510, 1938.0171, 1958.9393, 1959.9655, 1960.9813, 1969.9463, 1976.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.9851, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2760.2590, 2763.1829, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946									

5. [G3MXU3](#) Mass: 25162 Score: 45 Expect: 0.78 Matches: 11

Uncharacterized protein OS=Bos taurus GN=COL6A2 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
972.5023	971.4950	971.4825	12.9	54	- 61	0	---	R.LGEQNFHK.V
1043.5297	1042.5224	1042.5043	17.4	78	- 86	1	---	R.KDDDPNLNAR.V
1057.6187	1056.6114	1056.6080	3.22	87	- 96	0	---	R.VALLQFGGPR.E
1057.6200	1056.6127	1056.6080	4.45	87	- 96	0	39	R.VALLQFGGPR.E
1145.6373	1144.6300	1144.6241	5.22	198	- 208	0	---	K.ISLGDPAAVFR.E
1149.6230	1148.6157	1148.5900	22.4	21	- 30	0	---	K.QDFPLMIAAK.E + Oxidation (M)
1177.6421	1176.6348	1176.6363	-1.29	64	- 72	2	---	R.RFVEEVSRR.L
1227.6459	1226.6386	1226.6520	-10.90	54	- 63	1	---	R.LGEQNFHKVR.R
1383.7347	1382.7274	1382.7531	-18.57	54	- 64	2	---	R.LGEQNFHKVRR.F
1530.7058	1529.6985	1529.6787	13.0	211	- 223	0	---	K.DYDSLQAPGFFDR.F
1787.8407	1786.8334	1786.8162	9.63	209	- 223	1	---	R.EKDYDSLQAPGFFDR.F

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703,

1037.5466, 1041.5637, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1148.6318, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7861, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

6. [Q32L17](#) Mass: 30313 Score: 24 Expect: 86 Matches: 18

Putative uncharacterized protein MGCL133880 OS=Bos taurus GN=MGCL133880 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
805.4417	804.4344	804.4453	-13.54	266	-	272	2	--- K.SKNKNSK.-
1021.5762	1020.5689	1020.5465	22.0	97	-	105	1	--- K.KGSFRPSSR.E
1118.5687	1117.5614	1117.5476	12.4	57	-	67	1	--- R.GDSFRSSSLGR.A
1255.6351	1254.6278	1254.6105	13.8	240	-	249	1	--- K.TDDLGRWHQK.N
1319.6770	1318.6697	1318.6517	13.7	202	-	213	0	--- R.SNLFQGAQPETK.S
1383.7347	1382.7274	1382.7055	15.9	239	-	249	2	--- R.TDDLGRWHQK.N
1519.7705	1518.7632	1518.7804	-11.30	228	-	239	2	--- K.SVRDLHWHWGRK.T
1635.7964	1634.7891	1634.7756	8.29	250	-	263	1	--- K.NAMNNLQKALDEK.E + Oxidation (M)
1834.8650	1833.8577	1833.8870	-15.99	231	-	245	2	--- R.DLHWHGRKTTDDLGR.W
1908.8986	1907.8913	1907.9080	-8.76	250	-	265	2	--- K.NAMNNLQKALDEKEK.S + 2 Oxidation (M)
1938.0171	1937.0098	1937.0292	-9.98	214	-	230	2	--- K.SLMKASYTPEVIEKSVR.D
2011.9381	2010.9308	2010.9355	-2.32	123	-	142	0	--- K.EDPNAGAQGGSGSSIPNNIR.H
2199.1150	2198.1077	2198.0724	16.1	246	-	263	2	--- R.WHQKNAMNNLQKALDEK.E
2277.0642	2276.0569	2276.0894	-14.25	123	-	144	1	--- K.EDPNAGAQGGSGSSIPNNIRHK.F
2896.4324	2895.4251	2895.4688	-15.07	202	-	227	2	--- R.SNLFQGAQPETKSLMKASYTPEVIEK.S
2912.4265	2911.4192	2911.4637	-15.27	202	-	227	2	--- R.SNLFQGAQPETKSLMKASYTPEVIEK.S + Oxidation (M)
3505.6919	3504.6846	3504.6764	2.36	109	-	142	2	--- R.ASLREGAQCQAPKEDPNAGAQGGSGSSIPNNIR.H
3573.6545	3572.6472	3572.6927	-12.73	1	-	31	2	--- -.MELGHRPGTTTTLRAHPNNNKEGQQDTPWR.A + Oxidation (M)

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2576.6890, 2577.0642, 2578.7958, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705,

2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2908.3105, 2910.3325, 2911.3594, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

7. [P46171](#) Mass: 4789 Score: 23 Expect: 1.3e+002 Matches: 6

Beta-defensin 13 OS=Bos taurus GN=DEFB13 PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
759.3632	758.3559	758.3568	-1.14	21	26	0	---	R.CPVPMR.Q
1738.8267	1737.8194	1737.8226	-1.80	27	40	1	---	R.QIGTCFGRPVKCCR.S
1741.8934	1740.8861	1740.8586	15.8	12	26	1	---	R.NGGVCIPIRCVPVPMR.Q + Oxidation (M)
2011.9381	2010.9308	2010.9339	-1.53	27	42	2	---	R.QIGTCFGRPVKCCRSW.-
2018.9740	2017.9667	2018.0013	-17.11	21	37	1	---	R.CPVPMRQIGTCFGRPVK.C + Oxidation (M)
2057.0154	2056.0081	2056.0306	-10.94	1	20	1	---	-.SGISGPLSCGRNGVCIPIR.C
<b>No match to:</b> 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1739.8165, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2012.8951, 2015.9694, 2017.9860, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2528, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946								

8. [Q0VC96](#) Mass: 22800 Score: 21 Expect: 2.1e+002 Matches: 16

Thymocyte nuclear protein 1 OS=Bos taurus GN=THYN1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
887.4295	886.4222	886.4331	-12.24	7	14	0	---	R.RPAGPDMK.G + Oxidation (M)
944.4982	943.4909	943.5087	-18.84	15	22	2	---	K.GPEEKRTK.T
1043.5297	1042.5224	1042.5342	-11.28	6	14	1	---	R.RRPAGPDMK.G + Oxidation (M)
1178.6371	1177.6298	1177.6026	23.1	156	164	1	---	K.WMSRLSVQR.L + Oxidation (M)
1254.6993	1253.6920	1253.6775	11.6	4	14	2	---	R.ARRRPAGPDMK.G
1303.6489	1302.6416	1302.6568	-11.65	73	83	0	---	K.FSIEDLQAPR.Q
1555.7836	1554.7763	1554.7837	-4.76	93	104	2	---	R.NYQARNFLRAMR.L + Oxidation (M)
1761.8734	1760.8661	1760.8628	1.90	151	164	2	---	K.EDNPKWSMRLSVQR.L + Oxidation (M)
2015.9694	2014.9621	2014.9194	21.2	41	58	0	---	K.TPVSEDSGEALSSYLWLMK.S + Oxidation (M)
2285.1355	2284.1282	2284.0920	15.9	84	101	2	---	R.QTTCDGVRNYQARNFLR.A
2576.1792	2575.1719	2575.1848	-5.02	98	117	2	---	R.NFLRAMRLDEEAFFYHSNCR.E
2844.3398	2843.3325	2843.3402	-2.70	127	150	2	---	K.IVKEAYPDHTQFEKNNPYDASSK.E
2910.3325	2909.3252	2909.3952	-24.06	102	126	2	---	R.AMRLEDDEEAFFYHSNCRPGIAGLVK.I
3039.3838	3038.3765	3038.4417	-21.45	73	97	2	---	K.FSIEDLQAPRQTTCWDGVRNYQAR.N
3071.3933	3070.3860	3070.4441	-18.90	41	67	2	---	K.TPVSEDSGEALSSYLWLMKSEPEPSRLEK.G + Oxidation (M)
3087.3970	3086.3897	3086.3529	11.9	130	155	2	---	K.EAYPDHTQFEKNNPYDASSKEDPK.W
<b>No match to:</b> 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647,								

1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7995, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9531, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2256.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 2932.3674, 2935.3865, 3026.3452, 3042.3542, 3070.3745, 3086.3984, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

9. [P62935](#) Mass: 18086 Score: 20 Expect: 2.4e+002 Matches: 10

Peptidyl-prolyl cis-trans isomerase A OS=Bos taurus GN=PP1A PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1118.5687	1117.5614	1117.5801	-16.75	155	- 164	1	---	K.KIT1ADCGQI.-
1423.7096	1422.7023	1422.7103	-5.59	32	- 44	1	---	K.TAENFRALSTGEK.G
1434.7847	1433.7774	1433.7548	15.8	152	- 164	2	---	K.TSKKIT1ADCGQI.-
1747.9127	1746.9054	1746.9264	-12.02	29	- 44	2	---	K.VPKTAENFRALSTGEK.G
1975.9755	1974.9682	1974.9799	-5.92	32	- 49	2	---	K.TAENFRALSTGEKGFQYK.G
2205.0615	2204.0542	2204.1082	-24.48	126	- 144	2	---	K.HVVFGKVKEGMNIVEAMER.F + 2 Oxidation (M)
2343.0608	2342.0535	2342.0507	1.19	50	- 69	1	---	K.GSCFHR1IIPGFMCGGDFTR.H
2807.2869	2806.2796	2806.3167	-13.21	92	- 118	0	---	K.HTGPGLISMANAGPNTNGSQFFICTAK.T + Oxidation (M)
2911.3594	2910.3521	2910.3513	12.7	45	- 69	2	---	K.GFGYKGSFHR1IIPGFMCGGDFTR.H + Oxidation (M)
2927.4434	2926.4361	2926.3855	17.3	56	- 82	2	---	R.IIPGFMCGGDFTRHNGTGGKSIYGEK.F

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3622, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5791, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7995, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2256.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2912.4265, 2925.3323, 3026.3452, 3033.3674, 3025.3865, 3026.3452, 3027.3938, 3042.3533, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

10. [Q29RM9](#) Mass: 23940 Score: 20 Expect: 2.4e+002 Matches: 15

Regulator of G-protein signaling 4 OS=Bos taurus GN=RG54 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
894.4923	893.4850	893.4680	19.0	156	-	162	0	--- K.IFNLMLEK.D
972.5023	971.4950	971.4971	-2.13	15	-	22	2	--- R.SAKDMKHR.L
988.4922	987.4849	987.4920	-7.15	15	-	22	2	--- R.SAKDMKHR.L + Oxidation (M)
1145.6373	1144.6300	1144.6387	-7.54	42	-	50	2	--- K.KDKVVICQR.V
1540.8043	1539.7970	1539.8297	-21.20	113	-	125	1	--- K.KIYNEFISVQATK.E
1543.7938	1542.7865	1542.7864	0.08	155	-	166	2	--- R.KIFNLMKEDSYR.R
1587.7675	1586.7602	1586.7875	-17.17	156	-	167	2	--- K.IFNLMKEDSYRR.F + Oxidation (M)
1710.8904	1709.8831	1709.9247	-24.30	45	-	58	2	--- K.VVICQRVSHEEVKK.W
1774.9300	1773.9227	1773.9229	-0.11	4	-	20	2	--- K.GLAGLPASCLRSAKDMK.H
1774.9319	1773.9246	1773.9229	0.96	4	-	20	2	--- K.GLAGLPASCLRSAKDMK.H
2174.0508	2173.0435	2173.0222	9.81	23	-	41	1	--- R.LGFLFLQKSDSCHEHNSSHSK.K
2175.0435	2174.0362	2174.0466	-4.77	59	-	77	0	--- K.WAESLENLISHECGLAAFK.A
2467.2458	2466.2385	2466.1822	22.8	21	-	41	2	--- K.HRLGFLQKSDSCHEHNSSHSK.K
2787.2524	2786.2451	2786.2421	1.08	78	-	99	1	--- K.AFLKSEYSEENIDFWISCEEYK.K
2844.3398	2843.3325	2843.3656	-11.62	140	-	162	2	--- R.NMLEPTITCFDEAQRKIFNLMLEK.D + Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8486, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9065, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9340, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2667.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.9255, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3648.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

11. [Q28024](#) Mass: 8166 Score: 20 Expect: 2.5e+002 Matches: 7

Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-12 OS=Bos taurus GN=GNGL2 PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
900.5174	899.5101	899.5301	-22.20	16	-	22	1	--- R.RTVQQLR.M
978.5352	977.5279	977.5216	6.53	65	-	72	2	--- K.DKKTKTIL.-
2015.9694	2014.9621	2015.0034	-20.46	49	-	66	1	--- R.NDPLLMGIPTSENPFKDK.K
2144.0559	2143.0486	2143.0983	-23.19	49	-	67	2	--- R.NDPLLMGIPTSENPFKDK.K
2211.1067	2210.0994	2210.0459	24.2	30	-	48	2	--- R.IKVSKASADLMSCYEEHAR.N + Oxidation (M)
3707.7200	3706.7127	3706.7429	-8.14	32	-	64	2	--- K.VSKASADLMSCYEEHARNDPLLMGIPTSENPFK.D
3723.7041	3722.6968	3722.7378	-11.01	32	-	64	2	--- K.VSKASADLMSCYEEHARNDPLLMGIPTSENPFK.D + Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.5921, 1146.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1332.6719, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1588.7366, 1593.7556, 1594.7708, 1595.7859, 1596.7924, 1597.8079, 1598.8180, 1599.8297, 1600.8409, 1601.8518, 1602.8627, 1603.8736, 1604.8845, 1605.8954, 1606.9063, 1607.9172, 1608.9281, 1609.9390, 1610.9499, 1611.9608, 1612.9717, 1613.9826, 1614.9935, 1615.0044, 1616.0153, 1617.0262, 1618.0371, 1619.0480, 1620.0589, 1621.0698, 1622.0807, 1623.0916, 1624.1025, 1625.1134, 1626.1243, 1627.1352, 1628.1461, 1629.1570, 1630.1679, 1631.1788, 1632.1897, 1633.1996, 1634.2095, 1635.2194, 1636.2293, 1637.2392, 1638.2491, 1639.2590, 1640.2689, 1641.2788, 1642.2887, 1643.2986, 1644.3085, 1645.3184, 1646.3283, 1647.3382, 1648.3481, 1649.3580, 1650.3679, 1651.3778, 1652.3877, 1653.3976, 1654.4075, 1655.4174, 1656.4273, 1657.4372, 1658.4471, 1659.4570, 1660.4669, 1661.4768, 1662.4867, 1663.4966, 1664.5065, 1665.5164, 1666.5263, 1667.5362, 1668.5461, 1669.5560, 1670.5659, 1671.5758, 1672.5857, 1673.5956, 1674.6055, 1675.6154, 1676.6253, 1677.6352, 1678.6451, 1679.6550, 1680.6649, 1681.6748, 1682.6847, 1683.6946, 1684.7045, 1685.7144, 1686.7243, 1687.7342, 1688.7441, 1689.7540, 1690.7639, 1691.7738, 1692.7837, 1693.7936, 1694.8035, 1



1608.8051,	1616.8165,	1621.7870,	1625.7886,	1628.7313,	1632.8120,	1635.7964,	1637.7974,	1642.7417,	1647.8439,	1650.8429,	1651.8369,
1655.8147,	1657.8483,	1658.8953,	1660.8379,	1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8357,	1682.8409,	1696.8464,	1698.8180,
1701.8243,	1702.8386,	1707.8938,	1710.8904,	1714.7905,	1716.8219,	1717.9052,	1718.9094,	1721.8976,	1722.9003,	1724.9030,	1728.8840,
1730.8910,	1734.1617,	1738.8267,	1739.8165,	1741.8934,	1743.9005,	1747.9127,	1758.4807,	1758.8918,	1761.8734,	1765.8154,	1772.0012,
1774.9300,	1774.9319,	1779.9012,	1781.8585,	1783.8062,	1787.8407,	1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,	1833.8571,
1834.8650,	1836.8618,	1838.8677,	1845.8363,	1847.8600,	1848.8938,	1850.9128,	1851.8932,	1861.8531,	1862.9542,	1864.9258,	1880.9026,
1883.7704,	1887.8878,	1897.7863,	1902.9769,	1904.9276,	1908.8986,	1920.9131,	1923.9126,	1928.0443,	1932.0068,	1936.9510,	1938.0171,
1947.9314,	1958.9393,	1959.9655,	1960.9813,	1961.9463,	1967.1549,	1969.9951,	1973.9971,	1975.9755,	1976.9708,	1990.4971,	1990.9373,
1991.4857,	1997.8479,	2001.8607,	2003.8768,	2004.8850,	2007.9500,	2007.9532,	2011.9381,	2012.8951,	2017.9860,	2018.9740,	2020.1631,
2023.9482,	2026.9529,	2027.5033,	2029.9972,	2043.5356,	2044.9940,	2055.0205,	2057.0154,	2060.9878,	2066.9939,	2068.9661,	2082.9822,
2086.0254,	2088.1033,	2097.0371,	2098.4941,	2102.9954,	2109.0095,	2112.9932,	2114.9707,	2122.9578,	2128.0444,	2130.9980,	2132.0200,
2136.9250,	2140.0063,	2143.0237,	2145.0781,	2148.0483,	2153.0049,	2153.9973,	2174.0508,	2175.0435,	2178.0483,	2188.0610,	2191.0464,
2192.0427,	2199.1150,	2205.0615,	2223.1533,	2225.1382,	2226.1472,	2239.1646,	2243.1448,	2246.9482,	2251.1108,	2255.1484,	2265.0837,
2271.1211,	2273.0735,	2277.0642,	2283.1606,	2285.1355,	2286.0986,	2289.0901,	2291.0173,	2309.0349,	2328.9888,	2343.0608,	2352.9583,
2355.0383,	2366.9595,	2371.0325,	2392.1594,	2400.0532,	2424.1577,	2434.2429,	2438.2283,	2449.2180,	2450.2451,	2451.2480,	2465.1592,
2466.2458,	2467.2458,	2478.1377,	2501.2207,	2523.2014,	2526.2585,	2540.2451,	2542.2578,	2545.2258,	2550.2373,	2561.6841,	2562.1826,
2562.6890,	2573.2495,	2576.1792,	2646.9758,	2659.2144,	2661.1409,	2662.0120,	2671.1924,	2681.2705,	2682.2888,	2685.3098,	2689.3059,
2695.1064,	2696.2695,	2699.2324,	2703.2529,	2705.2944,	2712.2937,	2717.2903,	2720.2839,	2721.2937,	2726.2935,	2727.2986,	2728.3079,
2739.2837,	2743.2729,	2744.2207,	2745.2256,	2746.2031,	2748.2295,	2755.2700,	2760.2590,	2763.1829,	2771.2400,	2778.1865,	2785.2969,
2786.2561,	2787.2524,	2790.2317,	2792.2166,	2800.3093,	2801.2932,	2803.2415,	2804.2429,	2807.2869,	2808.2227,	2812.2244,	2813.2373,
2817.2632,	2820.2441,	2824.2598,	2828.2454,	2833.2544,	2843.2900,	2844.3398,	2847.3630,	2851.3313,	2864.3188,	2890.3293,	2896.4324,
2908.3105,	2910.3325,	2911.3594,	2912.4265,	2925.3323,	2927.4434,	3023.3674,	3025.3865,	3026.3452,	3039.3838,	3042.3542,	3070.3745,
3071.3933,	3086.3984,	3087.3970,	3093.4294,	3101.3831,	3103.4006,	3104.4041,	3110.4143,	3127.4749,	3141.4126,	3143.5066,	3144.5298,
3159.5210,	3219.4854,	3236.5574,	3266.6021,	3280.5635,	3321.6216,	3344.4895,	3347.5515,	3348.5020,	3380.5210,	3396.5195,	3412.5801,
3427.6099,	3428.5874,	3444.5840,	3462.6301,	3478.6123,	3484.6497,	3489.7246,	3505.6919,	3510.5859,	3521.6392,	3552.6614,	3553.6028,
3554.5630,	3558.6460,	3573.6545,	3589.6523,	3608.6155,	3624.6685,	3630.5806,	3641.7090,	3651.7944,	3667.7266,	3683.6980,	3691.7681,
3714.5493,	3715.6206,	3719.6914,	3720.7048,	3735.7100,	3751.7539,	3830.8091,	3869.7393,	3876.6707,	3885.6946		

12. [P46170](#) Mass: 4445 Score: 20 Expect: 2.6e+002 Matches: 5

Beta-defensin 12 OS=Bos taurus GN=DEFB12 PE=1 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
759.3632	758.3559	758.3568	-1.14	17	-	22	0	--- R.CPVPMR.Q
1738.8267	1737.8194	1737.8226	-1.80	23	-	36	1	--- R.QIGTGFGRPVKCCR.S
1741.8934	1740.8861	1740.8586	15.8	8	-	22	1	--- R.NGGVCIPIRCPVPMR.Q + Oxidation (M)
2011.9381	2010.9308	2010.9339	-1.53	23	-	38	2	--- R.QIGTGFGRPVKCCRSW.-
2018.9740	2017.9667	2018.0013	-17.11	17	-	33	1	--- R.CPVPMRQIGTCFGRPVK.C + Oxidation (M)
<b>No match to:</b> 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5255, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.6800, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2012.8951, 2015.9694, 2017.9860, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946								

13. [Q29RZ4](#) Mass: 49390 Score: 19 Expect: 2.8e+002 Matches: 20

Zinc finger protein 2 OS=Bos taurus GN=ZNF2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
950.5168	949.5096	949.4981	12.1	418	- 425	2	---	R.RYAKQGID.-
961.5109	960.5037	960.5253	-22.58	303	- 310	0	---	R.HQLIHTGR.K
1056.5575	1055.5502	1055.5764	-24.77	250	- 258	0	---	R.IHTGEKPFK.C
1110.5851	1109.5778	1109.6054	-24.83	410	- 418	1	---	K.SSVVIQHRR.Y
1113.5701	1112.5628	1112.5614	1.24	321	- 330	0	---	K.AFYGVSSLNLR.H
1126.6241	1125.6168	1125.5938	20.5	382	- 389	2	---	R.CRLTRHQR.V
1130.5756	1129.5683	1129.5741	-5.08	331	- 340	1	---	R.HQKHAAGEPR.Y
1658.8953	1657.8880	1657.9012	-7.97	405	- 418	2	---	K.VFSSKSSVIQHRR.Y
1920.9131	1919.9058	1919.8618	22.9	259	- 274	2	---	K.CSECGKAFFDRSSLTR.H
2225.1382	2224.1309	2224.1250	2.68	321	- 340	2	---	K.AFYGVSSLNLRHOKHAAGEPR.Y



2239.1646 2238.1573 2238.1718 -6.47 30 - 47 2 --- R.LVPTQRDLRYKEVMLENYK.S  
 2255.1484 2254.1411 2254.1667 -11.35 30 - 47 2 --- R.LVPTQRDLRYKEVMLENYK.S + Oxidation (M)  
 2450.2451 2449.2378 2449.2383 -0.20 139 - 159 2 --- K.ESPTVEACKKPPSLEESLR.H  
 2526.2585 2525.2512 2525.2380 5.24 384 - 404 2 --- R.LTRHQVRVHTGKPEKFCVCGK.V  
 2685.3098 2684.3025 2684.3690 -24.78 134 - 157 2 --- R.LGTEKESPTVEACKKPPSLEESLR.H  
 2745.2256 2744.2183 2744.2507 -11.80 270 - 292 2 --- R.SSLTRHQRIHTGESPYECNQCGK.A  
 2911.3594 2910.3521 2910.3752 -7.94 278 - 302 2 --- R.IHTGESPYECNQCGKAFSQKSLTR.H  
 3280.5635 3279.5562 3279.5619 -1.73 2 - 29 2 --- M.AAVSPTRCQDPVTFEDVAVVFTDEEWRR.L  
 3321.6216 3320.6143 3320.5931 6.39 303 - 330 2 --- R.HQLIHTGRKPYECNECGKAFYGVSSILNR.H  
 3427.6099 3426.6026 3426.5973 1.55 1 - 29 2 --- -.MAAVSPTRCQDPVTFEDVAVVFTDEEWRR.L + Oxidation (M)  
**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 957.5792, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1085.5938, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1128.5618, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2226.1472, 2243.1448, 2246.9482, 2251.1108, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

14. [A7Z060](#) Mass: 81637 Score: 19 Expect: 2.8e+002 Matches: 31

RNF219 protein OS=Bos taurus GN=RNF219 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
807.4076	806.4003	806.3923	9.99	653	-	658	0	R.LFEDQR.F
944.4982	943.4909	943.5087	-18.84	202	-	209	1	R.LKAEVDNR.S
967.4963	966.4891	966.4658	24.1	166	-	173	0	R.TANEIYEK.V
1143.5592	1142.5519	1142.5680	-14.05	204	-	213	1	K.AEVDNRSPPQK.F
1314.7227	1313.7154	1313.7303	-11.30	574	-	584	1	K.LEERTKPNLSK.G
1361.7147	1360.7074	1360.7133	-4.29	490	-	501	1	K.LSEKPGSCLSKR.L
1366.6965	1365.6892	1365.6823	5.08	502	-	512	1	R.LNSLRSFEMNR.T
1382.6771	1381.6698	1381.6772	-5.34	502	-	512	1	R.LNSLRSFEMNR.T + Oxidation (M)
1456.7555	1455.7482	1455.7793	-21.38	198	-	209	2	R.ENLRLKAEVDNR.S
1503.7648	1502.7575	1502.7590	-0.96	204	-	216	2	K.AEVDNRSPPQKFR.F
1522.7722	1521.7649	1521.7834	-12.13	501	-	512	2	K.RLNSLRSFEMNR.T
1851.8932	1850.8859	1850.8833	1.44	544	-	560	1	K.SPCNNGFKSLDLGLSK.S
1880.9026	1879.8953	1879.8846	5.69	327	-	341	2	K.TEPNCSKNQDLYQKR.V
1958.9393	1957.9320	1957.9415	-4.84	67	-	84	0	K.EIIGTSESEPMLSHTVR.K + Oxidation (M)
2003.8768	2002.8695	2002.8587	5.40	418	-	433	1	R.KLMDFEFCDSPNVCNK.D
2136.9250	2135.9177	2135.9603	-19.92	342	-	359	0	R.VETMLTVTDTSDMTYLER.E + 2 Oxidation (M)
2175.0435	2174.0362	2174.0565	-9.32	92	-	108	1	R.LELLHKEYEDEIDCLQK.E
2277.0642	2276.0669	2276.0665	-4.19	341	-	359	1	K.RVETMLTVTDTSDMTYLER.E + Oxidation (M)
2355.0383	2354.0310	2354.0808	-21.16	321	-	340	2	R.QEGTSKTEPNCSKNQDLYQK.R
2739.2837	2738.2764	2738.2363	14.6	412	-	433	2	K.QSNHLRLKLMDFEFCDSPNVCNK.D
2745.2256	2744.2183	2744.2574	-14.26	666	-	689	0	K.MSSEMPGLHHLQSPWSTSFVPEK.R + 2 Oxidation (M)
2755.2700	2754.2627	2754.2312	11.4	412	-	433	2	K.QSNHLRLKLMDFEFCDSPNVCNK.D + Oxidation (M)
2808.2227	2807.2154	2807.1473	24.3	418	-	440	2	R.KLMDFEFCDSPNVCNKDSDDDR.S
3127.4749	3126.4676	3126.5015	-10.84	666	-	692	2	K.MSSEMPGLHHLQSPWSTSFVPEKRN.N + Oxidation (M)
3143.5066	3142.4993	3142.4964	0.92	666	-	692	2	K.MSSEMPGLHHLQSPWSTSFVPEKRN.N + 2 Oxidation (M)
3521.6392	3520.6319	3520.5643	19.2	529	-	560	2	K.ISELDSSMMSESDNSKSPCNNGFKSLDLGLSK.S + Oxidation (M)
3651.7944	3650.7871	3650.7650	6.06	659	-	690	2	R.FGSSLFKMSSEMPGLHHLQSPWSTSFVPEKRN.N + Oxidation (M)
3667.7266	3666.7193	3666.7599	-11.07	659	-	690	2	R.FGSSLFKMSSEMPGLHHLQSPWSTSFVPEKRN.N + 2 Oxidation (M)
3720.7048	3719.6975	3719.7658	-18.36	373	-	405	1	K.DEELYDLTPASCAPLSLSCLQLNTPDNRESSVVK.A
3869.7393	3868.7320	3868.7416	-2.48	341	-	372	2	K.RVETMLTVTDTSDMTYLEREWGNKPSDCMPYK.D + Oxidation (M)
3885.6946	3884.6873	3884.7365	-12.67	341	-	372	2	K.RVETMLTVTDTSDMTYLEREWGNKPSDCMPYK.D + 2 Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280,

805.4417,	810.3293,	812.3207,	818.3782,	820.3700,	828.4415,	829.4508,	830.4513,	834.3805,	842.5101,	849.3834,	852.4368,	857.4457,
860.4262,	868.4412,	870.4462,	873.4370,	877.4166,	880.4280,	882.4470,	883.4816,	887.4295,	889.4857,	891.4872,	894.4923,	898.4610,
900.5174,	905.4763,	907.4251,	912.5086,	914.4942,	920.4296,	922.4855,	928.4565,	929.4484,	933.4327,	936.4976,	938.5062,	946.4672,
949.5244,	950.5168,	957.5792,	961.5109,	965.5151,	972.5023,	974.4913,	976.5255,	978.5352,	981.5225,	983.6221,	986.5463,	988.4922,
993.5123,	995.4512,	998.5833,	1000.5594,	1006.5120,	1007.5640,	1021.5762,	1024.5542,	1031.5300,	1034.5703,	1037.5466,	1041.5637,	
1043.5297,	1044.5375,	1045.5594,	1046.6058,	1054.5287,	1056.5575,	1057.6187,	1057.6200,	1068.5790,	1074.6162,	1076.6190,	1082.6056,	
1105.5938,	1110.5851,	1113.5701,	1118.5687,	1120.6050,	1122.5892,	1123.6047,	1126.6241,	1128.5618,	1130.5756,	1135.5951,	1137.5647,	
1145.6373,	1148.6318,	1149.6230,	1150.6226,	1156.5652,	1157.5676,	1159.5890,	1160.5966,	1169.5873,	1177.6421,	1178.6371,	1180.6443,	
1182.6539,	1184.6431,	1185.6815,	1193.6090,	1194.6001,	1209.6238,	1213.7180,	1216.7178,	1221.5953,	1227.6455,	1229.6874,	1234.6899,	
1238.2251,	1239.6622,	1254.6993,	1255.6351,	1264.7139,	1265.1680,	1265.7196,	1269.6532,	1276.6729,	1278.6892,	1281.6375,	1285.6674,	
1289.7029,	1293.6760,	1301.6362,	1303.6489,	1304.6685,	1306.6946,	1308.6797,	1319.6770,	1320.6364,	1323.6815,	1326.6937,	1328.6799,	
1333.7430,	1336.7301,	1337.6429,	1339.6729,	1351.6969,	1353.6981,	1356.6255,	1358.6919,	1359.7013,	1364.7118,	1365.6619,	1372.6228,	
1375.6693,	1383.7347,	1390.7089,	1393.8007,	1397.7449,	1403.7434,	1410.7849,	1416.7737,	1420.7114,	1423.7096,	1434.7847,	1436.7469,	
1442.8527,	1445.7913,	1457.7440,	1467.7560,	1470.7466,	1475.7615,	1479.8038,	1483.7579,	1484.7480,	1487.7660,	1488.7366,	1493.7556,	
1500.7393,	1500.7400,	1504.7708,	1514.7063,	1516.7281,	1519.7705,	1524.8040,	1526.7924,	1528.7079,	1530.7058,	1536.7252,	1537.7859,	
1540.8043,	1543.7938,	1550.7543,	1551.7465,	1553.7668,	1555.7836,	1556.8011,	1562.8008,	1568.7620,	1572.7425,	1578.8058,	1580.8580,	
1580.8606,	1584.8486,	1587.7675,	1608.8051,	1616.8165,	1621.7870,	1625.7886,	1628.7313,	1632.8120,	1635.7964,	1637.7974,	1642.7417,	
1647.8439,	1650.8429,	1651.8369,	1655.8147,	1657.8483,	1658.8953,	1660.8379,	1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8357,	
1682.8049,	1696.8464,	1698.8180,	1701.8243,	1702.8386,	1707.8938,	1710.8904,	1714.7905,	1716.8219,	1717.9052,	1718.9094,	1721.8796,	
1722.9003,	1724.9030,	1728.8840,	1730.8910,	1734.1617,	1738.8267,	1739.8165,	1741.8934,	1743.9005,	1747.9127,	1758.4807,	1758.8918,	
1761.8734,	1765.8154,	1772.0012,	1774.9300,	1774.9319,	1779.9012,	1781.8585,	1783.8062,	1787.8407,	1809.0583,	1810.0460,	1812.9126,	
1829.8527,	1832.8584,	1833.8571,	1834.8650,	1836.8618,	1838.8677,	1845.8363,	1847.8600,	1848.8938,	1850.9128,	1861.8531,	1862.9542,	
1864.9258,	1883.7704,	1887.8878,	1897.7863,	1902.9769,	1904.9276,	1908.8986,	1920.9131,	1923.9126,	1928.0443,	1932.0068,	1936.9510,	
1938.0171,	1947.9314,	1959.9655,	1960.9813,	1								

15. [P48427](#) **Mass:** 12756 **Score:** 19 **Expect:** 2.9e+002 **Matches:** 9

Tubulin-specific chaperone A OS=Bos taurus GN=TBCA PE=1 SV=3

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
860.4262	859.4189	859.4334	-16.91	1	-	7	1 ---	-.MADPRVR.Q + Oxidation (M)
1031.5300	1030.5227	1030.5294	-6.53	32	-	31	1 ---	K.QQEEKIEK.M
1229.6874	1228.6801	1228.6710	7.42	1	-	10	2 ---	-.MADPRVRQIK.I + Oxidation (M)
1306.6946	1305.6873	1305.6598	21.1	32	-	41	2 ---	K.QQEEKIEKMK.A + Oxidation (M)
1359.7013	1358.6940	1358.7041	-7.42	29	-	39	2 ---	K.EAKQQEEKIEK.M
1442.8257	1441.8184	1441.8140	3.06	96	-	108	2 ---	K.EARLVLDVSKVLE.-
1738.8267	1737.8194	1737.8607	-23.73	37	-	51	2 ---	K.IEKMKAEEDGENYAIK.K
2265.0837	2264.0764	2264.0711	2.34	52	-	69	2 ---	K.KQAEILQESRMMPDCQR.R + 2 Oxidation (M)
2277.0642	2276.0569	2276.0824	-11.17	53	-	70	2 ---	K.QAEILOESRMMPDCORR.L + Oxidation (M)

No match to:	716.3353,	718.2895,	724.2175,	726.3070,	728.2833,	729.4336,	730.2399,	732.2518,	734.4341,	743.3130,	745.3617,	
747.4360,	753.3469,	756.3524,	758.3462,	759.3632,	768.3517,	779.4633,	781.3725,	789.3640,	794.3674,	796.3701,	799.2854,	801.4280,
805.4417,	807.4076,	810.3293,	812.3207,	818.3782,	820.3700,	828.4415,	829.4580,	830.4513,	834.3805,	842.5101,	849.3834,	852.4368,
857.4457,	868.4412,	870.4462,	873.4370,	877.4166,	880.4280,	882.4470,	883.4816,	887.4295,	889.4857,	891.4872,	894.4923,	898.4610,
900.5174,	905.4763,	907.4251,	912.5086,	914.4942,	920.4296,	922.4855,	928.4565,	929.4484,	933.4327,	936.4972,	938.5062,	944.4982,
946.4672,	949.5244,	950.5168,	957.5792,	961.5109,	965.5151,	967.4963,	972.5023,	974.4913,	976.5255,	978.5352,	981.5225,	983.6221,
986.5463,	988.4922,	993.5123,	995.4512,	998.5833,	1000.5594,	1006.5120,	1007.5640,	1021.5762,	1024.5542,	1034.5703,	1037.5466,	
1041.5637,	1043.5297,	1044.5373,	1045.5594,	1046.6058,	1054.5287,	1056.5575,	1057.6187,	1057.6200,	1068.5790,	1074.6162,	1076.6190,	
1082.5056,	1105.5938,	1110.5851,	1113.5701,	1118.5687,	1120.6050,	1122.5892,	1123.6047,	1126.6241,	1128.5618,	1130.5756,	1135.5951,	
1137.5647,	1143.5592,	1145.6373,	1148.6318,	1149.6230,	1150.6226,	1156.5652,	1157.5676,	1159.5890,	1160.5966,	1169.5873,	1177.6421,	
1178.6371,	1180.6443,	1182.6539,	1184.6431,	1185.6815,	1193.6090,	1194.6001,	1209.6238,	1213.7180,	1216.7178,	1221.5953,	1227.6459,	
1234.6899,	1238.6251,	1239.6622,	1254.6993,	1255.6351,	1264.7139,	1265.6160,	1265.7196,	1269.6532,	1276.6729,	1278.6892,	1281.6375,	
1285.6674,	1289.7029,	1293.6760,	1301.6362,	1303.6489,	1304.6685,	1308.6797,	1314.7227,	1319.6770,	1320.6364,	1323.6815,	1326.6937,	
1328.6799,	1333.7430,	1336.7301,	1337.6429,	1349.6729,	1351.6969,	1353.6891,	1356.6255,	1358.6919,	1361.7147,	1364.7118,	1365.6619,	
1366.6965,	1372.6228,	1373.6693,	1382.6771,	1383.7347,	1390.7089,	1393.8007,	1397.7449,	1403.7434,	1410.7849,	1416.7737,	1420.7114,	
1423.7096,	1434.7847,	1436.7469,	1445.7913,	1456.7555,	1457.7440,	1467.7560,	1470.7466,	1475.7615,	1479.8038,	1483.7579,	1484.7480,	
1487.7660,	1488.7366,	1493.7556,	1500.7393,	1500.7440,	1503.7648,	1504.7708,	1514.7063,	1516.7281,	1519.7705,	1522.7722,	1524.8040,	
1526.7924,	1528.7079,	1530.7058,	1536.7252,	1537.7859,	1540.8043,	1543.7938,	1550.7543,	1551.7465,	1553.7668,	1555.7836,	1556.8011,	
1562.8008,	1568.7620,	1572.7245,	1578.8058,	1580.8580,	1580.8600,	1584.8486,	1587.7675,	1608.8051,	1616.8165,	1621.7870,	1625.7886,	
1628.7313,	1632.8120,	1635.7964,	1637.7974,	1642.7417,	1647.8439,	1650.8429,	1651.8369,	1655.8147,	1657.8483,	1658.8953,	1660.8379,	
1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8351,	1682.8409,	1696.8464,	1698.8180,	1701.8243,	1702.8386,	1707.8938,	1710.8904,	
1714.7905,	1716.8219,	1717.9052,	1718.9094,	1721.8976,	1722.9003,	1724.9030,	1728.8840,	1730.8910,	1734.1617,	1739.8165,	1741.8934,	
1743.9005,	1747.9127,	1758.4807,	1758.8918,	1761.8734,	1765.8154,	1772.0012,	1774.9300,	1774.9319,	1779.9012,	1781.8585,	1783.8062,	
1787.8407,	1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,							

3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

16. [Q32BD3](#) Mass: 12035 Score: 19 Expect: 2.9e+002 Matches: 8

Pterin-4- $\alpha$ -carbinolamine dehydratase OS=Bos taurus GN=PCBD1 PE=3 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1068.5790	1067.5717	1067.5472	23.0	5	13	1	---	K.AHRLSAEER.D
1130.5756	1129.5683	1129.5516	14.8	22	31	0	---	R.AVGWNELEGR.D
1584.8486	1583.8413	1583.8130	17.9	46	59	1	---	R.AFGFMTRVALQAEK.L + Oxidation (M)
1698.8180	1697.8107	1697.7950	9.24	60	72	0	---	K.LDHHPEWFNVYNK.V
1739.8165	1738.8092	1738.8448	-20.43	89	104	0	---	R.DVNLASFIEQVAVSMT.- + Oxidation (M)
1812.9126	1811.9053	1811.9107	-2.99	32	45	2	---	R.DAIFKQFHFKDFNR.A
2438.2283	2437.2210	2437.2179	1.30	53	72	1	---	R.VALQAEKLDHHPEWFNVYNK.V
3489.7246	3488.7173	3488.6684	14.0	60	88	1	---	K.LDHHPEWFNVYNKWHITLSTHECAGLSER.D

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.7022, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1586.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1686.8464, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4978, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

17. [F1MK70](#) Mass: 59648 Score: 19 Expect: 3e+002 Matches: 26

Uncharacterized protein OS=Bos taurus GN=SPATS2 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
807.4076	806.4003	806.3956	5.79	317	323	0	---	K.MTDVAVR.M + Oxidation (M)
912.5086	911.5013	911.4937	8.39	443	450	1	---	R.EALPGNRR.G
946.4672	945.4599	945.4404	20.7	538	546	0	---	R.TSQPDVVNS.-
1074.6162	1073.6089	1073.6080	0.82	235	244	1	---	K.LGSNIEKSVK.D
1076.6190	1075.6117	1075.6026	8.50	80	88	2	---	K.EWTVTGKKK.N
1118.5687	1117.5614	1117.5689	-6.67	286	295	0	---	R.EVALLAEMDK.V
1193.6090	1192.6017	1192.5836	15.2	345	354	1	---	K.YDEDLGRVAR.F
1328.6799	1327.6726	1327.6521	15.5	365	376	0	---	K.NIDSGFGQVSHPK.N
1361.7147	1360.7074	1360.7272	-14.51	286	297	1	---	R.EVALLAEMDKVK.A + Oxidation (M)
1365.6619	1364.6546	1364.6758	-15.54	21	33	0	---	K.TVLAQGGAFENMK.E
1456.7555	1455.7482	1455.7470	0.82	364	376	1	---	K.KNIDSGFGQVSHPK.N
1524.8040	1523.7967	1523.7593	24.6	437	449	1	---	R.SYQPHREALPGNR.R
1587.7675	1586.7602	1586.7285	20.0	420	436	0	---	K.NSAPGETPATTANSGR.S
1628.7313	1627.7240	1627.7148	5.67	175	189	0	---	R.TGSMLENGVSDFSER.S
1660.8379	1659.8306	1659.8501	-11.75	324	337	1	---	R.MSEEQLVELRADIK.H
1680.8357	1679.8284	1679.8604	-19.03	437	450	2	---	R.SYQPHREALPGNR.G
1682.8409	1681.8336	1681.8709	-22.15	256	269	2	---	R.YRVVKEEMDSIK.K + Oxidation (M)
1969.9951	1968.9878	1968.9905	-1.36	4	20	2	---	R.KQNQKSSGFIPLQSK.T
2243.1448	2242.1375	2242.0951	18.9	450	470	2	---	R.RGGQGYRPQGPSSDPTNQGR.H
2449.2180	2448.2107	2448.2352	-10.00	317	337	2	---	K.MTDVAVRMSEEQLVELRADIK.H + Oxidation (M)
2526.2585	2525.2512	2525.2836	-12.81	65	87	2	---	K.TVQAFMEGSASEVLKQWTVTGKK.K
2542.2578	2541.2505	2541.2785	-11.00	65	87	2	---	K.TVQAFMEGSASEVLKQWTVTGKK.K + Oxidation (M)
2550.2373	2549.2300	2549.2584	-11.15	355	376	2	---	R.FTCDVETLKKNIDSGFGQVSHPK.N
2927.4434	2926.4361	2926.4238	4.21	273	297	2	---	K.QAFIELQSCLMREVALLAEMDKVK.A + 2 Oxidation (M)
3093.4294	3092.4221	3092.4772	-17.81	420	449	2	---	K.NSAPGETPATTANSGRSYQPHREALPGNR.R
3751.7539	3750.7466	3750.8233	-20.44	47	79	1	---	K.SNNEIILVLQHFCDNKTQVQAFMEGSASEVLK.E + Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280,

805.4417, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6722, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.7029, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1364.7118, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0043, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1973.9971, 1975.9755, 1978.9708, 1990.9737, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2540.2451, 2545.2258, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6799, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3830.8091, 3869.7393, 3876.6707, 3885.6946

18. [Q5EAC6](#) Mass: 45065 Score: 18 Expect: 3.6e+002 Matches: 20

Hsp90 co-chaperone Cdc37 OS=Bos taurus GN=CDC37 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
805.4417	804.4344	804.4163	22.5	104	109	1	---	K.LEEMRK.K
949.5244	948.5171	948.5062	11.5	104	110	2	---	K.LEEMRKK.E + Oxidation (M)
1043.5297	1042.5224	1042.5335	-10.62	152	159	1	---	K.TFVEYKEK.Q
1056.5575	1055.5502	1055.5723	-20.94	86	94	0	---	R.LQAEAAQLR.K
1145.6373	1144.6300	1144.6175	10.9	160	168	1	---	K.QIKHFGMLR.R + Oxidation (M)
1194.6001	1193.5928	1193.5863	5.49	37	45	1	---	R.VERMEQFQK.E
1308.6797	1307.6724	1307.6874	-11.42	150	159	2	---	K.HKTfVEYKEK.Q
1358.6919	1357.6846	1357.7089	-17.86	68	80	1	---	K.LKELEVAEGEGGK.A
1375.6693	1374.6620	1374.6602	1.34	338	349	0	---	R.CIDSGLVVPSNR.K
1445.7913	1444.7840	1444.7649	13.2	234	244	2	---	R.ACFRQFFTKIK.T
1467.7560	1466.7487	1466.7187	20.4	37	47	2	---	R.VERMEQFQKE.E + Oxidation (M)
1550.7543	1549.7470	1549.7446	1.55	111	123	1	---	K.EKSPMPNVDTLSK.D + Oxidation (M)
1662.8666	1661.8593	1661.8447	8.82	110	123	2	---	K.EKSPMPNVDTLSK.D
1702.8386	1701.8313	1701.8369	-3.28	33	45	2	---	R.HQARVERMEQFQK.E + Oxidation (M)
1765.8154	1764.8081	1764.8100	-1.09	96	108	2	---	K.EERSWEQKLEEMR.K + Oxidation (M)
2068.9661	2067.9588	2067.9935	-16.78	111	128	2	---	K.EKSPMPNVDTLSKDGFSK.S
2192.0427	2191.0354	2191.0128	10.3	350	371	1	---	K.SSEAKDGEEAGTGDPLEATSK.S
2659.2144	2658.2071	2658.1975	3.61	310	332	2	---	K.CFDKDVQMLQDAISKMDPTDAK.Y + 2 Oxidation (M)
2721.2937	2720.2864	2720.2720	5.30	315	337	2	---	K.DVQMLQDAISKMDPTDAKYHMQR.C
3553.6028	3552.5955	3552.6792	-23.57	176	204	0	---	K.YLSDNVHLVCEETANYLVIWICIDLEVEEK.C

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7635, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1762.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0043, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.9737, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250,

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2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464,
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2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826,
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2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524,
2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441,
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3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854,
3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874,
3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3554.5630, 3558.6460, 3573.6545,
3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206,
3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

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19. [Q2HJG7](#) Mass: 16553 Score: 18 Expect: 3.6e+002 Matches: 10

Protein Churchill OS=Bos taurus GN=CHURC1 PE=2 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
829.4508	828.4435	828.4566	-15.74	3	9	0	---	R.RPSLSNRS.E
981.5225	980.5152	980.5001	15.4	64	71	0	---	R.DFMLITNK.S
1006.5120	1005.5047	1005.4927	12.0	90	97	0	---	K.NCHHVIAR.H
1761.8734	1760.8661	1760.9064	-22.85	1	15	2	---	-.MRRPRLNSREVSSSR.K
2191.0464	2190.0391	2190.0878	-22.24	121	139	1	---	K.AEDTISILPDDPRQMTLLF.- + Oxidation (M)
2277.0642	2276.0569	2276.0613	-1.91	17	35	2	---	K.HRRIFADNGVAMCVDCEK.E
2659.2144	2658.2071	2658.1989	3.11	19	40	2	---	R.RIFADNGVAMCVDCEYFNR.G + Oxidation (M)
2824.2598	2823.2525	2823.2704	-6.35	75	97	1	---	K.EEDGEIIVTDYHLCKNCHHVIAR.H
3127.4749	3126.4676	3126.4889	-6.81	64	89	2	---	R.DFMLITNKSLKEEDGEIIVTDYHLCK.N
3143.5066	3142.4993	3142.4838	4.93	64	89	2	---	R.DFMLITNKSLKEEDGEIIVTDYHLCK.N + Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6622, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.4918, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8608, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9917, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3141.4126, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

20. [Q0VCG0](#) Mass: 10705 Score: 18 Expect: 3.7e+002 Matches: 10

LVR motif-containing protein 4 OS=Bos taurus GN=LYRM4 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
779.4633	778.4560	778.4449	14.3	30	35	1	---	R.TYAIRR.I
842.5101	841.5029	841.5134	-12.49	62	68	1	---	R.DLGIIRR.Q
1148.6318	1147.6245	1147.6098	12.9	36	44	2	---	R.IRDAFRENK.N
1390.7089	1389.7016	1389.6789	16.3	19	29	2	---	R.ESKRFAGYNNY.T
1562.8008	1561.7935	1561.7671	16.9	68	80	1	---	R.RQVHIGQMYSTDK.L
1578.8058	1577.7985	1577.7620	23.1	68	80	1	---	R.RQVHIGQMYSTDK.L + Oxidation (M)
1580.8580	1579.8507	1579.8140	23.2	1	14	1	---	-.MAASSRAQVLIDL.YR.A
1580.8600	1579.8527	1579.8140	24.5	1	14	1	---	-.MAASSRAQVLIDL.YR.A
1650.8429	1649.8356	1649.8426	-4.24	23	35	2	---	R.FGAYNNYTYAIRR.I
1938.0171	1937.0098	1937.0582	-24.95	42	58	2	---	R.ENKNVKDPEIQALVNNK.A

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672,



949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1568.7620, 1572.7245, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1778.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1808.0593, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2408, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3233, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

21. [G3N0J4](#) Mass: 6707 Score: 18 Expect: 4e+002 Matches: 6

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1194.6001	1193.5928	1193.5750	14.9	17	26	0	---	R.LPEAMLEGGYR.A + Oxidation (M)
1657.8483	1656.8410	1656.8431	-1.24	27	42	2	---	R.AESIPPTSSGRNEGGK.E
2277.0642	2276.0569	2276.1107	-23.61	17	37	1	---	R.LPEAMLEGGYRAESIPPTSSGR.N + Oxidation (M)
2545.2258	2544.2185	2544.2254	-22.36	14	37	2	---	R.AGRLEPAMLEGGYRAESIPPTSSGR.N
2689.3059	2688.2986	2688.3177	-7.09	17	41	2	---	R.LPEAMLEGGYRAESIPPTSSGRNEGGK.K
2705.2944	2704.2871	2704.3126	-9.42	17	41	2	---	R.LPEAMLEGGYRAESIPPTSSGRNEGGK.K + Oxidation (M)
<b>No match to:</b> 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 924.4565, 929.4484, 933.4373, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1568.7620, 1572.7245, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1778.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1808.0593, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2295.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3233, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4126, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946								



22. [F1N2B6](#) Mass: 97976 Score: 18 Expect: 4.1e+002 Matches: 19

Uncharacterized protein OS=Bos taurus GN=AR PE=3 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
988.4922	987.4849	987.4873	-2.41	274	-	283	0	--- K.GSLLDGDPGSK.G
1356.6255	1355.6182	1355.6326	-10.58	590	-	601	1	--- K.CYEAGMTLGARK.L
1372.6228	1371.6155	1371.6275	-8.72	590	-	601	1	--- K.CYEAGMTLGARK.L + Oxidation (M)
1475.7615	1474.7542	1474.7278	17.9	797	-	807	1	--- K.FFDELRMNLIK.E
1484.7480	1483.7407	1483.7275	8.90	589	-	601	2	--- R.KCYEAGMTLGARK.L
1500.7393	1499.7320	1499.7224	6.39	589	-	601	2	--- R.KCYEAGMTLGARK.L + Oxidation (M)
1500.7400	1499.7327	1499.7224	6.86	589	-	601	2	18 R.KCYEAGMTLGARK.L + Oxidation (M)
1625.7886	1624.7813	1624.8177	-22.41	587	-	600	2	--- R.LRKCYEAGMTLGAR.K
2017.9860	2016.9787	2016.9310	23.7	205	-	223	1	--- K.DSYLGSGSSITSDSAKELCK.A
2174.0508	2173.0435	2173.0489	-2.46	732	-	748	1	--- R.MLYFAPDLVFNEYRMHK.S
2449.2180	2448.2107	2448.1718	15.9	732	-	750	2	--- R.MLYFAPDLVFNEYRMHKSR.M + 2 Oxidation (M)
2699.2324	2698.2251	2698.2850	-22.17	724	-	745	1	--- R.SFTNVNRMRLYFAPDLVFNEYR.M + Oxidation (M)
2912.4265	2911.4192	2911.3853	11.7	247	-	273	0	--- R.GDCMYAPLLGPPAAVRPTCAPLAECK.G
3478.6123	3477.6050	3477.6693	-18.49	54	-	82	2	--- R.LQQQQETSPRQQQQQQQREDGSPQVQSR.G
3707.7200	3706.7127	3706.6706	11.4	83	-	116	0	--- R.GPTGYLALEEEQQPSQHHSAPEGHGPGVPEPR.A
3719.6914	3718.6841	3718.7329	-13.39	751	-	779	2	--- R.MYSQCVMRHLSQEFGLQITPQEFCLCMK.A + Oxidation (M)
3735.7100	3734.7027	3734.7288	-6.99	751	-	779	2	--- R.MYSQCVMRHLSQEFGLQITPQEFCLCMK.A + 2 Oxidation (M)
3751.7539	3750.7466	3750.7238	6.10	751	-	779	2	--- R.MYSQCVMRHLSQEFGLQITPQEFCLCMK.A + 3 Oxidation (M)
3869.7393	3868.7320	3868.6841	12.4	482	-	514	2	--- R.VPYPSPCSVKSEMGFWMENYSGPYGDMRLETR.D + 3 Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.5423, 986.5463, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1479.8038, 1483.7579, 1487.7660, 1488.7366, 1493.7556, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2175.0435, 2178.0483, 2188.0610, 2191.0644, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3159.5210, 3219.4954, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6585, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3714.5493, 3715.6206, 3720.7048, 3723.7041, 3830.8091, 3876.6707, 3885.6946

23. [A8QW39](#) Mass: 16136 Score: 18 Expect: 4.2e+002 Matches: 9

Protein FAM183A OS=Bos taurus GN=FAM183A PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
928.4565	927.4493	927.4596	-11.16	1	-	8	1	--- -.MAGHQKEK.A
1076.6190	1075.6117	1075.5927	17.7	109	-	116	1	--- R.LNHFVRVYK.D
1403.7434	1402.7361	1402.7357	0.29	33	-	43	0	--- K.LYTYQVHNPLR.K
1572.7245	1571.7172	1571.7514	-21.77	123	-	135	2	--- K.AKMWSLGEDDRHK.-
1810.0460	1809.0387	1808.9937	24.9	109	-	122	2	--- R.LNHFVRVYKIDITLYK.A
2057.0154	2056.0081	2055.9935	7.11	117	-	133	2	--- K.DITLYKAKMWSLGEDDR.H + Oxidation (M)
2573.2495	2572.2422	2572.2605	-7.09	45	-	66	1	--- K.VHTIARKPMSWHDNLEEPADAR.F
2717.2903	2716.2830	2716.3503	-24.78	44	-	66	2	--- R.KVHTIARKPMSWHDNLEEPADAR.F + Oxidation (M)
2801.2932	2800.2859	2800.3304	-15.88	81	-	104	1	--- K.KYPETQTGEGIGWDSLEPLNPQR.D

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.5423, 986.5463, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013,

1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2353.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3159.5210, 3160.6021, 3179.9012, 3183.8062, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 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2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3159.5210, 3160.6021, 3179.9012, 3183.8062, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 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2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2576.1792, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3159.5210, 3160.6021, 3179.9012, 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25. [Q95106](#) Mass: 28555 Score: 17 Expect: 4.5e+002 Matches: 15

Brain-derived neurotrophic factor OS=Bos taurus GN=BDNF PE=2 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
781.3725	780.3652	780.3687	-4.51	220	- 226	0	---	R.ALTMDSK.K + Oxidation (M)
1118.5687	1117.5614	1117.5880	-23.78	28	- 38	0	---	R.AQGSLAYPGVR.T
1572.7245	1571.7172	1571.7184	-0.76	118	- 130	1	---	K.NYLDANMSMRVR.R + 2 Oxidation (M)
1616.8165	1615.8092	1615.7876	13.4	213	- 226	1	---	R.TTQSYVRALTMDSK.K + Oxidation (M)
1651.8369	1650.8296	1650.8499	-12.25	157	- 172	1	---	K.KTAVDMSGGVTIVLEK.V + Oxidation (M)
1696.8464	1695.8391	1695.8297	5.57	118	- 131	2	---	K.NYLDANMSMRVR.H
1728.8840	1727.8767	1727.8876	-6.30	213	- 227	2	---	R.TTQSYVRALTMDSKK.R
1779.9012	1778.8939	1778.9131	-10.80	236	- 250	2	---	R.IDTSCVCTLTIKRGR.-
2011.9381	2010.9308	2010.9065	12.1	80	- 96	1	---	K.VRPFSENNKADAMYTSR.V
2055.0205	2054.0132	2054.0113	0.93	1	- 17	0	---	-.MTILFLTMVISYFGCMK.A
2102.9954	2101.9881	2101.9961	-3.78	1	- 17	0	---	-.MTILFLTMVISYFGCMK.A + 3 Oxidation (M)
2122.9578	2121.9505	2122.0001	-23.35	138	- 156	1	---	R.RGELSVCDSISEWVTAADK.K
2251.1108	2250.1035	2250.0950	3.77	138	- 157	2	---	R.RGELSVCDSISEWVTAADKK.T
2438.2283	2437.2210	2437.2282	-2.93	2	- 22	1	---	M.TILFLTMVISYFGCMKAAPMK.E + Oxidation (M)
2786.2561	2785.2488	2785.3089	-21.59	132	- 156	2	---	R.HSDPARRGELSVCDSISEWVTAADK.K

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8351, 1682.8409, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2109.0095, 2112.9932, 2114.9707, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2027, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

26. [G5E620](#) Mass: 21503 Score: 17 Expect: 4.6e+002 Matches: 11

Uncharacterized protein OS=Bos taurus GN=LOC101904345 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
820.3700	819.3627	819.3659	-3.88	160	- 165	0	---	R.MTMFYK.K
1356.6255	1355.6182	1355.6140	3.15	167	- 178	0	---	K.GQLQYDAMTSSR.M
1372.6228	1371.6155	1371.6089	4.85	167	- 178	0	---	K.GQLQYDAMTSSR.M + Oxidation (M)
1484.7480	1483.7407	1483.7089	21.4	166	- 178	1	---	K.KGQLQYDAMTSSR.M
1500.7393	1499.7320	1499.7038	18.8	166	- 178	1	---	K.KGQLQYDAMTSSR.M + Oxidation (M)
1500.7400	1499.7327	1499.7038	19.3	166	- 178	1	9	K.KGQLQYDAMTSSR.M + Oxidation (M)
1787.8407	1786.8334	1786.8737	-22.56	20	- 34	1	---	K.WLDVIDQGNEDDKIK.A
1990.9373	1989.9300	1989.9176	6.26	150	- 165	1	---	K.EQSLESEFPVRMTMFYK.K + Oxidation (M)
2102.9954	2101.9881	2102.0176	-14.03	150	- 166	2	---	K.EQSLESEFPVRMTMFYK.G
2286.0986	2285.0913	2285.0643	11.8	160	- 178	2	---	R.VMTVFYKQQLQYDAMTSSR.M
2501.2207	2500.2134	2500.2705	-22.84	145	- 165	2	---	K.VAVIKEQSLESEFPVRMTMFYK.K + Oxidation (M)

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729,

1278.6892,	1281.6375,	1285.6674,	1289.7029,	1293.6760,	1301.6362,	1303.6489,	1304.6685,	1306.6946,	1308.6797,	1314.7227,	1319.6770,
1320.6364,	1323.6815,	1326.6937,	1328.6799,	1333.7430,	1336.7301,	1337.6429,	1349.6729,	1351.6969,	1353.6891,	1358.6919,	1359.7013,
1361.7147,	1364.7118,	1365.6619,	1366.6965,	1375.6693,	1382.6771,	1383.7347,	1390.7089,	1393.8007,	1397.7449,	1403.7434,	1410.7849,
1416.7737,	1420.7114,	1423.7096,	1434.7847,	1436.7469,	1442.8257,	1445.7913,	1456.7555,	1457.7440,	1467.7560,	1470.7466,	1475.7615,
1479.8038,	1483.7579,	1487.7660,	1488.7366,	1493.7556,	1503.7648,	1504.7708,	1514.7063,	1516.7281,	1519.7705,	1522.7722,	1524.8040,
1526.7924,	1528.7079,	1530.7058,	1536.7252,	1537.7859,	1540.8043,	1543.7938,	1550.7543,	1551.7465,	1553.7668,	1555.7836,	1556.8011,
1562.8008,	1568.7620,	1572.7245,	1578.8058,	1580.8580,	1580.8600,	1584.8486,	1587.7675,	1608.8051,	1616.8165,	1621.7870,	1625.7886,
1628.7313,	1632.8120,	1635.7964,	1637.7974,	1642.7417,	1647.8439,	1650.8429,	1651.8369,	1655.8147,	1657.8483,	1658.8953,	1660.8379,
1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8357,	1682.8409,	1696.8464,	1698.8180,	1701.8243,	1702.8386,	1707.8938,	1710.8904,
1714.7905,	1716.8219,	1717.9052,	1718.9094,	1721.8976,	1722.9003,	1724.9030,	1728.8840,	1730.8910,	1734.1617,	1738.8267,	1739.8165,
1741.8934,	1743.9005,	1747.9127,	1758.4807,	1758.8918,	1761.8734,	1765.8154,	1772.0012,	1774.9300,	1774.9319,	1779.9012,	1781.8585,
1783.8062,	1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,	1833.8571,	1834.8650,	1836.8618,	1838.8677,	1845.8363,	1847.8600,
1848.8938,	1850.9128,	1851.8932,	1861.8531,	1862.9542,	1864.9258,	1880.9026,	1883.7704,	1887.8878,	1897.7863,	1902.9769,	1904.9276,
1908.8986,	1920.9131,	1923.9126,	1928.0443,	1932.0068,	1936.9510,	1938.0171,	1947.9314,	1958.9393,	1959.9655,	1960.9813,	1961.9463,
1967.1549,	1969.9951,	1973.9971,	1975.9755,	1976.9708,	1990.4971,	1991.4857,	1997.8479,	2001.8607,	2003.8768,	2004.8850,	2007.9500,
2007.9532,	2011.9381,	2012.8951,	2015.9694,	2017.9860,	2018.9740,	2020.1631,	2023.9482,	2026.9529,	2027.5033,	2029.9972,	2043.5356,
2044.9940,	2055.0205,	2057.0154,	2060.9878,	2066.9939,	2068.9661,	2082.9822,	2086.0254,	2088.1033,	2097.0371,	2098.4941,	2109.0095,
2112.9932,	2114.9707,	2122.9578,	2128.0444,	2130.9980,	2132.0200,	2136.9250,	2140.0063,	2143.0237,	2144.0559,	2145.0781,	2148.0483,
2153.0049,	2153.9973,	2174.0508,	2178.0483,	2188.0610,	2191.0464,	2192.0427,	2199.1150,	2205.0615,	2211.1067,	2223.1533,	
2225.1382,	2226.1472,	2239.1646,	2243.1448,	2246.9482,	2251.1108,	2255.1484,	2265.0837,	2271.1211,	2273.0735,	2277.0642,	2283.1606,
2285.1355,	2289.0901,	2291.0173,	2309.0349,	2328.9888,	2343.0608,	2352.9583,	2355.0383,	2366.9595,	2371.0325,	2392.1594,	2400.0532,
2424.1577,	2434.2429,	2438.2283,	2449.2180,	2450.2451,	2451.2480,	2465.1592,	2466.2458,	2467.2458,	2478.1377,	2523.2014,	2526.2585,
2540.2451,	2542.2578,	2545.2258,	2550.2373,	2561.6841,	2562.1826,	2562.6890,	2573.2495,	2576.1792,	2646.9758,	2659.2144,	2661.1409,
2662.0120,	2671.1924,	2681.2705,	2682.2888,	2685.3098,	2689.3059,	2695.1064,	2696.2695,	2699.2324,	2703.2529,	2705.2944,	2712.2937,
2717.2903,	2720.2839,	2721.2937,	2726.2935,	2727.2986,	2728.3079,	2739.2837,	2743.2729,	2744.2207,	2745.2256,	2746.2031,	2748.2295,
2755.2700,	2760.2590,	2763.1829,	2771.2400,	2778.1865,	2785.2699,	2786.2561,	2787.2524,	2790.2317,	2792.2166,	2800.3093,	2801.2932,
2803.2415,	2804.2429,	2807.2869,	2808.2227,	2812.2244,	2813.2373,	2817.2632,	2820.2441,	2824.2598,	2828.2454,	2833.2544,	2843.2900,
2844.3398,	2847.3630,	2851.3313,	2864.3188,	2890.3293,	2896.4324,	2908.3105,	2910.3325,	2911.3594,	2912.4265,	2925.3323,	2927.4434,
3023.3674,	3025.3865,	3026.3452,	3039.3838,	3042.3542,	3070.3745,	3071.3933,	3086.3984,	3087.3970,	3093.4294,	3101.3831,	3103.4006,
3104.4041,	3110.4143,	3127.4749,	3141.4126,	3143.5066,	3144.5298,	3159.5210,	3219.4854,	3236.5574,	3266.6021,	3280.5635,	3321.6216,
3344.4895,	3347.5515,	3348.5020,	3380.5210,	3396.5195,	3412.5801,	3427.6099,	3428.5874,	3444.5840,	3462.6301,	3478.6123,	3484.6497,
3489.7246,	3505.6919,	3510.5859,	3521.6392,	3552.6614,	3553.6028,	3554.5630,	3558.6460,	3573.6545,	3589.6523,	3608.6155,	3624.6685,
3630.5806,	3641.7090,	3651.7944,	3667.7266,	3683.6980,	3691.7681,	3707.7200,	3714.5493,	3715.6206,	3719.6914,	3720.7048,	3723.7041,
3735.7100,	3751.7539,	3830.8091,	3869.7393,	3876.6707,	3885.6946						

27. [Q0II95](#) Mass: 50922 Score: 17 Expect: 4.8e+002 Matches: 22

Inositol hexakisphosphate kinase 1 OS=Bos taurus GN=IP6K1 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
753.3469	752.3396	752.3487	-11.99	195	- 200	1	---	R.MRSESK.D + Oxidation (M)
781.3725	780.3652	780.3622	3.88	354	- 359	1	---	R.SEMRMK.H
1056.5575	1055.5502	1055.5294	19.7	187	- 194	1	---	R.CHKQQLSR.M
1349.6729	1348.6656	1348.6881	-16.66	190	- 200	2	---	K.QQLSRMRSESK.D
1359.7013	1358.6940	1358.6659	20.7	187	- 196	2	---	R.CHKQQLSRMR.S + Oxidation (M)
1365.6619	1364.6546	1364.6830	-20.80	190	- 200	2	---	K.QQLSRMRSESK.D + Oxidation (M)
1423.7096	1422.7023	1422.7076	-3.72	120	- 132	2	---	R.RSLHRSGSGSDHK.E
1436.7469	1435.7396	1435.7089	21.4	247	- 259	1	---	R.KCEQSTSATLGVR.V
1528.7079	1527.7006	1527.7099	-6.10	346	- 357	2	---	R.SESYLDRRSEMR.M
1556.8011	1555.7938	1555.7606	21.4	397	- 409	1	---	R.MIDFAHSTFKGFR.D
1572.7245	1571.7172	1571.7555	-24.35	397	- 409	1	---	R.MIDFAHSTFKGFR.D + Oxidation (M)
1851.8932	1850.8859	1850.9091	-12.51	244	- 259	2	---	R.QMRKCEQSTSATLGVR.V
1936.9510	1935.9437	1935.9400	1.91	330	- 345	1	---	R.FYSSLLVIYDGKECR.S
2003.8768	2002.8695	2002.8659	1.80	2	- 18	1	---	M.CVCQTMEVGGYQGNASR.A + Oxidation (M)
2015.9694	2014.9621	2014.9856	-11.65	421	- 437	0	---	R.GYVFGLENLISIMEQMR.D + Oxidation (M)
2097.0371	2096.0298	2096.0578	-13.36	325	- 342	1	---	R.QASYRFYSSLLVIYDGK.E
2285.1355	2284.1282	2284.1434	-6.63	133	- 153	2	---	K.EEKASLPLETSESPQEAQSPK.V
2526.2585	2525.2512	2525.2268	9.69	19	- 41	1	---	R.AGDRGVLLPEFFIHQVGGHSSMMR.Y + 2 Oxidation (M)
2542.2578	2541.2505	2541.2322	7.22	325	- 345	2	---	R.QASYRFYSSLLVIYDGKECR.S
2728.3079	2727.3006	2727.2835	6.29	125	- 150	2	---	R.SGSGSDHKEEKASLPLETSESPQEAQ.S
2925.3323	2924.3250	2924.3974	-24.76	151	- 177	1	---	K.SPQVELHSHSDVPFQMLDGNGLSSEK.I
3236.5574	3235.5501	3235.4914	18.1	410	- 437	1	---	R.DDPTVHDGPDGRGYVFGLENLISIMEQMR.D + 2 Oxidation (M)
No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617,								
747.4360, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076,								
810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262,								
868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174,								
905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672,								
949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463,								
988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466,								
1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056,								
1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647,								
1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371,								
1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874,								
1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6727, 1278.6892, 1281.6375,								
1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815,								
1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1361.7147, 1364.7118, 1366.6965,								
1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1434.7847,								
1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366,								
1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1530.7058,								
1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1562.8008, 1568.7620, 1578.8058, 1580.8580,								
1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417,								
1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1663.8490, 1666.7892, 1668.7892,								
1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8129, 1717.9059, 1720.9129, 1722.9003,								
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1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1809.0583,								
1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9129, 1850.9129,								
1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8996, 1920.9131, 1923.9120, 1923.9120,								
1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9757, 1975.9757,								
1990.9373, 1991.4857, 1997.8479, 2001.8607, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2017.9860, 2017.9860,								
2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9933, 2066.9933,								
2086.0524, 2088.1033, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9998, 2130.9998,								
2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2178.0483,								
2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9448, 2246.9448,								
2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2286.0986, 2289.0901, 2291.0173, 2309.0439, 2328.9888, 2328.9888,								
2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2450.2451,								
2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.0144, 2540.2451, 2545.2258, 2550.2373, 2561.6841, 2562.1820, 2562.1820,								
2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2689.3059,								
2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2739.2859, 2739.2859,								

2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

28. [F6QWT9](#) Mass: 13281 Score: 17 Expect: 4.8e+002 Matches: 5

Uncharacterized protein OS=Bos taurus GN=FAM229A PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1445.7913	1444.7840	1444.7746	6.52	31	46	1	---	R.ARAAASSLGLASASGR.A
2847.3630	2846.3557	2846.3046	18.0	100	124	0	---	R.CPGCHCLTLLPMPIDVYLAMGGSPR.A + 2 Oxidation (M)
3039.3838	3038.3765	3038.4451	-22.56	1	30	1	---	-.MQPSPSTPGPGRAADTCPPPPGPERPPAAR.A + Oxidation (M)
3266.6021	3265.5948	3265.5833	3.53	1	32	2	---	-.MQPSPSTPGPGRAADTCPPPPGPERPPAARAR.A + Oxidation (M)
3651.7944	3650.7871	3650.7965	-2.56	64	98	0	---	R.FPIEAGDSPGLAAAPESQDSPEPVATEHNPVRLR.R

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.5677, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6659, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7909, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9476, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.0148, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.2937, 2739.2837, 2743.2279, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2851.3325, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

29. [A4FV50](#) Mass: 40277 Score: 17 Expect: 4.8e+002 Matches: 17

MGC142792 protein OS=Bos taurus GN=MGC142792 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1143.5592	1142.5519	1142.5655	-11.87	234	242	0	---	K.CEKPFLGHR.H
1145.6373	1144.6300	1144.6088	18.6	179	188	1	---	K.ELTADARELK.G
1326.6937	1325.6864	1325.6689	13.2	315	324	1	---	K.CYEKFPLELK.K
1543.7938	1542.7865	1542.7575	18.8	303	314	1	---	K.FVEFDMKPVCKK.C + Oxidation (M)
1657.8483	1656.8410	1656.8004	24.5	301	313	1	---	K.NKFEVDFMKPVCK.K + Oxidation (M)
1761.8734	1760.8661	1760.8226	24.7	186	199	1	---	R.ELKGVFLCYLCPCHKD.K
1904.9276	1903.9203	1903.9118	4.47	124	138	2	---	K.NAGRHLCRCPCHNREK.A
2140.0063	2138.9990	2139.0506	-24.13	216	233	1	---	R.VVNAMGKQWVHEHFVCAK.C
2355.0383	2354.0310	2354.0413	-4.35	2	24	0	---	M.LGVASGMTNSNMNALANASCR.C + Oxidation (M)
2371.0325	2370.0252	2370.0362	-4.63	2	24	0	---	M.LGVASGMTNSNMNALANASCR.C + 2 Oxidation (M)
2671.1924	2670.1851	2670.1730	4.53	2	26	1	---	M.LGVASGMTNSNMNALANASCRCR.G + Oxidation (M)
2786.2561	2785.2488	2785.2186	10.9	1	26	1	---	-.MLGVASGMTNSNMNALANASCRCR.G
3280.5635	3279.5562	3279.6005	-13.49	216	242	2	---	R.VVNAMGKQWVHEHFVCAKCEKPFLLGHR.H + Oxidation (M)
3412.5801	3411.5728	3411.5540	5.52	2	34	2	---	M.LGVASGMTNSNMNALANASCRCRGGFAPAEK.I
3428.5874	3427.5801	3427.5489	9.10	2	34	2	---	M.LGVASGMTNSNMNALANASCRCRGGFAPAEK.I + Oxidation (M)
3444.5840	3443.5767	3443.5438	9.55	2	34	2	---	M.LGVASGMTNSNMNALANASCRCRGGFAPAEK.I + 2 Oxidation (M)
3510.5859	3509.5786	3509.5703	2.36	150	178	1	---	K.CHAIDEQPLIFKNDPYHPDFHCANCCK.E

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421,



1178.6371,	1180.6443,	1182.6539,	1184.6431,	1185.6815,	1193.6090,	1194.6001,	1209.6238,	1213.7180,	1216.7178,	1221.5953,	1227.6459,
1229.6874,	1234.6899,	1238.2251,	1239.6622,	1254.6993,	1255.6351,	1264.7139,	1265.1680,	1265.7196,	1269.6532,	1276.6729,	1278.6892,
1281.6375,	1285.6674,	1289.7029,	1293.6760,	1301.6362,	1303.6489,	1304.6685,	1306.6946,	1308.6797,	1314.7227,	1319.6770,	1320.6364,
1323.6815,	1328.6799,	1333.7430,	1336.7301,	1337.6429,	1349.6729,	1351.6969,	1353.6891,	1356.6255,	1358.6919,	1359.7013,	1361.7147,
1364.7118,	1365.6619,	1366.6965,	1372.6228,	1375.6693,	1382.6771,	1383.7347,	1390.7089,	1393.8007,	1397.7449,	1403.7434,	1410.7849,
1416.7737,	1420.7114,	1423.7096,	1434.7847,	1436.7469,	1442.8257,	1445.7913,	1456.7555,	1457.7440,	1467.7560,	1470.7466,	1475.7615,
1479.8038,	1483.7579,	1484.7480,	1487.7660,	1488.7366,	1493.7556,	1500.7393,	1500.7400,	1503.7648,	1504.7708,	1514.7063,	1516.7281,
1519.7705,	1522.7722,	1524.8040,	1526.7924,	1528.7079,	1530.7058,	1536.7252,	1537.7859,	1540.8043,	1550.7543,	1551.7465,	1553.7668,
1555.7836,	1556.8011,	1562.8008,	1568.7620,	1572.7245,	1578.8058,	1580.8580,	1580.8600,	1584.8486,	1587.7675,	1608.8051,	1616.8165,
1621.7870,	1625.7886,	1628.7313,	1632.8120,	1635.7964,	1637.7974,	1642.7417,	1647.8439,	1650.8429,	1651.8369,	1655.8147,	1658.8953,
1660.8379,	1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8357,	1682.8409,	1696.8464,	1698.8180,	1701.8243,	1702.8386,	1707.8938,
1710.8904,	1714.7905,	1716.8219,	1717.9052,	1718.9094,	1721.8976,	1722.9003,	1724.9030,	1728.8840,	1730.8910,	1734.1617,	1738.8267,
1739.8165,	1741.8934,	1743.9005,	1747.9127,	1758.4807,	1758.8918,	1765.8154,	1772.0012,	1774.9300,	1774.9319,	1779.9012,	1781.8585,
1783.8062,	1787.8407,	1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,	1833.8571,	1834.8650,	1836.8618,	1838.8677,	1845.8363,
1847.8600,	1848.8938,	1850.9128,	1851.8932,	1861.8531,	1862.9542,	1864.9258,	1880.9026,	1883.7704,	1887.8878,	1897.7863,	1902.9769,
1908.8986,	1920.9131,	1923.9126,	1928.0443,	1932.0068,	1936.9510,	1938.0171,	1947.9314,	1958.9393,	1959.9655,	1960.9813,	1961.9463,
1967.1549,	1969.9951,	1973.9971,	1975.9755,	1976.9708,	1990.4971,	1990.9373,	1991.4857,	1997.8479,	2001.8607,	2003.8768,	2004.8850,
2007.9500,	2007.9532,	2011.9381,	2012.8951,	2015.9694,	2017.9860,	2018.9740,	2020.1631,	2023.9482,	2026.9529,	2027.5033,	2029.9972,
2043.5356,	2044.9940,	2055.0205,	2057.0154,	2060.9878,	2066.9939,	2068.9661,	2082.9822,	2086.0254,	2088.1033,	2097.0371,	2098.4941,
2102.9954,	2109.0095,	2112.9932,	2114.9707,	2122.9578,	2128.0444,	2130.9980,	2132.0200,	2136.9250,	2143.0237,	2144.0559,	2145.0781,
2148.0483,	2153.0049,	2153.9973,	2174.0508,	2175.0435,	2178.0483,	2188.0610,	2191.0464,	2192.0427,	2199.1150,	2205.0615,	2211.1067,
2223.1533,	2225.1382,	2226.1472,	2239.1646,	2243.1448,	2246.9482,	2251.1108,	2255.1484,	2265.0837,	2271.1211,	2273.0735,	2277.0642,
2283.1606,	2285.1355,	2286.0986,	2289.0901,	2291.0173,	2309.0349,	2328.9888,	2343.0608,	2352.9583,	2366.9595,	2392.1594,	2400.0532,
2424.1577,	2434.2429,	2438.2283,	2449.2180,	2450.2451,	2451.2480,	2465.1592,	2466.2458,	2478.1377,	2501.2207,	2523.2014,	
2526.2585,	2540.2451,	2542.2578,	2545.2258,	2550.2373,	2561.6841,	2562.1826,	2562.6890,	2573.2495,	2576.1792,	2646.9758,	2659.2144,
2661.1409,	2662.0120,	2681.2705,	2682.2888,	2685.3098,	2689.3059,	2695.1064,	2696.2695,	2699.2324,	2703.2529,	2705.2944,	2712.2937,
2717.2903,	2720.2839,	2721.2937,	2726.2935,	2727.2986,	2728.3079,	2739.2837,	2743.2729,	2744.2207,	2745.2256,	2746.2031,	2748.2295,
2755.2700,	2760.2590,	2763.1829,	2771.2400,	2778.1865,	2785.2969,	2787.2524,	2790.2317,	2792.2166,	2800.3093,	2801.2932,	2803.2415,
2804.2429,	2807.2869,	2808.2227,	2812.2244,	2813.2373,	2817.2632,	2820.2441,	2824.2598,	2828.2454,	2833.2544,	2843.2900,	2844.3398,
2847.3630,	2851.3313,	2864.3188,	2890.3293,	2896.4324,	2908.3105,	2910.3325,	2911.3594,	2912.4265,	2925.3323,	2927.4434,	3023.3674,
3025.3865,	3026.3452,	3039.3838,	3042.3542,	3070.3745,	3071.3933,	3086.3984,	3087.3970,	3093.4294,	3101.3831,	3103.4006,	3104.4041,
3110.4143,	3127.4749,	3141.4126,	3143.5066,	3144.5298,	3159.5210,	3219.4854,	3236.5574,	3266.6021,	3321.6216,	3344.4895,	3347.5515,
3348.5020,	3380.5210,	3396.5195,	3427.6099,	3462.6301,	3478.6123,	3484.6497,	3489.7246,	3505.6919,	3521.6392,	3552.6614,	3553.6028,
3554.5630,	3558.6460,	3573.6545,	3589.6523,	3608.6155,	3624.6685,	3630.5806,	3641.7090,	3651.7944,	3667.7266,	3683.6980,	3691.7681,
3707.7200,	3714.5493,	3715.6206,	3719.6914,	3720.7048,	3723.7041,	3735.7100,	3751.7539,	3830.8091,	3869.7393,	3876.6707,	3885.6946

30. [G3MXX8](#) Mass: 36525 Score: 17 Expect: 4.9e+002 Matches: 13

Uncharacterized protein OS=Bos taurus GN=SCRT1 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
873.4370	872.4297	872.4100	22.5	180	-	190	0 ---	R.AGPAGGSSGGR.H
889.4857	888.4784	888.4665	13.5	215	-	222	0 ---	R.SLDSQLAR.R
1045.5594	1044.5521	1044.5676	-14.80	215	-	223	1 ---	R.SLDSQLARR.C
1157.5676	1156.5603	1156.5448	13.5	293	-	302	0 ---	R.AHMQTHSAFK.H
1364.7118	1363.7045	1363.6844	14.8	199	-	210	1 ---	K.TYATSNLSLRHK.Q
1743.9005	1742.8932	1742.8521	23.6	159	-	179	2 ---	R.GAGSGAGGRGARAGAGTEAR.A
2029.9972	2028.9899	2028.9523	18.5	293	-	308	2 ---	R.AHMQTHSAFKHFQCKR.C + Oxidation (M)
2188.0610	2187.0537	2187.0756	-9.99	284	-	302	2 ---	K.AFADRSNLRHMQTHSAFK.H
2523.2014	2522.1941	2522.1746	7.76	128	-	158	0 ---	K.AANASAAAAPSAASAPAPDGGGGVGVGAGR.G
2703.2529	2702.2456	2702.2554	-3.62	269	-	292	2 ---	R.SHTGKPFPGCAHCCKAFADRSNLR.A
2820.2441	2819.2368	2819.3049	-24.16	224	-	247	1 ---	R.CPTCKGVVPMFAMPHLLTHDLR.H + 2 Oxidation (M)
3093.4294	3092.4221	3092.3894	10.6	1	-	28	2 ---	-.MPSRFPQGEGQDTDFSSADLESSYGRAR.S + Oxidation (M)
3321.6216	3320.6143	3320.5842	9.07	127	-	167	2 ---	R.KAANASAAAAPSAASAPAPDGGGGGVGAGTRGAGSGAGGR.G

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1747.9127, 1758.4807, 1758.8918, 1761.8524, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2705.2944, 2712.



3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

31. [GSE5D2](#) Mass: 21544 Score: 17 Expect: 4.9e+002 Matches: 14

Uncharacterized protein OS=Bos taurus GN=TNNI2 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1137.5647	1136.5574	1136.5682	-9.46	15	124	1	---	R.VRMSADAMLK.A + Oxidation (M)
1293.6760	1292.6687	1292.6693	-0.43	114	124	2	---	R.VRMSADAMLK.A + Oxidation (M)
1467.7560	1466.7487	1466.7473	1.00	117	130	1	---	R.MSADAMLKALLGSK.H + 2 Oxidation (M)
1484.7480	1483.7407	1483.7751	-23.20	131	142	2	---	K.HKVCMDLRANLK.Q
1488.7366	1487.7293	1487.7368	-5.05	157	168	2	---	R.DVGDRWNKNEEK.S
1500.7400	1499.7327	1499.7701	-24.90	131	142	2	---	K.HKVCMDLRANLK.Q + Oxidation (M)
1650.8429	1649.8356	1649.8083	16.6	92	104	1	---	K.ELEDNMNQLKFLDLR.G
1666.7892	1665.7819	1665.8032	-12.77	92	104	1	---	K.ELEDNMNQLKFLDLR.G + Oxidation (M)
1722.9003	1721.8930	1721.9168	-13.80	115	130	2	---	R.VRMSADAMLKALLGSK.H + 2 Oxidation (M)
1851.8932	1850.8859	1850.9196	-18.20	92	106	2	---	K.ELEDNMNQLKFLDLR.GK.F + Oxidation (M)
2066.9939	2065.9866	2065.9990	-5.97	72	88	2	---	K.IDAAEEEEKYDMEIRVQK.S
2082.9822	2081.9749	2081.9939	-9.11	72	88	2	---	K.IDAAEEEEKYDMEIRVQK.S + Oxidation (M)
2289.0901	2288.0828	2288.1106	-12.15	67	85	2	---	R.QLHAKIDAAEEEEKYDMEIR.V
3558.6460	3557.6387	3557.6966	-16.26	42	71	1	---	K.QNYLSEHCPLHLPGSMSEVQELCRQLHAK.I

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1143.5592, 1145.5927, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1487.7660, 1493.7556, 1500.7393, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7425, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.9338, 1850.9128, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2068.9661, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2229.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2866.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

32. [Q2YDE5](#) Mass: 22966 Score: 17 Expect: 5.1e+002 Matches: 13

Uncharacterized protein C14orf53 homolog OS=Bos taurus PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
747.4360	746.4287	746.4109	23.9	68	73	0	---	R.SLQIMR.Q
860.4262	859.4189	859.4287	-11.41	28	34	0	---	K.ELNEDLK.L
880.4280	879.4207	879.4338	-14.87	21	27	0	---	K.LDDNYLK.E
1314.7227	1313.7154	1313.6939	16.4	135	146	2	---	K.NKTDLQDGKAPK.T
1504.7708	1503.7635	1503.7351	18.9	92	103	2	---	K.EAEEMKQNLERK.N
1608.8051	1607.7978	1607.7986	-0.45	106	117	2	---	K.MLRKEMEMLWNK.T
1714.7905	1713.7832	1713.8169	-19.66	2	17	1	---	M.TSASNSPESYLSSKTR.S
1721.8976	1720.8903	1720.8519	22.3	21	34	1	---	K.LDDNYLKELNEDLK.L
1845.8363	1844.8290	1844.8574	-15.38	1	17	1	---	-.MTSASNSPESYLSSKTR.S
1861.8531	1860.8458	1860.8523	-3.49	1	17	1	---	-.MTSASNSPESYLSSKTR.S + Oxidation (M)
2057.0154	2056.0081	2056.0000	3.93	118	134	1	---	K.TFNTTEFSDEEKVLQIK.N
2148.0483	2147.0410	2147.0164	11.5	1	20	2	---	-.MTSASNSPESYLSSKTRSSK.L
2812.2244	2811.2171	2811.2770	-21.30	173	198	1	---	R.LFLPPGKETEENGMGQVSGTSQHHSE.- + Oxidation (M)

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 868.4412, 870.4462, 873.4370, 877.4166, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874,

1234.6899,	1238.2251,	1239.6622,	1254.6993,	1255.6351,	1264.7139,	1265.1680,	1265.7196,	1269.6532,	1276.6729,	1278.6892,	1281.6375,
1285.6674,	1289.7029,	1293.6760,	1301.6362,	1303.6489,	1304.6685,	1306.6946,	1308.6797,	1319.6770,	1320.6364,	1323.6815,	1326.6937,
1328.6799,	1333.7430,	1336.7301,	1337.6429,	1349.6729,	1351.6969,	1353.6891,	1356.6255,	1358.6919,	1359.7013,	1361.7147,	1364.7118,
1365.6619,	1366.6965,	1372.6228,	1375.6693,	1382.6771,	1383.7347,	1390.7089,	1393.8007,	1397.7449,	1403.7434,	1410.7849,	1416.7737,
1420.7114,	1423.7096,	1434.7847,	1436.7469,	1442.8257,	1445.7913,	1456.7555,	1457.7440,	1467.7560,	1470.7466,	1475.7615,	1479.8038,
1483.7579,	1484.7480,	1487.7660,	1488.7366,	1493.7556,	1500.7393,	1500.7400,	1503.7648,	1514.7063,	1516.7281,	1519.7705,	1522.7722,
1524.8040,	1526.7924,	1528.7079,	1530.7058,	1536.7252,	1537.7859,	1540.8043,	1543.7938,	1550.7543,	1551.7465,	1553.7668,	1555.7836,
1556.8011,	1562.8008,	1568.7620,	1572.7245,	1578.8058,	1580.8580,	1580.8600,	1584.8486,	1587.7675,	1616.8165,	1621.7870,	1625.7886,
1628.7313,	1632.8120,	1635.7964,	1637.7974,	1642.7417,	1647.8439,	1650.8429,	1651.8369,	1655.8147,	1657.8483,	1658.8953,	1660.8379,
1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8357,	1682.8409,	1696.8464,	1698.8180,	1701.8243,	1702.8386,	1707.8938,	1710.8904,
1716.8219,	1717.9052,	1718.9094,	1722.9003,	1724.9030,	1728.8840,	1730.8910,	1734.1617,	1738.8267,	1739.8165,	1741.8934,	1743.9005,
1747.9127,	1758.4807,	1758.8918,	1761.8734,	1765.8154,	1772.0012,	1774.9300,	1774.9319,	1779.9012,	1781.8505,	1783.8062,	1787.8047,
1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,	1833.8512,	1834.8650,	1836.8618,	1838.8677,	1847.8600,	1848.8938,	1850.9128,
1851.8932,	1862.9542,	1864.9258,	1880.9026,	1883.7704,	1887.8878,	1897.7863,	1902.9769,	1904.9276,	1908.8986,	1920.9131,	1923.9126,
1928.0443,	1932.0068,	1936.9510,	1938.0171,	1947.9314,	1958.9393,	1959.9655,	1960.9813,	1961.9463,	1967.1549,	1969.9951,	1973.9971,
1975.9755,	1976.9708,	1990.4971,	1990.9373,	1991.4857,	1997.8479,	2001.8607,	2003.8768,	2004.8850,	2007.9500,	2007.9532,	2011.9381,
2012.8951,	2015.9694,	2017.9860,	2018.9740,	2020.1631,	2023.9482,	2026.9529,	2027.5033,	2029.9972,	2043.5356,	2044.9940,	2055.0205,
2060.9878,	2066.9939,	2068.9661,	2082.9822,	2086.0254,	2088.1033,	2097.0371,	2098.4941,	2102.9954,	2109.0095,	2112.9932,	2114.9707,
2122.9578,	2128.0444,	2130.9980,	2132.0200,	2136.9250,	2140.0063,	2143.0237,	2144.0559,	2145.0781,	2153.0049,	2153.9973,	2174.0508,
2175.0435,	2178.0483,	2188.0610,	2191.0464,	2192.0427,	2199.1150,	2205.0615,	2211.1067,	2223.1533,	2225.1382,	2226.1472,	2239.1646,
2243.1448,	2246.9482,	2251.1108,	2255.1484,	2265.0837,	2271.1211,	2273.0735,	2277.0642,	2283.1606,	2285.1355,	2286.0986,	2289.0901,
2291.0173,	2309.0349,	2328.9888,	2343.0608,	2352.9583,	2355.0383,	2366.9595,	2371.0325,	2392.1594,	2400.0532,	2424.1577,	2434.2429,
2438.2283,	2449.2180,	2450.2451,	2451.2480,	2465.1592,	2466.2458,	2467.2458,	2478.1377,	2501.2207,	2523.2014,	2526.2585,	2540.2451,
2542.2578,	2545.2258,	2550.2373,	2561.6841,	2562.1826,	2562.6890,	2573.2495,	2576.1792,	2646.9758,	2659.2144,	2661.1409,	2662.0120,
2671.1924,	2681.2705,	2682.2888,	2685.3098,	2689.3059,	2695.1064,	2696.2695,	2699.2324,	2703.2529,	2705.2944,	2712.2937,	2717.2903,
2720.2839,	2721.2937,	2726.2935,	2727.2986,	2728.3079,	2739.2837,	2743.2729,	2744.2207,	2745.2256,	2746.2031,	2748.2295,	2755.2700,
2760.2590,	2763.1829,	2771.2400,	2778.1865,	2785.2969,	2786.2561,	2787.2524,	2790.2317,	2792.2166,	2800.3093,	2801.2932,	2803.2415,
2804.2429,	2807.2869,	2808.2227,	2813.2373,	2817.2632,	2820.2441,	2824.2598,	2828.2454,	2833.2544,	2843.2900,	2844.3398,	2847.3630,
2851.3313,	2864.3188,	2890.3293,	2896.4324,	2908.3105,	2910.3325,	2911.3594,	2912.4265,	2925.3323,	2927.4434,	2932.3674,	2935.3865,
3026.3452,	3039.3838,	3042.3542,	3070.3745,	3071.3933,	3086.3984,	3087.3970,	3093.4294,	3101.3831,	3103.4006,	3104.4041,	3110.4143,
3127.4749,	3141.4126,	3143.5066,	3144.5298,	3159.5210,	3219.4854,	3236.5574,	3266.6021,	3280.5635,	3321.6216,	3344.4895,	3347.5515,
3348.5020,	3380.5210,	3396.5195,	3412.5801,	3427.6099,	3428.5874,	3444.5840,	3462.6301,	3478.6123,	3484.6497,	3489.7246,	3505.6919,
3510.5859,	3521.6392,	3552.6614,	3553.6028,	3554.5630,	3558.6460,	3573.6545,	3589.6523,	3608.6155,	3624.6685,	3630.5806,	3641.7090,
3651.7944,	3667.7266,	3683.6980,	3691.7681,	3707.7200,	3714.5493,	3715.6206,	3719.6914,	3720.7048,	3723.7041,	3735.7100,	3751.7539,
3830.8091,	3869.7393,	3876.6707,	3885.6946								

33. [F1N7K1](#) Mass: 24749 Score: 17 Expect: 5.1e+002 Matches: 12

Ropporin-l-like protein OS=Bos taurus GN=ROPN1L PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
972.5023	971.4950	971.5110	-16.47	103	110	0	---	K.NLCLPVEK.F
1301.6362	1300.6289	1300.6333	-3.35	113	123	0	---	R.ALLQLDPCEDK.I
1319.6770	1318.6697	1318.6373	24.6	59	69	1	---	K.DRIEMPMAQK.T
1349.6729	1348.6656	1348.6816	-11.83	163	173	0	---	R.IPFQTFYSVYVR.Y
1456.7555	1455.7482	1455.7432	3.45	203	215	0	---	K.NGMIGLSDDFFVLK.R + Oxidation (M)
1584.8486	1583.8413	1583.8382	2.00	202	215	1	---	R.KNGMIGLSDDFFVLK.R + Oxidation (M)
1765.8154	1764.8081	1764.8465	-21.73	147	162	0	---	K.HLCEILTDTDEGGPAR.I
2097.0371	2096.0298	2096.0327	-1.37	33	51	0	---	R.TQPDADVLQWSAGYFSALSR.G
2277.0642	2276.0569	2276.0895	-14.33	85	102	2	---	K.QCSHKEYVDLADLEQKWK.N
2540.2451	2539.2378	2539.3001	-24.51	124	146	1	---	K.IEWIKFLALGCSMLGGSLNTAMK.H
2689.3059	2688.2986	2688.3655	-24.89	2	24	0	---	M.PLPDITMFAQQHIPPPELDILK.Q + Oxidation (M)
3143.5066	3142.4993	3142.5305	-9.94	174	202	2	---	R.YLSGLSDSDIPESDTEAYLSSLKENAAARK.N
No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5951, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3239, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100,								

34. [F1N1Y9](#) Mass: 49406 Score: 17 Expect: 5.2e+002 Matches: 19

Zinc finger protein 2 OS=Bos taurus GN=ZNF2 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
950.5168	949.5096	949.4981	12.1	418	-	425	2	--- R.RYAKQGID.-
961.5109	960.5037	960.5253	-22.58	303	-	310	0	--- R.HQLIHTGR.K
1056.5575	1055.5502	1055.5764	-24.77	250	-	258	0	--- R.IHTGKPFK.C
1110.5851	1109.5778	1109.6054	-24.83	410	-	418	1	--- K.SSVIQHQRR.Y
1113.5701	1112.5628	1112.5614	1.24	321	-	330	0	--- K.AFYGVSSLNLR.H
1126.6241	1125.6168	1125.5938	20.5	382	-	389	2	--- R.CRLTRHQR.V
1130.5756	1129.5683	1129.5741	-5.08	331	-	340	1	--- R.HQKAHAGEPR.Y
1658.8953	1657.8880	1657.9012	-7.97	405	-	418	2	--- K.VFSSKSSVIQHQR.Y
1920.9131	1919.9058	1919.8618	22.9	259	-	274	2	--- K.CSECGKAFFDRSSLTR.H
2225.1382	2224.1309	2224.1250	2.68	321	-	340	2	--- K.AFYGVSSLNLRHQKAHAGEPR.Y
2239.1646	2238.1573	2238.1718	-6.47	30	-	47	2	--- R.LVPTQRDLKYEVMLENYK.S
2255.1484	2254.1411	2254.1667	-11.35	30	-	47	2	--- R.LVPTQRDLKYEVMLENYK.S + Oxidation (M)
2466.2458	2465.2385	2465.2696	-12.61	139	-	159	2	--- K.ESLTVEACKKPPSLESLRHR.A
2526.2585	2525.2512	2525.2380	5.24	384	-	404	2	--- R.LTRHQRVHTGKPFECSCVGK.V
2745.2256	2744.2183	2744.2507	-11.80	270	-	292	2	--- R.SSLTRHQRHTGSPFYECNQCGK.A
2911.3594	2910.3521	2910.3752	-7.94	278	-	302	2	--- R.IHTGESPYECNQCGKAFSQKSILTR.H
3280.5635	3279.5562	3279.5619	-1.73	2	-	29	2	--- M.AAVSPTRCQDPVTFEDVAVVFTDEEWRR.L
3321.6216	3320.6143	3320.5931	6.39	303	-	330	2	--- R.HQLIHTGRKPYECNECGKAFYGVSSLNLR.H
3427.6099	3426.6026	3426.5973	1.55	1	-	29	2	--- -.MAAVSPTRCQDPVTFEDVAVVFTDEEWRR.L + Oxidation (M)
No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 957.5792, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1118.5687, 1120.6050, 1128.5892, 1128.6047, 1128.5618, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2226.1472, 2243.1448, 2246.9482, 2251.1108, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2540.0251, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2629, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946								

35. [P79136](#) Mass: 34176 Score: 17 Expect: 5.2e+002 Matches: 14

F-actin-capping protein subunit beta OS=Bos taurus GN=CAP2B PE=1 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1006.5120	1005.5047	1005.4992	5.52	189	-	197	1	--- K.SSGRTAHYK.L
1057.6187	1056.6114	1056.5927	17.7	289	-	297	1	--- K.NDLVEALKR.K
1057.6200	1056.6127	1056.5927	18.9	289	-	297	1	7 K.NDLVEALKR.K
1110.5851	1109.5778	1109.5717	5.53	274	-	283	1	--- R.SVQTFADKSK.Q
1185.6815	1184.6742	1184.6877	-11.36	289	-	298	2	--- K.NDLVEALKRK.Q
1337.6429	1336.6356	1336.6405	-3.66	211	-	224	0	--- K.SGSGTMNLGGSILTR.Q
1568.7620	1567.7547	1567.7267	17.9	125	-	137	0	--- K.LEVEANNAFDQYR.D
1662.8666	1661.8593	1661.8737	-8.64	267	-	281	1	--- K.DIVNGLRSVQTFADK.S
1696.8464	1695.8391	1695.8216	10.3	124	-	137	1	--- R.KLEVEANNAFDQYR.D
1787.8407	1786.8334	1786.8672	-18.90	108	-	123	1	--- K.YDPPLEDGAMP SARLR.K
1932.0068	1930.9995	1930.9571	22.0	108	-	124	2	--- K.YDPPLEDGAMP SARLR.K + Oxidation (M)
2055.0205	2054.0132	2054.0619	-23.69	172	-	188	2	--- K.KIKGCWDSIHVVVEQEK.S
2745.2256	2744.2183	2744.2381	-7.22	229	-	252	1	--- K.DETVSDCSPHIANIGRLVEDMENK.I + Oxidation (M)
2911.3594	2910.3521	2910.2879	22.1	96	-	121	2	--- R.DGDSYRSPWNSKYPDPLEDGAMP SAR.L
No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703,								

1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1527.7222, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0601, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0439, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3386.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

36. [Q0VC77](#) Mass: 19543 Score: 17 Expect: 5.3e+002 Matches: 9

CCDC49 protein OS=Bos

taurus GN=CCDC49

PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
805.4417	804.4344	804.4355	-1.27	144	- 149	1	---	R.VHHEKR.W
920.4296	919.4223	919.4433	-22.86	1	- 9	0	---	-.MGGGDLNLK.K + Oxidation (M)
1024.5542	1023.5469	1023.5250	21.4	11	- 18	0	---	K.SWHPQTLR.N
1185.6815	1184.6742	1184.6513	19.4	37	- 45	1	---	K.IEELQREL.R.E
1851.8932	1850.8859	1850.8945	-4.61	49	- 64	2	---	R.AREEMQRYAEDVGAVK.K
1883.7704	1882.7631	1882.8057	-22.60	150	- 164	1	---	R.WAGRSTWSQDCWEK.Y
2153.9973	2152.9900	2153.0034	-6.20	66	- 83	2	---	K.KEEKLDWMYQGGPGMVNR.D + Oxidation (M)
3236.5574	3235.5501	3235.5853	-10.87	104	- 135	1	---	K.EAGCSSETGLLPGSIFAPSGANSLDLMASKIR.E
3484.6497	3483.6424	3483.6207	6.23	100	- 133	1	---	K.MEEKEAGCSSETGLLPGSIFAPSGANSLDLMASK.I

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1362.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8486, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2280, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3360.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

37. [F1MHLL1](#) Mass: 40868 Score: 17 Expect: 5.3e+002 Matches: 19

Hsp90 co-chaperone Cdc37 OS=Bos taurus GN=CDC37 PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
716.3353	715.3281	715.3177	14.5	205	-	210	0	--- R.SFYGDK.H
805.4417	804.4344	804.4163	22.5	71	-	76	1	--- K.LEEMRR.K
949.5244	948.5171	948.5062	11.5	71	-	77	2	--- K.LEEMRRK.E + Oxidation (M)
1043.5297	1042.5224	1042.5335	-10.62	119	-	126	1	--- K.TFVEKYEK.Q
1056.5575	1055.5502	1055.5723	-20.94	53	-	61	0	--- R.LQAEAQQLR.K
1145.6373	1144.6300	1144.6175	10.9	127	-	135	1	--- K.QIKHFGMLR.R + Oxidation (M)
1180.6443	1179.6370	1179.6302	5.82	224	-	233	0	--- R.RPGFHPWVGK.I
1194.6001	1193.5928	1193.5863	5.49	4	-	12	1	--- R.VERMEQFQK.E
1308.6797	1307.6724	1307.6874	-11.42	117	-	126	2	--- K.HKTFVEKYEK.Q
1358.6919	1357.6846	1357.7089	-17.86	35	-	47	1	--- K.LKELEVAEGGGK.A
1375.6693	1374.6620	1374.6602	1.34	306	-	317	0	--- R.CIDSGLVVPSK.S
1467.7560	1466.7487	1466.7187	20.4	4	-	14	2	--- R.VERMEQFQKEK.E + Oxidation (M)
1550.7543	1549.7470	1549.7446	1.55	78	-	90	1	--- K.EKSMPWNVDTLISK.D + Oxidation (M)
1662.8666	1661.8593	1661.8447	8.82	77	-	90	2	--- K.EKSMPWNVDTLISK.D
1765.8154	1764.8081	1764.8100	-1.09	63	-	75	2	--- K.EERSWEQKLEEMR.K + Oxidation (M)
2068.9661	2067.9588	2067.9935	-16.78	78	-	95	2	--- K.EKSMPWNVDTLISKDGFSK.S
2192.0427	2191.0354	2191.0128	10.3	318	-	339	1	--- K.SSEAKDGEEAGTGDPLLEATSK.S
2277.0642	2276.0569	2276.1008	-19.28	262	-	279	1	--- K.ELHMTQLSLHFFTTTRD.R + Oxidation (M)
2685.3098	2684.3025	2684.3500	-17.67	239	-	261	2	--- R.ERLPTPVFWPFGFHLGLYSPGDRK.E

No match to: 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.6180, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2627, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3145.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

38. [F1MQW7](#) Mass: 14077 Score: 16 Expect: 5.4e+002 Matches: 6

Uncharacterized protein OS=Bos taurus GN=C15H1lorf97 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1221.5953	1220.5880	1220.6012	-10.79	51	-	59	1	--- K.KFLYCEPHK.R
1526.7924	1525.7851	1525.7736	7.54	3	-	17	0	--- R.EEEAAAVVITVPQAGR.D
1682.8409	1681.8336	1681.8747	-24.44	2	-	17	1	--- M.EEEAAAVVITVPQAGR.D
2760.2590	2759.2517	2759.2682	-5.96	18	-	46	1	--- R.DGEQFGPPAGLGCAAVRGEFGGGGPFQESR.K
3159.5210	3158.5137	3158.5415	-8.79	3	-	34	1	--- R.EEEAAAVVITVPQAGRDGEQFGPPAGLGCAAVR.G
3462.6301	3461.6228	3461.6780	-15.93	1	-	34	2	--- M.EEEAAAVVITVPQAGRDGEQFGPPAGLGCAAVR.G + Oxidation (M)

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.6180, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 19



1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2880.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

39. [E1B9E7](#) Mass: 17216 Score: 16 Expect: 5.4e+002 Matches: 10

Uncharacterized protein OS=Bos taurus GN=LOC783279 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
905.4763	904.4690	904.4510	19.9	50	-	56	0	--- K.MPICILQK.K + Oxidation (M)
1150.6226	1149.6153	1149.5924	19.9	1	-	10	2	--- -.MGSRTLKDSR.L
1372.6228	1371.6155	1371.6313	-11.54	97	-	107	1	--- R.DCSQRVDHLRSR.N
1457.7440	1456.7367	1456.7133	16.1	79	-	89	1	--- K.DNFNNMYLQKLR.V + Oxidation (M)
2003.8768	2002.8695	2002.8408	14.3	120	-	138	0	--- K.GNCQGDGSGAPMVCTIHGSR.R
2174.0508	2173.0435	2173.0408	1.24	102	-	119	1	--- R.VDHLSRNMLCAWQLGTG.G + Oxidation (M)
2255.1484	2254.1411	2254.1389	0.97	90	-	107	2	--- R.VVQITWRDCSQRVDHLRSR.N
2720.2839	2719.2766	2719.2378	14.3	120	-	144	2	--- K.GNCQGDGSGAPMVCTIHGSRRLFQVG.- + Oxidation (M)
2804.2429	2803.2356	2803.2952	-21.26	97	-	119	2	--- R.DCSQRVDHLSRNMLCAWQLGTG.G
2820.2441	2819.2368	2819.2901	-18.91	97	-	119	2	--- R.DCSQRVDHLSRNMLCAWQLGTG.G + Oxidation (M)

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617,

747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5811, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3292, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3466.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

40. [E1BA70](#) Mass: 34295 Score: 16 Expect: 5.7e+002 Matches: 11

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1514.7063	1513.6990	1513.7269	-18.40	76	-	88	0	--- R.MPEPCQIPVINTK.T
1530.7058	1529.6985	1529.7218	-15.22	76	-	88	0	--- R.MPEPCQIPVINTK.T + Oxidation (M)



1608.8051 1607.7978 1607.8090 -6.93 178 - 191 0 --- R.NQIVHEVMALPADR.W + Oxidation (M)  
 1833.8571 1832.8498 1832.8913 -22.64 74 - 88 1 --- K.FRMPEPCQIPVINTK.T + Oxidation (M)  
 2289.0901 2288.0828 2288.1082 -11.09 254 - 273 0 --- R.ALFPCEPPVAMSTWQATVR.A  
 2576.1792 2575.1719 2575.1382 13.1 105 - 129 2 --- K.GEKDTSGKDNHNDQEQASGISSSK.Y  
 2681.2705 2680.2632 2680.2664 -1.18 230 - 253 0 --- R.SVITWSDQSGRPCVYTVGSPINN.R.A  
 3104.4041 3103.3968 3103.3396 18.5 130 - 155 0 --- K.YCCDTGNHSGEEFLVLDCCDLSVLK.V  
 3236.5574 3235.5501 3235.5642 -4.35 274 - 304 0 --- R.AAASFVVLMSGENSAAKPTQLQEGTVHVFCA.S.-  
 3347.5515 3346.5442 3346.6036 -17.75 76 - 104 2 --- R.MPEPCQIPVINTKTFSSKIGYNDFVICGK.G + Oxidation (M)  
 3641.7090 3640.7017 3640.6266 20.6 57 - 88 2 --- R.SSSTEVAACPSESNEACKFRMPEPCQIPVINTK.T  
**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6693, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8486, 1587.7653, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.9033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2939, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3348.5020, 3380.5210, 3396.5159, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

41. [F1MR52](#) Mass: 116761 Score: 16 Expect: 5.7e+002 Matches: 43

Uncharacterized protein OS=Bos taurus PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
972.5023	971.4950	971.4858	9.41	400	- 408	0	---	R.ASGLTQHMK.T
988.4922	987.4849	987.4808	4.21	400	- 408	0	---	R.ASGLTQHMK.T + Oxidation (M)
1044.5375	1043.5302	1043.5400	-9.36	780	- 788	0	---	K.THTGEKPFK.C
1056.5575	1055.5502	1055.5764	-24.77	808	- 816	0	---	K.IHTGEKPFK.C
1336.7301	1335.7228	1335.6895	24.9	378	- 389	1	---	R.HLQSHTEKTAK.C
1382.6771	1381.6698	1381.6482	15.6	134	- 144	2	---	R.DQPYKCKVCGK.H
1410.7849	1409.7776	1409.7555	15.7	879	- 890	0	---	K.TFTTSSYLIIHK.R
1434.7847	1433.7774	1433.7813	-2.69	238	- 249	1	---	K.HMKIHTGEKPLK.C + Oxidation (M)
1483.7579	1482.7506	1482.7732	-15.21	947	- 958	2	---	K.YFRAHTGQKTFK.C
1484.7480	1483.7407	1483.7354	3.59	350	- 361	1	---	R.HMRTHTEKPYK.C
1493.7556	1492.7483	1492.7457	1.79	396	- 408	1	---	K.TFTRASGLTQHMK.T + Oxidation (M)
1500.7393	1499.7320	1499.7303	1.14	350	- 361	1	---	R.HMRTHTEKPYK.C + Oxidation (M)
1500.7400	1499.7327	1499.7303	1.61	350	- 361	1	---	R.HMRTHTEKPYK.C + Oxidation (M)
1522.7722	1521.7649	1521.7610	2.61	739	- 751	1	---	K.TFTRSSGLIEHMK.T + Oxidation (M)
1524.8040	1523.7967	1523.7766	13.2	480	- 492	1	---	K.TFTTSLSVTHMKR.R + Oxidation (M)
1526.7924	1525.7851	1525.7677	11.4	851	- 863	0	---	K.AFANSSYLTIHFR.T
1537.7859	1536.7786	1536.7831	-2.91	795	- 807	2	---	K.TFTRSSGLTRHMK.I + Oxidation (M)
1555.7836	1554.7763	1554.7388	24.1	986	- 997	0	---	K.CTEVNTWELLYK.-
1616.8165	1615.8092	1615.8140	-2.98	651	- 663	2	---	K.ECGKTRFLSSYL.R.V
1664.8490	1663.8417	1663.8828	-24.69	480	- 493	2	---	K.TFTTSLSVTHMKRR.H
1682.8409	1681.8336	1681.8477	-8.39	943	- 955	2	---	K.HFYKYFRAHTGQK.T
1739.8165	1738.8092	1738.8421	-18.88	378	- 392	2	---	R.HLQSHTEKTAKCDK.C
1765.8154	1764.8081	1764.7924	8.93	780	- 794	1	---	K.THTGEKPFKCDTCGK.T
1781.8585	1780.8512	1780.8930	-23.47	208	- 222	0	---	R.LIEHMHNTHTGEKPFK.C
1838.8677	1837.8604	1837.8451	8.34	158	- 172	2	---	K.THTGEQLYKCKEKGK.A
1887.8878	1886.8805	1886.9210	-21.45	434	- 448	2	---	K.HFRTHTEKPFKCDK.C
1960.9813	1959.9740	1960.9126	-19.69	5	- 23	0	---	R.ASIQSASLQAHVPTHTANK.H
2029.9972	2028.9899	2029.0051	-7.48	400	- 417	1	---	R.ASGLTQHMKTHTEKPYK.C + Oxidation (M)
2097.0371	2096.0298	2096.0287	0.56	24	- 41	2	---	K.HYIYEDSGKVSDATLSRR.Q
2112.9932	2111.9859	2111.9477	18.1	590	- 607	2	---	K.CYRCEDSGKVSTASLSHR.Q
2140.0063	2138.9990	2138.9626	17.0	612	- 629	1	---	K.THTGEKPFQCDTCGKAFR.F
2174.0508	2173.0435	2173.0231	9.40	805	- 822	2	---	R.HMKIHTGEKPFKCDTCGK.A
2251.1108	2250.1035	2250.1447	-18.29	368	- 386	2	---	K.GFGFSFTLRRHLQSHTEK.T

2271.1211 2270.1138 2270.0573 24.9 780 - 798 2 --- K.THTGEKPFKCDTCGKTFTTR.S  
 2286.0986 2285.0913 2285.1409 -21.69 182 - 200 2 --- R.VHSQIHTGIKIYKQCECGK.T  
 2573.2495 2572.2422 2572.3009 -22.80 909 - 930 2 --- K.RFANSSPFAIHKCIHTGEIPYK.C  
 2748.2295 2747.2822 2747.2829 -22.10 743 - 766 2 --- R.SSGLIEHMKTHTEGKPFKCDTCGK.T  
 2847.3630 2846.3557 2846.3956 -14.01 808 - 832 2 --- K.IHTGEKPFKCDTCGKAFASSSHLIR.H  
 3025.3865 3024.3792 3024.4434 -21.21 297 - 323 2 --- R.TPTGEKPFKCDTCGKTFTVQSSGLSQHK.K  
 3280.5635 3279.5562 3279.5223 10.3 195 - 222 2 --- K.CQCEGKFTTGSRRILIEHMTHTGEKPFK.C  
 3347.5515 3346.5442 3346.4958 14.5 705 - 732 2 --- K.CEECGDKFKHSLPFNIHMGHTGEQPYK.C  
 3735.7100 3734.7027 3734.7790 -20.42 238 - 268 2 --- K.HMKIHTGEKPLKCDICGTTFTQTSYLTQHMR.T + Oxidation (M)  
 3751.7539 3750.7466 3750.7739 -7.27 238 - 268 2 --- K.HMKIHTGEKPLKCDICGTTFTQTSYLTQHMR.T + 2 Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1045.5594, 1046.6058, 1054.5287, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1416.7737, 1420.7114, 1423.7096, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1487.7660, 1488.7366, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1528.7079, 1530.7058, 1536.7252, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1556.8011, 1562.8008, 1568.7620, 1572.7425, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1666.7892, 1679.8091, 1680.8357, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2098.4941, 2102.9954, 2109.0095, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2136.9250, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2255.1484, 2265.0837, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3321.6216, 3344.4895, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3830.8091, 3869.7393, 3876.6707, 3885.6946

42. [E1B705](#) Mass: 50364 Score: 16 Expect: 5.8e+002 Matches: 18

Uncharacterized protein OS=Bos taurus GN=RASSF9 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
734.4341	733.4269	733.4156	15.3	325	-	331	1	K.SMKAGKL.I
920.4296	919.4223	919.4433	-22.84	255	-	261	0	R.QMLEDLRL.E + Oxidation (M)
1082.6056	1081.5983	1081.6244	-24.08	151	-	159	2	K.TLPDDKQKR.I
1145.6373	1144.6300	1144.6339	-3.40	283	-	292	1	K.LSAEIEKEVK.S
1351.6969	1350.6896	1350.6642	18.8	140	-	150	0	K.LWELSPANYMK.T
1403.7434	1402.7361	1402.7489	-9.14	203	-	213	2	K.RMKLEDLIEK.C
1470.7466	1469.7393	1469.7435	-2.87	342	-	353	1	K.EIKYSDSLQMK.A + Oxidation (M)
1761.8734	1760.8661	1760.8556	5.98	102	-	116	0	K.AWGDEQPNMQFVLVK.A
1833.8571	1832.8498	1832.8905	-22.18	384	-	400	0	K.ESEVPTNSGVVSPFTQR.I
1969.9951	1968.9878	1968.9905	-1.34	262	-	277	1	R.ESNGIVQLEERLTYR.K
2018.9740	2017.9667	2018.0069	-19.91	382	-	400	1	R.GKESEVPTNSGVVSPFTQR.I
2145.0781	2144.0708	2144.0572	6.37	206	-	222	2	K.ELDLEIEKCEAKFLDLR.V
2175.0435	2174.0362	2174.0637	-12.64	255	-	272	1	R.QMLEDLRESNGIVQLEER.L + Oxidation (M)
2205.0615	2204.0542	2204.1088	-24.78	99	-	116	1	K.LWKAWGDEQPNMQFVLVK.A + Oxidation (M)
2696.2695	2695.2622	2695.2357	9.85	17	-	38	2	R.SPTKEMDSEKEIVVWVCQEEK.I + Oxidation (M)
2790.2317	2789.2244	2789.2490	-8.81	223	-	246	0	R.VENNGENIVQDAYLMPSFSEVQEK.L
3735.7100	3734.7027	3734.6378	17.4	401	-	435	0	R.IFNMYTNDTSDTGSSNHSQDSETTAGDVLLST.-
3876.6707	3875.6634	3875.7056	-10.89	293	-	327	2	K.SVCMTEINEDAEGAAASELESSNLESVKCDLEKSMK.A + Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1337.6429, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313,

1632.8120,	1635.7964,	1637.7974,	1642.7417,	1647.8439,	1650.8429,	1651.8369,	1655.8147,	1657.8483,	1658.8953,	1660.8379,	1662.8666,
1664.8490,	1666.7892,	1679.8091,	1680.8357,	1682.8409,	1696.8464,	1698.8180,	1701.8243,	1702.8386,	1707.8938,	1710.8904,	1714.7905,
1716.8219,	1717.9052,	1718.9094,	1721.8976,	1722.9003,	1724.9030,	1728.8840,	1730.8910,	1734.1617,	1738.8267,	1739.8165,	1741.8934,
1743.9005,	1747.9127,	1758.4807,	1758.8918,	1765.8154,	1772.0012,	1774.9300,	1774.9319,	1779.9012,	1781.8585,	1783.8062,	1787.8407,
1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,	1834.8650,	1836.8618,	1838.8677,	1845.8363,	1847.8600,	1848.8938,	1850.9128,
1851.8932,	1861.8531,	1862.9542,	1864.9258,	1880.9026,	1883.7704,	1887.8878,	1897.7863,	1902.9769,	1904.9276,	1908.8986,	1920.9131,
1923.9126,	1928.0443,	1932.0068,	1936.9510,	1938.0171,	1947.9314,	1958.9393,	1959.9655,	1960.9813,	1961.9463,	1967.1549,	1973.9971,
1975.9755,	1976.9708,	1990.4971,	1990.9373,	1991.4857,	1997.8479,	2001.8607,	2003.8768,	2004.8850,	2007.9500,	2007.9532,	2011.9381,
2012.8951,	2015.9694,	2017.9860,	2020.1631,	2023.9482,	2026.9529,	2027.5033,	2029.9972,	2043.5356,	2044.9940,	2055.0205,	2057.0154,
2060.9878,	2066.9939,	2068.9661,	2082.9822,	2086.0254,	2088.1033,	2097.0371,	2098.4941,	2102.9954,	2109.0095,	2112.9932,	2114.9707,
2122.9578,	2128.0444,	2130.9980,	2132.0200,	2136.9250,	2140.0063,	2143.0237,	2144.0559,	2148.0483,	2153.0049,	2153.9973,	2174.0508,
2178.0483,	2188.0610,	2191.0464,	2192.0427,	2199.1150,	2211.1067,	2223.1533,	2225.1382,	2226.1472,	2239.1646,	2243.1448,	2246.9482,
2251.1108,	2255.1484,	2265.0837,	2271.1211,	2273.0735,	2277.0642,	2283.1606,	2285.1355,	2286.0986,	2289.0901,	2291.0173,	2299.0349,
2328.9888,	2343.0608,	2352.9583,	2355.0383,	2366.9595,	2371.0325,	2392.1594,	2400.0532,	2424.1577,	2434.2429,	2438.2283,	2449.2180,
2450.2451,	2451.2480,	2465.1592,	2466.2458,	2467.2458,	2478.1377,	2501.2207,	2523.2014,	2526.2585,	2540.2451,	2542.2578,	2545.2258,
2550.2373,	2561.6841,	2562.1826,	2562.6890,	2573.2495,	2576.1792,	2646.9758,	2659.2144,	2661.1409,	2662.0120,	2671.1924,	2681.2705,
2682.2888,	2685.3098,	2689.3059,	2695.1064,	2699.2324,	2703.2529,	2705.2944,	2712.2937,	2717.2903,	2720.2839,	2721.9237,	2726.2935,
2727.2986,	2728.3079,	2739.2837,	2743.2729,	2744.2207,	2745.2562,	2746.2031,	2748.2295,	2755.2700,	2760.2590,	2763.1829,	2771.2400,
2778.1865,	2785.2969,	2786.2561,	2787.2524,	2792.2166,	2800.3093,	2801.2932,	2803.2415,	2804.2429,	2807.2869,	2808.2227,	2812.2244,
2813.2373,	2817.2632,	2820.2441,	2824.2598,	2828.2454,	2833.2544,	2843.2900,	2844.3398,	2847.3630,	2851.3313,	2864.3188,	2890.3293,
2896.4324,	2908.3105,	2910.3325,	2911.3594,	2912.4265,	2925.3323,	2927.4434,	3023.3674,	3025.3865,	3026.3452,	3039.3838,	3042.3542,
3070.3745,	3071.3933,	3086.3984,	3087.3970,	3093.4294,	3101.3831,	3103.4006,	3104.4041,	3110.4143,	3127.4749,	3141.4126,	3143.5066,
3144.5298,	3159.5210,	3219.4854,	3236.5574,	3266.6021,	3280.5635,	3321.6216,	3344.4895,	3347.5515,	3348.5020,	3380.5210,	3396.5195,
3412.5801,	3427.6099,	3428.5874,	3444.5840,	3462.6301,	3478.6123,	3484.6497,	3489.7246,	3505.6919,	3510.5859,	3521.6392,	3552.6614,
3553.6028,	3554.5630,	3558.6460,	3573.6545,	3589.6523,	3608.6155,	3624.6685,	3630.5806,	3641.7090,	3651.7944,	3667.7266,	3683.6980,
3691.7681,	3707.7200,	3714.5493,	3715.6206,	3719.6914,	3720.7048,	3723.7041,	3751.7539,	3830.8091,	3869.7393,	3885.6946	

43. [E1BDB7](#) Mass: 30920 Score: 16 Expect: 5.8e+002 Matches: 12

Uncharacterized protein OS=Bos taurus GN=CEBPE PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
729.4336	728.4263	728.4405	-19.50	209	213	2	---	R.LRRER.N
998.5833	997.5760	997.5556	20.5	117	125	1	---	R.AVAVKEEPR.G
1057.6187	1056.6114	1056.6152	-3.56	214	222	2	---	R.NNIAVRKSR.D
1057.6200	1056.6127	1056.6152	-2.33	214	222	2	8	R.NNIAVRKSR.D
1194.6001	1193.5928	1193.6040	-9.38	199	208	1	---	K.AVNKDSLEYR.L
1484.7480	1483.7407	1483.7127	18.9	122	135	2	---	K.EEPRGPEGRSGAS.R
1568.7620	1567.7547	1567.7664	-7.45	236	247	1	---	K.VLEYMTENERLR.N + Oxidation (M)
2140.0063	2138.9990	2139.0517	-24.65	229	245	1	---	R.ILETQQKVLEYMTENER.L + Oxidation (M)
2771.2400	2770.2327	2770.2228	3.60	1	24	1	---	-.MSHGTYEECEPRAGQQPLEFSGAR.A
2787.2524	2786.2451	2786.2177	9.85	1	24	1	---	-.MSHGTYEECEPRAGQQPLEFSGAR.A + Oxidation (M)
3505.6919	3504.6846	3504.7031	-5.26	136	167	0	---	R.SSYNPLQYQVAHCGQTAMHLPPGLASPSQPLR.V
3521.6392	3520.6319	3520.6980	-18.76	136	167	0	---	R.SSYNPLQYQVAHCGQTAMHLPPGLASPSQPLR.V + Oxidation (M)

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4662, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 986.5463, 988.4922, 993.5123, 995.4512, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6932, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7079, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1373.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1565.8011, 1562.8008, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2935, 2699.2324, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.9237, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2778.1865, 2785.2969, 2786.2561, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2444, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3303.4006, 3304.4041, 3310.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3751.7539, 3830.8091, 3869.7393, 3885.6946

44. [Q0P584](#) Mass: 23768 Score: 16 Expect: 5.9e+002 Matches: 11

Uncharacterized protein OS=Bos taurus GN=ZMAT2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
936.4976	935.4903	935.4746	16.9	132	138	2	---	K.KMEEKQK.D + Oxidation (M)
1074.6162	1073.6089	1073.6193	-9.66	117	125	2	---	R.STLDQVKKR.F
1229.6874	1228.6801	1228.6676	10.2	47	55	2	---	R.ELLRHRDYK.V
1320.6364	1319.6291	1319.6391	-7.52	146	155	2	---	R.MKELRREEEEK.A

1553.7668 1552.7595 1552.7409 12.0 16 - 27 2 --- K.WDKDEYEKLAEK.R  
 1555.7836 1554.7763 1554.7573 12.3 1 - 14 2 --- -.MASGSGTKNLDFRR.K + Oxidation (M)  
 2813.2373 2812.2300 2812.1732 20.2 171 - 196 0 --- R.AEEDLTFEEDDEMAAVMGFSGFGSTK.K  
 3023.3674 3022.3601 3022.3909 -10.17 65 - 90 1 --- K.TIVITKITTPQSEMGGYCNCVDCVVK.D  
 3039.3838 3038.3765 3038.3858 -3.05 65 - 90 1 --- K.TIVITKITTPQSEMGGYCNCVDCVVK.D + Oxidation (M)  
 3141.4126 3140.4053 3140.3703 11.2 169 - 196 2 --- K.RRAEEDLTFEEDDEMAAVMGFSGFGSTK.K + Oxidation (M)  
 3321.6216 3320.6143 3320.5914 6.92 62 - 90 2 --- K.LGKTIIVITKITTPQSEMGGYCNCVDCVVK.D  
**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.9851, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2299.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3025.3865, 3026.3452, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.6630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

45. [F1MH60](#) Mass: 51585 Score: 16 Expect: 6.1e+002 Matches: 18

Uncharacterized protein OS=Bos taurus GN=SPRED1 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
852.4368	851.4295	851.4137	18.5	207	213	0	---	R.SIEYGQR.Q
1122.5892	1121.5819	1121.5647	15.4	69	77	0	---	K.MVVLECMK.K
1365.6619	1364.6546	1364.6866	-23.42	67	77	1	---	R.DKMVVLECMK.K
1493.7556	1492.7483	1492.7815	-22.25	67	78	2	---	R.DKMVVLECMK.K
1637.7974	1636.7901	1636.7569	20.3	256	267	2	---	R.RYADYRHPDMWK.N
1650.8429	1649.8356	1649.8667	-18.82	65	77	2	---	R.LRDKMVVLECMK.K + Oxidation (M)
1783.8062	1782.7989	1782.8272	-15.86	273	288	1	---	R.DDTSSVQFSKPDSSK.S
1923.9126	1922.9053	1922.9520	-24.26	207	223	2	---	R.SIEYGQRQMPKESGGLK.S + Oxidation (M)
1997.8479	1996.8406	1996.8268	6.92	334	348	1	---	R.CVYCQERFNHEENGR.G
2057.0154	2056.0081	2055.9796	13.9	189	206	0	---	R.SQANQIMFSHPGLDIQDR.S
2109.0095	2108.0022	2107.9534	23.2	257	272	2	---	R.YADYRHPDMWKNDLER.D
2703.2529	2702.2456	2702.2388	2.53	1	24	2	---	-.MSEETATSDNDNSYARVAVVMTR.D
2890.3293	2889.3220	2889.3828	-21.02	189	213	1	---	R.SQANQIMFSHPGLDIQDRSIEYGQR.Q
2896.4324	2895.4251	2895.4259	-0.28	19	46	1	---	R.AVVMTRDSSGGWLPGLGSGLSCTVIFK.V
2912.4265	2911.4192	2911.4209	-0.56	19	46	1	---	R.AVVMTRDSSGGWLPGLGSGLSCTVIFK.V + Oxidation (M)
3093.4294	3092.4221	3092.3782	14.2	262	287	2	---	R.HPDMWKNDLERDDTSSVQFSKPDSSK.K + Oxidation (M)
3144.5298	3143.5225	3143.5768	-17.25	399	423	1	---	K.FCLRRLWALVALSFIVPCMCYVPLR.M
3869.7393	3868.7320	3868.7432	-2.90	119	154	1	---	R.AIEDISQGCPSFKNEAEGTEDNLQAAEEDTSSSLVK.D

**No match to:** 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1556.7686, 1557.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1642.7417, 1647.8439, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379,

1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8357,	1682.8409,	1696.8464,	1698.8180,	1701.8243,	1702.8386,	1707.8938,	1710.8904,
1714.7905,	1716.8219,	1717.9052,	1718.9094,	1721.8976,	1722.9003,	1724.9030,	1728.8840,	1730.8910,	1734.1617,	1738.8267,	1739.8165,
1741.8934,	1743.9005,	1747.9127,	1758.4807,	1758.8918,	1761.8734,	1765.8154,	1772.0012,	1774.9300,	1774.9319,	1779.9012,	1781.8585,
1787.8407,	1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,	1833.8571,	1834.8650,	1836.8618,	1838.8677,	1845.8363,	1847.8600,
1848.8938,	1850.9128,	1851.8932,	1861.8531,	1862.9542,	1864.9258,	1880.9026,	1883.7704,	1887.8878,	1897.7863,	1902.9769,	1904.9276,
1908.8986,	1920.9131,	1928.0443,	1932.0068,	1936.9510,	1938.0171,	1947.9314,	1958.9393,	1959.9655,	1960.9813,	1961.9463,	1967.1549,
1969.9951,	1973.9971,	1975.9755,	1976.9708,	1990.4971,	1990.9373,	1991.4857,	2001.8607,	2003.8768,	2004.8850,	2007.9500,	2007.9532,
2011.9381,	2012.8951,	2015.9694,	2017.9860,	2018.9740,	2020.1631,	2023.9482,	2026.9529,	2027.5033,	2029.9972,	2043.5356,	2044.9940,
2055.0205,	2060.9878,	2066.9939,	2068.9661,	2082.9822,	2086.0254,	2088.1033,	2097.0371,	2098.4941,	2102.9954,	2112.9932,	2114.9707,
2122.9578,	2128.0444,	2130.9980,	2132.0200,	2136.9250,	2140.0063,	2143.0237,	2144.0559,	2145.0781,	2148.0483,	2153.0049,	2153.9973,
2174.0508,	2175.0435,	2178.0483,	2188.0610,	2191.0464,	2192.0427,	2199.1150,	2205.0615,	2211.1067,	2223.1533,	2225.1382,	2226.1472,
2239.1646,	2243.1448,	2246.9482,	2251.1108,	2255.1484,	2265.0837,	2271.1211,	2273.0735,	2277.0642,	2283.1606,	2285.1355,	2286.0986,
2289.0901,	2291.0173,	2309.0349,	2328.9888,	2343.0608,	2352.9583,	2355.0383,	2366.9595,	2371.0325,	2392.1594,	2400.0532,	2424.1577,
2434.2429,	2438.2283,	2449.2180,	2450.2451,	2451.2480,	2465.1592,	2466.2458,	2467.2458,	2478.1377,	2501.2207,	2523.2014,	2526.2585,
2540.2451,	2542.2578,	2545.2258,	2550.2373,	2561.6841,	2562.1826,	2562.6890,	2573.2495,	2576.1792,	2646.9758,	2659.2144,	2661.1409,
2662.0120,	2671.1924,	2681.2705,	2682.2888,	2685.3098,	2689.3059,	2695.1064,	2696.2695,	2699.2324,	2705.2944,	2712.2937,	2717.2903,
2720.2839,	2721.2937,	2726.2905,	2727.2986,	2728.3079,	2739.2837,	2743.2729,	2744.2207,	2745.2256,	2746.2031,	2748.2295,	2755.2700,
2760.2590,	2763.1829,	2771.2400,	2778.1865,	2785.2969,	2786.2561,	2787.2524,	2790.2317,	2792.2166,	2800.3093,	2801.2932,	2803.2415,
2804.2429,	2807.2869,	2808.2227,	2812.2244,	2813.2373,	2817.2632,	2820.2441,	2824.2598,	2828.2454,	2833.2544,	2843.2900,	2844.3398,
2847.3630,	2851.3313,	2864.3188,	2908.3105,	2910.3325,	2911.3594,	2925.3323,	2927.4434,	3023.3674,	3025.3865,	3026.3452,	3039.3838,
3042.3542,	3070.3745,	3071.3933,	3086.3984,	3087.3970,	3101.3831,	3103.4006,	3104.4041,	3110.4143,	3127.4749,	3141.4126,	3143.5066,
3159.5210,	3219.4854,	3236.5574,	3266.6021,	3280.5635,	3321.6216,	3344.4895,	3347.5515,	3348.5020,	3380.5210,	3396.5195,	3412.5801,
3427.6099,	3428.5874,	3444.5840,	3462.6301,	3478.6123,	3484.6497,	3489.7246,	3505.6919,	3510.5859,	3521.6392,	3552.6614,	3553.6028,
3554.5630,	3588.6460,	3573.6545,	3589.6523,	3608.6155,	3624.6685,	3630.5806,	3641.7090,	3651.7944,	3667.7266,	3683.6980,	3691.7681,
3707.7200,	3714.5493,	3715.6206,	3719.6914,	3720.7048,	3723.7041,	3735.7100,	3751.7539,	3830.8091,	3876.6707,	3885.6946	

46. [Q3ZCH0](#) Mass: 73981 Score: 16 Expect: 6.2e+002 Matches: 30

Stress-70 protein, mitochondrial OS=Bos taurus GN=HSPA9 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
900.5174	899.5101	899.5229	-14.17	285	-	291	1	--- R.HIVKEFK.R
1045.5594	1044.5521	1044.5314	19.9	647	-	654	1	--- K.LFEMAYKK.M + Oxidation (M)
1118.5687	1117.5614	1117.5662	-4.28	301	-	309	1	--- K.DNMALQVRV.R + Oxidation (M)
1148.6318	1147.6245	1147.6131	9.92	1	-	11	1	--- -.MISASRAAVSR.F
1149.6230	1148.6157	1148.6223	-5.72	611	-	619	2	--- K.LKEEISKMR.E + Oxidation (M)
1285.6674	1284.6601	1284.6786	-14.36	74	-	85	1	--- K.QAKVLENAEGAR.T
1349.6729	1348.6656	1348.6510	10.8	128	-	138	1	--- R.YDDPEVQKDIK.N
1361.7147	1360.7074	1360.7211	-10.08	12	-	25	1	--- R.FVGTAAASRGPTAAR.H
1568.7620	1567.7547	1567.7631	-5.32	108	-	121	0	--- R.QAVTNPNNTFYATK.R
1608.8051	1607.7978	1607.7613	22.7	174	-	187	1	--- K.MKETAENYLGHTAK.N + Oxidation (M)
1635.7964	1634.7891	1634.7796	5.82	647	-	659	2	--- K.LFEMAYKKMASER.E + 2 Oxidation (M)
1662.8666	1661.8593	1661.8559	2.04	392	-	405	1	--- R.MPKVQQTVDLFGRA.A + Oxidation (M)
1724.9030	1723.8957	1723.8642	18.3	108	-	122	1	--- R.QAVTNPNNTFYATKR.L
1730.8910	1729.8837	1729.8958	-7.00	620	-	634	2	--- R.ELLARKDSETGENIR.Q
1862.9542	1861.9469	1861.9316	8.23	292	-	307	2	--- K.RETGVDLTKDNMALQVR.V + Oxidation (M)
1936.9510	1935.9437	1935.9902	-23.99	468	-	485	1	--- K.KSQVFSTAADGGQTQVEIK.V
1938.0171	1937.0098	1937.0265	-8.60	1	-	19	2	--- -.MISASRAAVSRFVGTAASR.G
2088.1033	2087.0960	2087.0971	-0.51	536	-	555	2	--- K.DKGTGREQQIVIVQSSGGLSK.D
2109.0095	2108.0022	2108.0300	-13.18	26	-	43	1	--- R.HQDGWNGLSHEAFRIVSR.R
2265.0837	2264.0764	2264.1311	-24.16	26	-	44	2	--- R.HQDGWNGLSHEAFRIVSR.R
2286.0986	2285.0913	2285.1321	-17.86	576	-	595	2	--- K.KERVEAVNMAEGIIHDTETK.M + Oxidation (M)
2434.2429	2433.2356	2433.2057	12.3	542	-	563	1	--- R.EQQIVIVQSSGGLSKDDIENMVK.N + Oxidation (M)
2438.2283	2437.2210	2437.1829	15.7	369	-	391	1	--- K.AMQDAEVSKSDIGEVILVGGMT.R + 2 Oxidation (M)
3127.4749	3126.4676	3126.5325	-20.77	44	-	73	2	--- R.RDYASEAIKGAUVGIDLGTTNSCVAVMGK.Q + Oxidation (M)
3159.5210	3158.5137	3158.5780	-20.35	160	-	187	2	--- K.LYSPSQIGAFVLMKKMKETAENYLGHTAK.N + 2 Oxidation (M)
3236.5574	3235.5501	3235.5887	-11.92	362	-	391	2	--- R.TIAPCQKAMQDAEVSKSDIGEVILVGGMT.R + 2 Oxidation (M)
3651.7944	3650.7871	3650.7742	3.53	317	-	348	2	--- K.CELSSSVQTDINLPYLTMDASGPKHLNMKLTR.A + 2 Oxidation (M)
3691.7681	3690.7608	3690.6851	20.5	579	-	610	2	--- R.VEAVNMAEGIIHDTETKMEEFKQDLPADECNK.L
3707.7200	3706.7127	3706.6800	8.82	579	-	610	2	--- R.VEAVNMAEGIIHDTETKMEEFKQDLPADECNK.L + Oxidation (M)
3723.7041	3722.6968	3722.6750	5.87	579	-	610	2	--- R.VEAVNMAEGIIHDTETKMEEFKQDLPADECNK.L + 2 Oxidation (M)

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.4594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.9378, 1999.9379, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2097.0371, 2098.4941, 2102.9954, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937,



2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3107.4143, 3141.4126, 3143.5066, 3144.5298, 3219.4854, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3667.7266, 3683.6980, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

47. [Q0P571](#) Mass: 19114 Score: 16 Expect: 6.2e+002 Matches: 9

Myosin regulatory light chain 2, skeletal muscle isoform OS=Bos taurus GN=MYLFP PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
880.4280	879.4207	879.4338	-14.87	132	-	138	0	R.FSQEEIK.N
1319.6770	1318.6697	1318.6405	22.2	94	-	106	0	K.GADPEDVITGAFK.V
1390.7089	1389.7016	1389.6711	22.0	156	-	167	0	K.NICVYITHGDAK.D
1550.7543	1549.7470	1549.7480	-0.61	61	-	73	1	R.LNVKNEELDAMMK.E + Oxidation (M)
1851.8932	1850.8859	1850.9309	-24.28	49	-	64	2	K.EDLRDTFAAMGRNLNVK.N + Oxidation (M)
1880.9026	1879.8953	1879.8563	20.7	139	-	155	0	K.NMWAAPPDPVGGNVVDYK.N
2465.1592	2464.1519	2464.1217	12.3	10	-	32	0	R.AAAEGGSSVSFMFDQTQIQEFK.E
3110.4143	3109.4070	3109.4082	-0.39	65	-	91	1	K.NEELDAMMKEASGPINFVFLNMFGEK.L + 3 Oxidation (M)
3624.6685	3623.6612	3623.7480	4.49	139	-	170	2	K.NMWAAPPDPVGGNVVDYKNICVYITHGDAKDE.-

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1861.8531, 1862.9542, 1864.9258, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2042.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2103.9554, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2335.1068, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.1826, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3107.4143, 3141.4126, 3143.5066, 3144.5298, 3219.4854, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946

48. [G3N0L1](#) Mass: 8718 Score: 16 Expect: 6.2e+002 Matches: 7

Uncharacterized protein OS=Bos taurus GN=FGF12 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1057.6187	1056.6114	1056.5927	17.7	1	-	9	1	-.SRLSEPLK.L
1057.6200	1056.6127	1056.5927	18.9	1	-	9	1	-.SRLSEPLK.G
1761.8734	1760.8661	1760.8920	-14.69	10	-	24	0	K.GIVTMVFSQQGYFLR.M + Oxidation (M)
1880.9026	1879.8953	1879.8774	9.53	61	-	77	0	K.ASLYVAMNGEGYLYSSR.S
2896.4324	2895.4251	2895.3936	10.9	10	-	35	1	K.GIVTMVFSQQGYFLRMYPDGAVDGK.D + Oxidation (M)
2912.4265	2911.4192	2911.3885	10.6	10	-	35	1	K.GIVTMVFSQQGYFLRMYPDGAVDGK.D + 2 Oxidation (M)
3691.7681	3690.7608	3690.8426	-22.16	3	-	35	2	R.LSEPLKLGIVTMVFSQQGYFLRMYPDGAVDGK.D + Oxidation (M)

No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 972.5023, 974.4913, 976.5255, 978.5352, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1006.5120, 1007.5640, 1021.5762, 1024.5542, 1031.5300, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1105.5938, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1137.5647, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1159.5890, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1390.7089, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281



1516.7281,	1519.7705,	1522.7722,	1524.8040,	1526.7924,	1528.7079,	1530.7058,	1536.7252,	1537.7859,	1540.8043,	1543.7938,	1550.7543,
1551.7465,	1553.7668,	1555.7836,	1556.8011,	1562.8008,	1568.7620,	1572.7245,	1578.8058,	1580.8580,	1580.8600,	1584.8486,	1587.7675,
1608.8051,	1616.8165,	1621.7870,	1625.7886,	1628.7313,	1632.8120,	1635.7964,	1637.7974,	1642.7417,	1647.8439,	1650.8429,	1651.8369,
1655.8147,	1657.8483,	1658.8953,	1660.8379,	1662.8666,	1664.8490,	1666.7892,	1679.8091,	1680.8357,	1682.8409,	1696.8464,	1698.8180,
1701.8243,	1702.8386,	1707.8938,	1710.8904,	1714.7905,	1716.8219,	1717.9052,	1718.9094,	1721.8976,	1722.9003,	1724.9030,	1728.8840,
1730.8910,	1734.1617,	1738.8267,	1739.8165,	1741.8934,	1743.9005,	1747.9127,	1758.4807,	1758.8918,	1765.8154,	1772.0012,	1774.9300,
1774.9319,	1779.9012,	1781.8585,	1783.8062,	1787.8407,	1809.0583,	1810.0460,	1812.9126,	1829.8527,	1832.8584,	1833.8571,	1834.8650,
1836.8618,	1838.8677,	1845.8363,	1847.8600,	1848.8938,	1850.9128,	1851.8932,	1861.8531,	1862.9542,	1864.9258,	1883.7704,	1887.8878,
1897.7863,	1902.9769,	1904.9276,	1908.8986,	1920.9131,	1923.9126,	1928.0443,	1932.0068,	1936.9510,	1938.0171,	1947.9314,	1958.9393,
1959.9655,	1960.9813,	1961.9463,	1967.1549,	1969.9951,	1973.9971,	1975.9755,	1976.9708,	1990.4971,	1990.9373,	1991.4857,	1997.8479,
2001.8607,	2003.8768,	2004.8850,	2007.9500,	2007.9532,	2011.9381,	2012.8951,	2015.9694,	2017.9860,	2018.9740,	2020.1631,	2023.9482,
2026.9529,	2027.5033,	2029.9972,	2043.5356,	2044.9940,	2055.0205,	2057.0154,	2060.9878,	2066.9939,	2068.9661,	2082.9822,	2086.0254,
2088.1033,	2097.0371,	2098.4941,	2102.9954,	2109.0095,	2112.9932,	2114.9707,	2122.9578,	2128.0444,	2130.9980,	2132.0200,	2136.9250,
2140.0063,	2143.0237,	2144.0559,	2145.0781,	2148.0483,	2153.0049,	2153.9973,	2174.0508,	2175.0435,	2178.0483,	2188.0610,	2191.0464,
2192.0427,	2199.1150,	2205.0615,	2211.1067,	2223.1533,	2225.1382,	2226.1472,	2239.1646,	2243.1448,	2246.9482,	2251.1108,	2255.1484,
2265.0837,	2271.1211,	2273.0735,	2277.0642,	2283.1606,	2285.1355,	2286.0986,	2289.0901,	2291.0173,	2309.0349,	2328.9888,	2343.0608,
2352.9583,	2355.0383,	2366.9595,	2371.0325,	2392.1594,	2400.0532,	2424.1577,	2434.2429,	2438.2283,	2449.2180,	2450.2451,	2451.2480,
2465.1592,	2466.2458,	2467.2458,	2478.1377,	2501.2207,	2523.2014,	2526.2585,	2540.2451,	2542.2578,	2545.2258,	2550.2373,	2561.6841,
2562.1826,	2562.6890,	2573.2495,	2576.1792,	2646.9758,	2659.2144,	2661.1409,	2662.0120,	2671.1924,	2681.2705,	2682.2888,	2685.3098,
2689.3059,	2695.1064,	2696.2695,	2699.2324,	2703.2529,	2705.2944,	2712.2937,	2717.2903,	2720.2839,	2721.2937,	2726.2935,	2727.2986,
2728.3079,	2739.2837,	2743.2729,	2744.2207,	2745.2256,	2746.2031,	2748.2295,	2755.2700,	2760.2590,	2763.1829,	2771.2400,	2778.1865,
2785.2969,	2786.2561,	2787.2524,	2790.2317,	2792.2166,	2800.3093,	2801.2932,	2803.2415,	2804.2429,	2807.2869,	2808.2227,	2812.2244,
2813.2373,	2817.2632,	2820.2441,	2824.2598,	2828.2454,	2833.2544,	2843.2900,	2844.3398,	2847.3630,	2851.3313,	2864.3188,	2890.3293,
2908.3105,	2910.3325,	2911.3594,	2925.3323,	2927.4434,	3023.3674,	3025.3865,	3026.3452,	3039.3838,	3042.3542,	3070.3745,	3071.3933,
3086.3984,	3087.3970,	3093.4294,	3101.3831,	3103.4006,	3104.4041,	3110.4143,	3127.4749,	3141.4126,	3143.5066,	3144.5298,	3159.5210,
3219.4854,	3236.5574,	3266.6021,	3280.5635,	3321.6216,	3344.4895,	3347.5515,	3348.5020,	3380.5210,	3396.5195,	3412.5801,	3427.6099,
3428.5874,	3444.5840,	3462.6301,	3478.6123,	3484.6497,	3489.7246,	3505.6919,	3510.5859,	3521.6392,	3552.6614,	3553.6028,	3554.5630,
3558.6460,	3573.6545,	3589.6523,	3608.6155,	3624.6685,	3630.5806,	3641.7090,	3651.7944,	3667.7266,	3683.6980,	3707.7200,	3714.5493,
3715.6206,	3719.6914,	3720.7048,	3723.7041,	3735.7100,	3751.7539,	3830.8091,	3869.7393,	3876.6707,	3885.6946		

49. [G3MYV8](#) Mass: 6868 Score: 16 Expect: 6.4e+002 Matches: 6

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1006.5120	1005.5047	1005.5138	-9.01	1	-	8	---	-,MTRGNQRK.L + Oxidation (M)
1031.5300	1030.5227	1030.5155	6.96	27	-	36	---	R.RDDGLSAAAR.K
1105.5938	1104.5865	1104.6073	-18.84	9	-	17	---	K.LARQKNMTK.Q + Oxidation (M)
1137.5647	1136.5574	1136.5496	6.92	14	-	23	---	K.NMTKQSDSVK.G
1159.5890	1158.5817	1158.6105	-24.84	27	-	37	---	R.RDDGLSAAARK.Q
1390.7089	1389.7016	1389.7034	-1.29	37	-	47	---	R.KQRDSEIMQQK.Q
<b>No match to:</b> 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 729.4336, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360, 753.3469, 756.3524, 758.3462, 759.3632, 768.3517, 779.4633, 781.3725, 789.3640, 794.3674, 796.3701, 799.2854, 801.4280, 805.4417, 807.4076, 810.3293, 812.3207, 818.3782, 820.3700, 828.4415, 829.4508, 830.4513, 834.3805, 842.5101, 849.3834, 852.4368, 857.4457, 860.4262, 868.4412, 870.4462, 873.4370, 877.4166, 880.4280, 882.4470, 883.4816, 887.4295, 889.4857, 891.4872, 894.4923, 898.4610, 900.5174, 905.4763, 907.4251, 912.5086, 914.4942, 920.4296, 922.4855, 928.4565, 929.4484, 933.4327, 936.4976, 938.5062, 944.4982, 946.4672, 949.5244, 950.5168, 957.5792, 961.5109, 965.5151, 967.4963, 976.5023, 974.4913, 976.5255, 981.5225, 983.6221, 986.5463, 988.4922, 993.5123, 995.4512, 998.5833, 1000.5594, 1007.5640, 1021.5762, 1024.5542, 1034.5703, 1037.5466, 1041.5637, 1043.5297, 1044.5375, 1045.5594, 1046.6058, 1054.5287, 1056.5575, 1057.6187, 1057.6200, 1068.5790, 1074.6162, 1076.6190, 1082.6056, 1110.5851, 1113.5701, 1118.5687, 1120.6050, 1122.5892, 1123.6047, 1126.6241, 1128.5618, 1130.5756, 1135.5951, 1143.5592, 1145.6373, 1148.6318, 1149.6230, 1150.6226, 1156.5652, 1157.5676, 1160.5966, 1169.5873, 1177.6421, 1178.6371, 1180.6443, 1182.6539, 1184.6431, 1185.6815, 1193.6090, 1194.6001, 1209.6238, 1213.7180, 1216.7178, 1221.5953, 1227.6459, 1229.6874, 1234.6899, 1238.2251, 1239.6622, 1254.6993, 1255.6351, 1264.7139, 1265.1680, 1265.7196, 1269.6532, 1276.6729, 1278.6892, 1281.6375, 1285.6674, 1289.7029, 1293.6760, 1301.6362, 1303.6489, 1304.6685, 1306.6946, 1308.6797, 1314.7227, 1319.6770, 1320.6364, 1323.6815, 1326.6937, 1328.6799, 1333.7430, 1336.7301, 1337.6429, 1349.6729, 1351.6969, 1353.6891, 1356.6255, 1358.6919, 1359.7013, 1361.7147, 1364.7118, 1365.6619, 1366.6965, 1372.6228, 1375.6693, 1382.6771, 1383.7347, 1393.8007, 1397.7449, 1403.7434, 1410.7849, 1416.7737, 1420.7114, 1423.7096, 1434.7847, 1436.7469, 1442.8257, 1445.7913, 1456.7555, 1457.7440, 1467.7560, 1470.7466, 1475.7615, 1479.8038, 1483.7579, 1484.7480, 1487.7660, 1488.7366, 1493.7556, 1500.7393, 1500.7400, 1503.7648, 1504.7708, 1514.7063, 1516.7281, 1519.7705, 1522.7722, 1524.8040, 1526.7924, 1528.7079, 1530.7058, 1536.7252, 1537.7859, 1540.8043, 1543.7938, 1550.7543, 1551.7465, 1553.7668, 1555.7836, 1556.8011, 1562.8008, 1568.7620, 1572.7245, 1578.8058, 1580.8580, 1580.8600, 1584.8486, 1587.7675, 1608.8051, 1616.8165, 1621.7870, 1625.7886, 1628.7313, 1632.8120, 1635.7964, 1637.7974, 1642.7417, 1647.8439, 1650.8429, 1651.8369, 1655.8147, 1657.8483, 1658.8953, 1660.8379, 1662.8666, 1664.8490, 1666.7892, 1679.8091, 1680.8357, 1682.8409, 1696.8464, 1698.8180, 1701.8243, 1702.8386, 1707.8938, 1710.8904, 1714.7905, 1716.8219, 1717.9052, 1718.9094, 1721.8976, 1722.9003, 1724.9030, 1728.8840, 1730.8910, 1734.1617, 1738.8267, 1739.8165, 1741.8934, 1743.9005, 1747.9127, 1758.4807, 1758.8918, 1761.8734, 1765.8154, 1772.0012, 1774.9300, 1774.9319, 1779.9012, 1781.8585, 1783.8062, 1787.8407, 1809.0583, 1810.0460, 1812.9126, 1829.8527, 1832.8584, 1833.8571, 1834.8650, 1836.8618, 1838.8677, 1845.8363, 1847.8600, 1848.8938, 1850.9128, 1851.8932, 1861.8531, 1862.9542, 1864.9258, 1880.9026, 1883.7704, 1887.8878, 1897.7863, 1902.9769, 1904.9276, 1908.8986, 1920.9131, 1923.9126, 1928.0443, 1932.0068, 1936.9510, 1938.0171, 1947.9314, 1958.9393, 1959.9655, 1960.9813, 1961.9463, 1967.1549, 1969.9951, 1973.9971, 1975.9755, 1976.9708, 1990.4971, 1990.9373, 1991.4857, 1997.8479, 2001.8607, 2003.8768, 2004.8850, 2007.9500, 2007.9532, 2011.9381, 2012.8951, 2015.9694, 2017.9860, 2018.9740, 2020.1631, 2023.9482, 2026.9529, 2027.5033, 2029.9972, 2043.5356, 2044.9940, 2055.0205, 2057.0154, 2060.9878, 2066.9939, 2068.9661, 2082.9822, 2086.0254, 2088.1033, 2097.0371, 2098.4941, 2102.9954, 2109.0095, 2112.9932, 2114.9707, 2122.9578, 2128.0444, 2130.9980, 2132.0200, 2136.9250, 2140.0063, 2143.0237, 2144.0559, 2145.0781, 2148.0483, 2153.0049, 2153.9973, 2174.0508, 2175.0435, 2178.0483, 2188.0610, 2191.0464, 2192.0427, 2199.1150, 2205.0615, 2211.1067, 2223.1533, 2225.1382, 2226.1472, 2239.1646, 2243.1448, 2246.9482, 2251.1108, 2255.1484, 2265.0837, 2271.1211, 2273.0735, 2277.0642, 2283.1606, 2285.1355, 2286.0986, 2289.0901, 2291.0173, 2309.0349, 2328.9888, 2343.0608, 2352.9583, 2355.0383, 2366.9595, 2371.0325, 2392.1594, 2400.0532, 2424.1577, 2434.2429, 2438.2283, 2449.2180, 2450.2451, 2451.2480, 2465.1592, 2466.2458, 2467.2458, 2478.1377, 2501.2207, 2523.2014, 2526.2585, 2540.2451, 2542.2578, 2545.2258, 2550.2373, 2561.6841, 2562.6890, 2562.6890, 2573.2495, 2576.1792, 2646.9758, 2659.2144, 2661.1409, 2662.0120, 2671.1924, 2681.2705, 2682.2888, 2685.3098, 2689.3059, 2695.1064, 2696.2695, 2699.2324, 2703.2529, 2705.2944, 2712.2937, 2717.2903, 2720.2839, 2721.2937, 2726.2935, 2727.2986, 2728.3079, 2739.2837, 2743.2729, 2744.2207, 2745.2256, 2746.2031, 2748.2295, 2755.2700, 2760.2590, 2763.1829, 2771.2400, 2778.1865, 2785.2969, 2786.2561, 2787.2524, 2790.2317, 2792.2166, 2800.3093, 2801.2932, 2803.2415, 2804.2429, 2807.2869, 2808.2227, 2812.2244, 2813.2373, 2817.2632, 2820.2441, 2824.2598, 2828.2454, 2833.2544, 2843.2900, 2844.3398, 2847.3630, 2851.3313, 2864.3188, 2890.3293, 2896.4324, 2908.3105, 2910.3325, 2911.3594, 2912.4265, 2925.3323, 2927.4434, 3023.3674, 3025.3865, 3026.3452, 3039.3838, 3042.3542, 3070.3745, 3071.3933, 3086.3984, 3087.3970, 3093.4294, 3101.3831, 3103.4006, 3104.4041, 3110.4143, 3127.4749, 3141.4126, 3143.5066, 3144.5298, 3159.5210, 3219.4854, 3236.5574, 3266.6021, 3280.5635, 3321.6216, 3344.4895, 3347.5515, 3348.5020, 3380.5210, 3396.5195, 3412.5801, 3427.6099, 3428.5874, 3444.5840, 3462.6301, 3478.6123, 3484.6497, 3489.7246, 3505.6919, 3510.5859, 3521.6392, 3552.6614, 3553.6028, 3554.5630, 3558.6460, 3573.6545, 3589.6523, 3608.6155, 3624.6685, 3630.5806, 3641.7090, 3651.7944, 3667.7266, 3683.6980, 3691.7681, 3707.7200, 3714.5493, 3715.6206, 3719.6914, 3720.7048, 3723.7041, 3735.7100, 3751.7539, 3830.8091, 3869.7393, 3876.6707, 3885.6946								

50. [A2VDP3](#) Mass: 30659 Score: 16 Expect: 6.4e+002 Matches: 13

RASD family, member 2 OS=Bos taurus GN=RASD2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
729.4336	728.4263	728.4432	-23.21	115	-	120	0 ---	K.QILEV.K.S
978.5352	977.5279	977.5328	-4.94	121	-	128	2 ---	K.SCLKNKT.K.E
1118.5687	1117.5614	1117.5476	12.4	254	-	262	2 ---	R.ESQARERDK.K
1303.6489	1302.6416	1302.6503	-6.64	192	-	202	0 ---	K.LPHEMSPALH.R.K + Oxidation (M)
1660.8379	1659.8306	1659.8324	-1.06	127	-	141	1 ---	K.TKEAAELPMVICGNK.N
1679.8901	1678.8018	1678.8382	-21.67	2	-	17	1 ---	M.MKTLSSSGNCALSPVAK.N + Oxidation (M)
1902.9769	1901.9696	1901.9703	-0.33	125	-	141	2 ---	K.NKTKKEAELPMVICGNK.N

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1908.8986 1907.8913 1907.8797 6.07 176 - 191 0 --- K.NTNVDEMFFVVLFSMAK.L
2068.9661 2067.9588 2067.9645 -2.76 175 - 191 1 --- K.NTNVDEMFFVVLFSMAK.L + 2 Oxidation (M)
2550.2373 2549.2300 2549.1791 20.0 64 - 85 1 --- R.GDMYQLDILDITSGNHPPFAMRR.L + Oxidation (M)
2685.3098 2684.3025 2684.2640 14.4 150 - 174 0 --- R.QVPTTEAELLVSGDGNCAYPEVSAK.K
3039.3838 3038.3765 3038.4379 -20.18 59 - 84 1 --- K.VYNIRGDMYQLDILDITSGNHPPFAMR.R + Oxidation (M)
3321.6216 3320.6143 3320.6144 -0.03 176 - 203 2 --- K.NTNVDEMFFVVLFSMAKLPHEMSPALHRK.I + Oxidation (M)
No match to: 716.3353, 718.2895, 724.2175, 726.3070, 728.2833, 730.2399, 732.2518, 734.4341, 743.3130, 745.3617, 747.4360,
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## Search Parameters

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Fixed modifications  : Carbamidomethyl \(C\)
Variable modifications : Oxidation \(M\)
Mass values         : Monoisotopic
Protein Mass        : Unrestricted
Peptide Mass Tolerance : ± 25 ppm
Fragment Mass Tolerance : ± 0.5 Da
Max Missed Cleavages : 2
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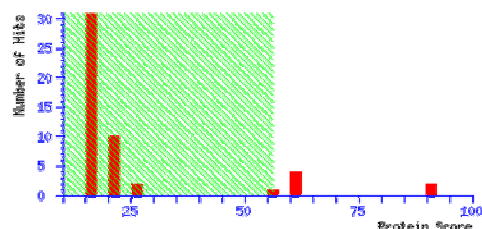
Mascot: <http://www.matrixscience.com/>

# MASCOT SEARCH RESULTS

User : 2w\_(F19@11273\_12Mar2012)  
 Email : proteomics@ipatimup.pt  
 Search title : Project: Proteomica, Spot Set: Proteomica\12Jan2012, Label: F19, Spot Id: 221882, Peak List Id: 435347, MS Job Run Id: 30  
 MS data file : C:\Documents and Settings\Administrator\Desktop\xu\xu\xu\Proteomica\12Jan2012\ppw\_F19\_146796935501.txt  
 Database : OrganismSpecie Bos\_taurus\_Reference\_Proteome\_2016\_06 (24214 sequences; 12839866 residues)  
 Timestamp : 8 Jul 2016 at 10:03:05 GMT  
 Warning : **A Peptide summary report will usually give a much clearer picture of MS/MS search results.**  
 Top Score : 91 for **F1MSR8**, Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=4 SV=2

## Mascot Score Histogram

Protein score is  $-10 \cdot \log(P)$ , where P is the probability that the observed match is a random event.  
 Protein scores greater than 56 are significant ( $p < 0.05$ ).  
 Protein scores are derived from ions scores as a non-probabilistic basis for ranking protein hits.



## Protein Summary Report

Format As  [Help](#)

Significance threshold  $p < 0.05$  Max. number of hits

Preferred taxonomy

## Index

Accession	Mass	Score	Description
1. <a href="#">F1MSR8</a>	134858	91	Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=4 SV=2
2. <a href="#">P02459</a>	142825	91	Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=1 SV=4
3. <a href="#">F1MYE4</a>	41319	63	Chondroadherin OS=Bos taurus GN=CHAD PE=4 SV=2
4. <a href="#">P19879</a>	34530	62	Mimecan OS=Bos taurus GN=OGN PE=1 SV=2
5. <a href="#">A5D9E8</a>	34517	62	Mimecan OS=Bos taurus GN=OGN PE=1 SV=1
6. <a href="#">G3N088</a>	40915	61	Mimecan OS=Bos taurus GN=OGN PE=1 SV=1
7. <a href="#">Q27972</a>	41373	58	Chondroadherin OS=Bos taurus GN=CHAD PE=1 SV=1
8. <a href="#">F1MYS7</a>	68834	25	Uncharacterized protein OS=Bos taurus GN=EIF4B PE=1 SV=1
9. <a href="#">E1BND5</a>	218183	24	Uncharacterized protein OS=Bos taurus GN=NCOA6 PE=4 SV=1
10. <a href="#">A7Z060</a>	81637	22	RNF219 protein OS=Bos taurus GN=RNF219 PE=2 SV=1
11. <a href="#">G5E523</a>	28080	20	Uncharacterized protein OS=Bos taurus GN=STAU2 PE=4 SV=1
12. <a href="#">A6QR15</a>	32975	20	LOC535277 protein OS=Bos taurus GN=LOC535277 PE=1 SV=1
13. <a href="#">G3N219</a>	3783	20	Uncharacterized protein OS=Bos taurus PE=4 SV=1
14. <a href="#">G3X6N6</a>	52918	19	Uncharacterized protein OS=Bos taurus PE=4 SV=1
15. <a href="#">Q5E9D0</a>	38604	19	Eukaryotic translation initiation factor 2 subunit 2 OS=Bos taurus GN=EIF2S2 PE=2 SV=1
16. <a href="#">A0A140T862</a>	38576	19	Eukaryotic translation initiation factor 2 subunit 2 OS=Bos taurus GN=EIF2S2 PE=1 SV=1
17. <a href="#">E1BDF0</a>	81113	19	Uncharacterized protein OS=Bos taurus GN=NEXN PE=4 SV=2
18. <a href="#">Q2TBK0</a>	39253	19	Uncharacterized protein C6orf163 homolog OS=Bos taurus PE=2 SV=1
19. <a href="#">Q2TBN3</a>	19797	19	Centrin-2 OS=Bos taurus GN=CETN2 PE=2 SV=1
20. <a href="#">G3MNY8</a>	9886	19	Coiled-coil domain-containing protein 167 OS=Bos taurus GN=CCDC167 PE=4 SV=1
21. <a href="#">Q3MHQ4</a>	30565	19	Zinc finger protein SNAI2 OS=Bos taurus GN=SNAI2 PE=2 SV=1
22. <a href="#">F1MMB7</a>	28878	18	Uncharacterized protein OS=Bos taurus GN=TP53TG5 PE=4 SV=1
23. <a href="#">F1N6K9</a>	95221	18	Uncharacterized protein OS=Bos taurus PE=4 SV=2
24. <a href="#">Q32KL9</a>	28308	18	B-cell receptor-associated protein 29 OS=Bos taurus GN=BCAP29 PE=2 SV=1
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26. <a href="#">F1MB56</a>	24689	18	Uncharacterized protein OS=Bos taurus GN=TEX35 PE=4 SV=1
27. <a href="#">G3MYV8</a>	6868	18	Uncharacterized protein OS=Bos taurus PE=4 SV=1
28. <a href="#">F1N3R9</a>	25138	18	Uncharacterized protein OS=Bos taurus GN=TMCO5A PE=4 SV=1
29. <a href="#">F1MNR3</a>	91564	18	Uncharacterized protein OS=Bos taurus GN=TOP1 PE=4 SV=1
30. <a href="#">Q3SX42</a>	23992	18	Charged multivesicular body protein 2b OS=Bos taurus GN=CHMP2B PE=2 SV=1
31. <a href="#">F1MGT0</a>	24053	18	Meiotic nuclear division protein 1 homolog OS=Bos taurus GN=MND1 PE=4 SV=1
32. <a href="#">Q32L19</a>	24083	18	Meiotic nuclear division protein 1 homolog OS=Bos taurus GN=MND1 PE=2 SV=1
33. <a href="#">Q62B27</a>	21064	18	ADM OS=Bos taurus GN=ADM PE=2 SV=2
34. <a href="#">Q05B49</a>	24773	18	UPF0711 protein C18orf21 homolog OS=Bos taurus PE=2 SV=1
35. <a href="#">Q8MJN0</a>	20622	18	FUN14 domain-containing protein 2 OS=Bos taurus GN=FUND2C2 PE=2 SV=1
36. <a href="#">Q32LM7</a>	28555	18	Coiled-coil domain-containing protein 152 OS=Bos taurus GN=CCDC152 PE=2 SV=2
37. <a href="#">F1MJA8</a>	28543	18	Coiled-coil domain-containing protein 152 OS=Bos taurus GN=CCDC152 PE=4 SV=2
38. <a href="#">A5D7A0</a>	26902	18	EF-hand domain-containing protein D2 OS=Bos taurus GN=EFHD2 PE=2 SV=1
39. <a href="#">G3N365</a>	141959	17	Structural maintenance of chromosomes protein OS=Bos taurus GN=SMC3 PE=3 SV=1
40. <a href="#">E1BMK2</a>	25092	17	Uncharacterized protein OS=Bos taurus PE=4 SV=2
41. <a href="#">A7MBI0</a>	50969	17	Protein kinase C and casein kinase substrate in neurons protein 1 OS=Bos taurus GN=PACIN1 PE=2 SV=1
42. <a href="#">G3N0Z2</a>	40114	17	Uncharacterized protein OS=Bos taurus PE=3 SV=1
43. <a href="#">Q0I181</a>	14868	17	Regulator of G-protein signaling 13 OS=Bos taurus GN=RGS13 PE=2 SV=1
44. <a href="#">P35246</a>	37724	16	Pulmonary surfactant-associated protein D OS=Bos taurus GN=SFTPD PE=1 SV=2
45. <a href="#">F1MWQ0</a>	17662	16	Complexin-3 OS=Bos taurus GN=CPLX3 PE=4 SV=1
46. <a href="#">Q0VC09</a>	44563	16	RIB43A-like with coiled-coils protein 1 OS=Bos taurus GN=RIBC1 PE=2 SV=1
47. <a href="#">E1BL95</a>	154749	16	Uncharacterized protein OS=Bos taurus GN=CENPJ PE=4 SV=1
48. <a href="#">P31976</a>	68832	16	Ezrin OS=Bos taurus GN=EZR PE=1 SV=2

49. [Q2YDN4](#) 58176 16 Coiled-coil domain-containing protein 105 OS=Bos taurus GN=CCDC105 PE=2 SV=1  
 50. [G3MZ80](#) 7701 16 Uncharacterized protein OS=Bos taurus PE=4 SV=1

## Results List

1.	<a href="#">F1MSR8</a>	Mass: 134858	Score: 91	Expect: 1.9e-005	Matches: 40
Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=4 SV=2					
Observed	Mr (expt)	Mr (calc)	ppm	Start	End Miss Ions Peptide
807.3893	806.3820	806.3711	13.5	1266 - 1271	0 --- K.NWWSSK.S
812.3985	811.3912	811.3898	1.75	1379 - 1384	0 --- K.TMIEYR.S
828.3904	827.3831	827.3847	-1.95	1379 - 1384	0 --- K.TMIEYR.S + Oxidation (M)
871.4945	870.4872	870.4851	2.44	1360 - 1366	0 --- R.FTYITVLK.D
912.4497	911.4424	911.4283	15.4	1038 - 1046	0 --- R.GMPGPQGPR.G + Oxidation (M)
935.4698	934.4625	934.4661	-3.82	1265 - 1271	1 --- K.KNWWSSK.S
969.4571	968.4498	968.4538	-4.13	1219 - 1225	0 --- K.LCHPEWK.S
1003.4687	1002.4614	1002.4553	6.12	1367 - 1375	1 --- K.DGCTKHTGK.W
1026.4922	1025.4849	1025.5003	-14.95	861 - 871	1 --- K.GARGDSGPPGR.A
1114.5396	1113.5323	1113.5414	-8.18	540 - 551	1 --- K.GANGEPGKAGEK.G
1155.6113	1154.6040	1154.5754	24.8	1379 - 1387	1 --- K.TMIEYRSQK.T
1173.6259	1172.6186	1172.6149	3.16	1192 - 1201	0 --- K.SLNNQIESLR.S
1183.6123	1182.6050	1182.5855	16.5	1376 - 1384	1 --- K.WGKTMIEYR.S
1196.6102	1195.6029	1195.5768	21.9	1038 - 1049	1 --- R.GMPGPQGPRGDK.G
1226.5948	1225.5875	1225.5939	-5.18	1181 - 1191	0 --- R.QHDAEVDATLK.S
1325.6637	1324.6564	1324.6598	-2.53	1216 - 1225	1 --- R.DLKLCHPEWK.S
1374.6412	1373.6339	1373.6510	-12.45	1367 - 1378	2 --- K.DGCTKHTGKWGK.T
1427.7872	1426.7799	1426.7780	1.37	1341 - 1353	0 --- K.ALLLIQGSNDVEIR.A
1432.7133	1431.7060	1431.7068	-0.55	1360 - 1371	1 --- R.FTYITVLKDGCTK.H
1478.7439	1477.7366	1477.7412	-3.11	1326 - 1339	0 --- K.NSIAYLDEEAAGNLK.K
1485.7720	1484.7647	1484.7623	1.61	1354 - 1366	1 --- R.AEGNSRFTYITVLK.D
1555.8816	1554.8743	1554.8729	0.90	1340 - 1353	1 --- K.KALLIQGSNDVEIR.A
1606.8384	1605.8311	1605.8362	-3.15	1326 - 1340	1 --- K.NSIAYLDEEAAGNLKK.A
1622.8137	1621.8064	1621.8035	1.81	1372 - 1384	2 --- K.HTGKWGKTMIEYR.S + Oxidation (M)
1750.8356	1749.8283	1749.8356	-4.14	1311 - 1325	0 --- R.LLSTEGSQNITYHCK.N
1757.8322	1756.8249	1756.8605	-20.25	633 - 650	1 --- R.GFPGERGSPGSQLQGAR.G
1786.9000	1785.8927	1785.8969	-2.34	1192 - 1207	1 76 K.SLNNQIESLRSPESGR.K
1786.9017	1785.8944	1785.8969	-1.38	1192 - 1207	1 --- K.SLNNQIESLRSPESGR.K
1914.9995	1913.9922	1913.9919	0.19	1192 - 1208	2 --- K.SLNNQIESLRSPESGRK.N
2007.9894	2006.9821	2006.9341	23.9	1016 - 1037	1 --- K.QGDRGEAGAQQPMGPAGPAGAR.G
2042.0640	2041.0567	2041.0552	0.75	1341 - 1359	1 --- K.ALLLIQGSNDVEIRAEGNSR.F
2047.0167	2046.0094	2045.9840	12.4	1354 - 1371	2 --- R.AEGNSRFTYITVLKDGCTK.H
2070.8835	2069.8762	2069.8823	-2.92	1226 - 1243	0 --- K.SGDYWIDPNQGTLDAMK.V
2086.8828	2085.8755	2085.8772	-0.80	1226 - 1243	0 --- K.SGDYWIDPNQGTLDAMK.V + Oxidation (M)
2098.9976	2097.9903	2097.9498	19.3	1038 - 1058	2 --- R.GMPGPQGPRGDKGETGEAGER.G + Oxidation (M)
2170.1467	2169.1394	2169.1501	-4.94	1340 - 1359	2 --- K.KALLIQGSNDVEIRAEGNSR.F
2400.0652	2399.0579	2399.0596	-0.70	1244 - 1264	0 --- K.VFCNMETGETCVYPNPASVPK.K
2416.0752	2415.0679	2415.0545	5.55	1244 - 1264	0 --- K.VFCNMETGETCVYPNPASVPK.K + Oxidation (M)
2452.0632	2451.0559	2451.1085	-21.44	231 - 257	1 --- K.GEAGAPGVKGESGSPGENGSPGPMGPR.G + Oxidation (M)
2528.1580	2527.1507	2527.1546	-1.52	1244 - 1265	1 --- K.VFCNMETGETCVYPNPASVPKK.N
No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 809.4480, 811.4104, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1179.6063, 1180.6165, 1182.6090, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1271.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1401.7505, 1411.7208, 1421.7177, 1431.7961, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1615.8826, 1616.8605, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1751.8787, 1753.8948, 1756.8905, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2074.8914, 2083.9907, 2084.8987, 2092.8821, 2095.9941, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2406.0737, 2411.0076, 2414.0813, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365					
2.	<a href="#">P02459</a>	Mass: 142825	Score: 91	Expect: 2e-005	Matches: 41
Collagen alpha-1(II) chain OS=Bos taurus GN=COL2A1 PE=1 SV=4					
Observed	Mr (expt)	Mr (calc)	ppm	Start	End Miss Ions Peptide
807.3893	806.3820	806.3711	13.5	1335 - 1340	0 --- K.NWWSSK.S
812.3985	811.3912	811.3898	1.75	1448 - 1453	0 --- K.TMIEYR.S
828.3904	827.3831	827.3847	-1.95	1448 - 1453	0 --- K.TMIEYR.S + Oxidation (M)
871.4945	870.4872	870.4851	2.44	1429 - 1435	0 --- R.FTYITVLK.D
912.4497	911.4424	911.4283	15.4	1107 - 1115	0 --- R.GMPGPQGPR.G + Oxidation (M)
935.4698	934.4625	934.4661	-3.82	1334 - 1340	1 --- K.KNWWSSK.S
969.4571	968.4498	968.4538	-4.13	1288 - 1294	0 --- K.LCHPEWK.S
1003.4687	1002.4614	1002.4553	6.12	1436 - 1444	1 --- K.DGCTKHTGK.W
1026.4922	1025.4849	1025.5003	-14.95	930 - 940	1 --- K.GARGDSGPPGR.A

1114.5396	1113.5323	1113.5414	-8.18	609	-	620	1	---	K.GANGEPGKAGEK.G
1155.6113	1154.6040	1154.5754	24.8	1448	-	1456	1	---	K.TMIEYRSQK.T
1173.6259	1172.6186	1172.6149	3.16	1261	-	1270	0	---	K.SLNNQIESLR.S
1183.6123	1182.6050	1182.5855	16.5	1445	-	1453	1	---	K.WGKTMIEYR.S
1196.6102	1195.6029	1195.5768	21.9	1107	-	1118	1	---	R.GMPGPQGPRGDK.G
1226.5948	1225.5875	1225.5939	-5.18	1250	-	1260	0	---	R.QHDAEVDATLK.S
1325.6637	1324.6564	1324.6598	-2.53	1285	-	1294	1	---	R.DLKLCHPEWK.S
1374.6412	1373.6339	1373.6510	-12.45	1436	-	1447	2	---	K.DGCTKHTGKWK.G
1427.7872	1426.7799	1426.7780	1.37	1410	-	1422	0	---	K.ALLIQGSNDVEIR.A
1432.7133	1431.7060	1431.7068	-0.55	1429	-	1440	1	---	R.FTYITVLKDGCTK.H
1478.7439	1477.7366	1477.7412	-3.11	1395	-	1408	0	---	K.NSIAYLDEAAGNLK.K
1485.7720	1484.7647	1484.7623	1.61	1423	-	1435	1	---	R.AEGNSRFTYITVLK.D
1555.8816	1554.8743	1554.8729	0.90	1409	-	1422	1	---	K.KALLIQGSNDVEIR.A
1606.8384	1605.8311	1605.8362	-3.15	1395	-	1409	1	---	K.NSIAYLDEAAGNLK.K
1622.8137	1621.8064	1621.8035	1.81	1441	-	1453	2	---	K.HTGKWKTMIEYR.S + Oxidation (M)
1750.8356	1749.8283	1749.8356	-4.14	1380	-	1394	0	---	R.LLSTEGSQNITYHCK.N
1757.8322	1756.8249	1756.8605	-20.25	702	-	719	1	---	R.GFPGERGSPGSQLQGAR.G
1786.9000	1785.8927	1785.8969	-2.34	1261	-	1276	1	76	K.SLNNQIESLRSPGSR.K
1786.9017	1785.8944	1785.8969	-1.38	1261	-	1276	1	---	K.SLNNQIESLRSPGSR.K
1914.9995	1913.9922	1913.9919	0.19	1261	-	1277	2	---	K.SLNNQIESLRSPGSRK.N
2007.9894	2006.9821	2006.9341	23.9	1085	-	1106	1	---	K.QGDRGEAGAQGMPGAPAGAR.G
2042.0640	2041.0567	2041.0552	0.75	1410	-	1428	1	---	K.ALLIQGSNDVEIRAEGNSR.F
2047.0167	2046.0094	2045.9840	12.4	1423	-	1440	2	---	R.AEGNSRFTYITVLKDGCTK.H
2070.8835	2069.8762	2069.8823	-2.92	1295	-	1312	0	---	K.SGDYWIDPNQGTLDAMK.V
2086.8828	2085.8755	2085.8772	-0.80	1295	-	1312	0	---	K.SGDYWIDPNQGTLDAMK.V + Oxidation (M)
2098.9976	2097.9903	2097.9498	19.3	1107	-	1127	2	---	R.GMPGPQGPRGDKGETGEAGER.G + Oxidation (M)
2170.1467	2169.1394	2169.1501	-4.94	1409	-	1428	2	---	K.KALLIQGSNDVEIRAEGNSR.F
2400.0652	2399.0579	2399.0596	-0.70	1313	-	1333	0	---	K.VFCNMETGETCVYPNPASVPK.K
2416.0752	2415.0679	2415.0545	5.55	1313	-	1333	0	---	K.VFCNMETGETCVYPNPASVPK.K + Oxidation (M)
2417.0732	2416.0659	2416.0089	23.6	54	-	73	0	---	R.ICVCDTGTVLKDDIICEDMK.D
2452.0632	2451.0559	2451.1085	-21.44	300	-	326	1	---	K.GEAGAPGVKGESGSPGENSGPMGPR.G + Oxidation (M)
2528.1580	2527.1507	2527.1546	-1.52	1313	-	1334	1	---	K.VFCNMETGETCVYPNPASVPK.K

**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 809.4480, 811.4104, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1179.6063, 1180.6165, 1182.6090, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1431.7961, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1615.8826, 1616.8605, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1751.8787, 1753.8948, 1756.8905, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2074.8914, 2083.9907, 2084.8987, 2092.8821, 2095.9941, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2406.0737, 2411.0076, 2414.0813, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

### 3. **F1MYE4** Mass: 41319 Score: 63 Expect: 0.012 Matches: 20

Chondroherin OS=Bos taurus GN=CHAD PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
756.4687	755.4614	755.4653	-5.21	57	-	62	0	--- K.LLNLQR.N
765.3908	764.3835	764.3817	2.40	166	-	173	0	--- R.SGAFQGAQ.D
802.4548	801.4475	801.4497	-2.74	315	-	320	1	--- R.RWLEAK.T
820.4244	819.4171	819.4239	-8.28	91	-	98	0	--- R.EVAAGAFR.G
837.3853	836.3780	836.3633	17.6	306	-	311	0	--- K.CTCQLR.LG
913.5118	912.5045	912.5042	0.32	334	-	340	1	--- K.FRGQHIR.D
993.5331	992.5258	992.5226	3.26	347	-	354	2	--- R.GCKFPTKR.S
1018.5200	1017.5127	1017.5104	2.28	274	-	281	0	35 K.HVHLENNR.L
1018.5212	1017.5139	1017.5104	3.46	274	-	281	0	--- K.HVHLENNR.L
1315.6570	1314.6497	1314.6429	5.19	336	-	346	1	--- R.GQHIRDTDARF.G
1319.6852	1318.6779	1318.6710	5.22	306	-	315	2	--- K.CTCQLRGLRR.W
1338.6471	1337.6398	1337.6364	2.55	235	-	246	0	--- K.SIPDNAFQSFGR.Y
1349.6991	1348.6918	1348.6888	2.27	63	-	74	0	--- R.NNFPVLAANSFR.A
1355.7155	1354.7082	1354.7133	-3.74	261	-	273	0	--- K.FSDGAFLGVITLK.H
1361.6670	1360.6597	1360.6405	14.1	321	-	333	0	--- K.TSRPDATCASPAAK.F
1365.6913	1364.6840	1364.6936	-6.99	207	-	219	0	--- R.NQLSSYPSAALSK.L
1505.8649	1504.8576	1504.8613	-2.44	222	-	234	1	--- R.VVEELKLSHNP.LS
1647.8785	1646.8712	1646.8780	-4.12	102	-	114	0	--- K.QLIYLYLSHNDIR.V
1751.8787	1750.8714	1750.8777	-3.60	247	-	260	0	--- R.YLETWLWDNTNLEK.F
2060.0469	2059.0396	2059.0374	1.07	202	-	219	1	--- K.FYLDNRQLSSYPSAALSK.L

**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 764.4056, 767.3679, 768.3909, 772.3955, 795.4186, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657,

963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1317.6521, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1342.6680, 1345.6760, 1346.6880, 1354.6907, 1357.7034, 1360.6882, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9663, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0646, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

4. [P19879](#) Mass: 34530 Score: 62 Expect: 0.015 Matches: 15

Mimecan OS=Bos taurus GN=OGN PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
806.4631	805.4558	805.4698	-17.35	190	196	0	---	K.LTLFNAK.Y
918.5391	917.5318	917.5334	-1.80	292	299	1	---	K.RLPIGSYI.-
930.5048	929.4975	929.4930	4.81	266	272	1	---	R.DRIEEIR.L
939.4758	938.4686	938.4457	24.3	258	265	0	---	K.ANDTSYIR.D
972.4793	971.4720	971.4712	0.85	121	128	0	---	K.ESAYLYAR.F
972.4800	971.4727	971.4712	1.56	121	128	0	8	K.ESAYLYAR.F
1060.5400	1059.5327	1059.5349	-2.05	139	147	0	36	K.DFADIPNLR.R
1060.5442	1059.5369	1059.5349	1.91	139	147	0	---	K.DFADIPNLR.R
1115.5605	1114.5532	1114.5593	-5.49	283	291	0	---	K.HPNSFICLK.R
1216.6494	1215.6421	1215.6360	5.04	139	148	1	---	K.DFADIPNLR.R
1271.6696	1270.6623	1270.6604	1.48	283	292	1	---	K.HPNSFICLK.R
1361.6670	1360.6597	1360.6775	-13.07	121	131	1	---	K.ESAYLYARFNK.I
1473.8054	1472.7981	1472.7987	-0.40	135	147	1	---	K.LTAKDFADIPNLR.R
1679.9736	1678.9663	1678.9617	2.74	268	282	1	---	R.IEEIRLEGNPVILGK.H
2705.2192	2704.2119	2704.1704	15.3	29	50	0	---	R.IIYDYGTDNLEETFFSQDYEDK.Y

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 925.4747, 928.5064, 933.4619, 935.4698, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9663, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0646, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

5. [A5D9E8](#) Mass: 34517 Score: 62 Expect: 0.015 Matches: 15

Mimecan OS=Bos taurus GN=OGN PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
806.4631	805.4558	805.4698	-17.35	190	196	0	---	K.LTLFNAK.Y
918.5391	917.5318	917.5334	-1.80	292	299	1	---	K.RLPIGSYI.-
930.5048	929.4975	929.4930	4.81	266	272	1	---	R.DRIEEIR.L
939.4758	938.4686	938.4457	24.3	258	265	0	---	K.ANDTSYIR.D
972.4793	971.4720	971.4712	0.85	121	128	0	---	K.ESAYLYAR.F
972.4800	971.4727	971.4712	1.56	121	128	0	8	K.ESAYLYAR.F
1060.5400	1059.5327	1059.5349	-2.05	139	147	0	36	K.DFADIPNLR.R
1060.5442	1059.5369	1059.5349	1.91	139	147	0	---	K.DFADIPNLR.R
1115.5605	1114.5532	1114.5593	-5.49	283	291	0	---	K.HPNSFICLK.R
1216.6494	1215.6421	1215.6360	5.04	139	148	1	---	K.DFADIPNLR.R
1271.6696	1270.6623	1270.6604	1.48	283	292	1	---	K.HPNSFICLK.R
1361.6670	1360.6597	1360.6775	-13.07	121	131	1	---	K.ESAYLYARFNK.I
1473.8054	1472.7981	1472.7987	-0.40	135	147	1	---	K.LTAKDFADIPNLR.R
1679.9736	1678.9663	1678.9617	2.74	268	282	1	---	R.IEEIRLEGNPVILGK.H



2705.2192 2704.2119 2704.1704 15.3 29 - 50 0 --- R.IIYDYGTDNLEETFFSQDYEDK.Y

**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 925.4747, 928.5064, 933.4619, 935.4698, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2038.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0814, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

6. [G3N088](#) Mass: 40915 Score: 61 Expect: 0.021 Matches: 16

Mimecan OS=Bos taurus GN=OGN PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
735.3865	734.3792	734.3963	-23.27	5	-	10	0 ---	K.ISTTWK.L
806.4631	805.4558	805.4698	-17.35	247	-	253	0 ---	K.LTLFNAK.Y
918.5391	917.5318	917.5334	-1.80	349	-	356	1 ---	K.RLPIGSIYI.-
930.5048	929.4975	929.4930	4.81	323	-	329	1 ---	R.DRIIEIR.L
939.4758	938.4686	938.4457	24.3	315	-	322	0 ---	K.ANDTSYIR.D
972.4793	971.4720	971.4712	0.85	178	-	185	0 ---	K.ESAYLYAR.F
972.4800	971.4727	971.4712	1.56	178	-	185	0 8	K.ESAYLYAR.F
1060.5400	1059.5327	1059.5349	-2.05	196	-	204	0 36	K.DFADIPNLR.R
1060.5442	1059.5369	1059.5349	1.91	196	-	204	0 ---	K.DFADIPNLR.R
1115.5605	1114.5532	1114.5593	-5.49	340	-	348	0 ---	K.HPNSFICLK.R
1216.6494	1215.6421	1215.6360	5.04	196	-	205	1 ---	K.DFADIPNLR.L
1271.6696	1270.6623	1270.6604	1.48	340	-	349	1 ---	K.HPNSFICLK.R
1361.6670	1360.6597	1360.6775	-13.07	178	-	188	1 ---	K.ESAYLYARFNK.I
1473.8054	1472.7981	1472.7987	-0.40	192	-	204	1 ---	K.LTAKDFADIPNLR.R
1679.9736	1678.9663	1678.9617	2.74	325	-	339	1 ---	R.IEEIRLEGNPVILGK.H
2705.2192	2704.2119	2704.1704	15.3	86	-	107	0 ---	R.IIYDYGTDNLEETFFSQDYEDK.Y
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 925.4747, 928.5064, 933.4619, 935.4698, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2038.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0814, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

7. [Q27972](#) Mass: 41373 Score: 58 Expect: 0.039 Matches: 19

Chondroadherin OS=Bos taurus GN=CHAD PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
756.4687	755.4614	755.4653	-5.21	57	-	62	0 ---	K.LLLNQR.N
765.3908	764.3835	764.3817	2.40	166	-	173	0 ---	R.SGAFQGAK.D
802.4548	801.4475	801.4497	-2.74	315	-	320	1 ---	R.RWLEAK.T
820.4244	819.4171	819.4239	-8.28	91	-	98	0 ---	R.EVAAGAFR.G
837.3853	836.3780	836.3633	17.6	306	-	311	0 ---	K.CTCQLR.G
913.5118	912.5045	912.5042	0.32	334	-	340	1 ---	K.RFGQHIR.D
993.5331	992.5258	992.5226	3.26	347	-	354	2 ---	R.GCKFPTKR.S

1018.5200	1017.5127	1017.5104	2.28	274	-	281	0	35	K.HVHLENNR.L
1018.5212	1017.5139	1017.5104	3.46	274	-	281	0	---	K.HVHLENNR.L
1315.6570	1314.6497	1314.6429	5.19	336	-	346	1	---	R.GQHIRDTDAFR.G
1319.6852	1318.6779	1318.6710	5.22	306	-	315	2	---	K.CTCQLRGLRRR.W
1338.6471	1337.6398	1337.6364	2.55	235	-	246	0	---	K.SIPDNAFQSFGR.Y
1355.7155	1354.7082	1354.7133	-3.74	261	-	273	0	---	K.FSDGAFLGVTTLK.H
1361.6670	1360.6597	1360.6405	14.1	321	-	333	0	---	K.TSRPDATCASPAK.F
1365.6913	1364.6840	1364.6936	-6.99	207	-	219	0	---	R.NQLSSYPSAALSK.L
1505.8649	1504.8576	1504.8613	-2.44	222	-	234	1	---	R.VVEEKLSHNPFLK.S
1647.8785	1646.8712	1646.8780	-4.12	102	-	114	0	---	K.QLIYLYLSHNDIR.V
1751.8787	1750.8714	1750.8777	-3.60	247	-	260	0	---	R.YLETLWLDNTNLEK.F
2060.0469	2059.0396	2059.0374	1.07	202	-	219	1	---	K.FYLDNRQLSSYPSAALSK.L
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 764.4056, 767.3679, 768.3909, 772.3955, 795.4186, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1317.6521, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1357.7034, 1360.6882, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.9887, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1870, 2528.1870, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365									

8. [F1MYS7](#) Mass: 68834 Score: 25 Expect: 84 Matches: 16

Uncharacterized protein OS=Bos taurus GN=EIF4B PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
713.4334	712.4261	712.4092	23.7	399	-	403	1	--- R.RPRER.H
828.3904	827.3831	827.3773	6.99	129	-	135	0	--- R.EPSNPER.L
836.4589	835.4516	835.4626	-13.17	473	-	480	0	--- K.VMPAPPPK.E
839.3696	838.3623	838.3569	6.39	287	-	292	1	--- R.RDDDYR.G
845.4100	844.4027	844.3926	12.0	579	-	586	0	15 K.AEENPASK.F
845.4123	844.4050	844.3926	14.7	579	-	586	0	--- K.AEENPASK.F
852.4056	851.3984	851.3886	11.5	180	-	186	1	--- R.DDRSFGR.D
930.5048	929.4975	929.4930	4.81	383	-	389	1	--- K.EQEKLQR.Q
1165.5817	1164.5744	1164.6000	-21.93	324	-	333	1	--- R.DDRGPPQRPK.L
1342.6680	1341.6607	1341.6888	-20.95	512	-	524	0	--- K.VVPAQLSEEGSAR.K
1357.7034	1356.6961	1356.6997	-2.66	166	-	177	1	--- R.IRVDVADQAQDK.D
1579.7926	1578.7853	1578.8228	-23.75	473	-	486	1	--- K.VMPAPPPKENAVWK.R + Oxidation (M)
1628.8260	1627.8187	1627.8278	-5.57	166	-	179	2	--- R.IRVDVADQAQDKDR.D
2013.8983	2012.8910	2012.9049	-6.89	538	-	557	2	--- K.GQSGSSSRGPGDGGNKDHWK.E
2352.0571	2351.0498	2351.0567	-2.92	195	-	214	1	--- K.TDTRWARPAADSFDYPPR.R
2390.0403	2389.0330	2389.0742	-17.23	488	-	511	1	--- R.SSNPPARSQSSDTEQQSPTSGGGK.V

**No match to:** 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 834.4043, 837.3853, 840.3839, 842.5085, 851.3975, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.9887, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1870, 2528.1870, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

9. [E1BND5](#) Mass: 218183 Score: 24 Expect: 1e+002 Matches: 12

Uncharacterized protein OS=Bos taurus GN=NCOA6 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
805.4229	804.4156	804.4090	8.21	1321	-	1328	1 ---	R.SSPGSSSRK.T
983.4664	982.4591	982.4832	-24.54	1047	-	1055	0 ---	R.GPLNPDSQR.M
1128.5775	1127.5702	1127.5683	1.71	900	-	909	0 ---	K.QNNTNANKPK.K
1165.5817	1164.5744	1164.5735	0.83	2026	-	2037	0 ---	R.SSRPASASSSTK.V
1172.6301	1171.6228	1171.5945	24.1	1329	-	1339	1 ---	K.TTPSPGRQNSK.A
1328.6809	1327.6736	1327.6983	-18.61	1517	-	1529	0 ---	K.ASVIPSLQDPSSK.E
1365.6913	1364.6840	1364.6725	8.48	54	-	64	2 ---	K.GNIDDKDFKWK.L
1786.9000	1785.8927	1785.9221	-16.44	1294	-	1311	1 24	K.LDSVVVNSGKQNSGAPK.R
1786.9017	1785.8944	1785.9221	-15.49	1294	-	1311	1 ---	K.LDSVVVNSGKQNSGAPK.R
1931.9463	1930.9390	1930.9717	-16.92	1083	-	1099	2 ---	K.QRMPEVNTPLGTSRK.M + 2 Oxidation (M)
1953.9353	1952.9280	1952.9700	-21.48	1432	-	1448	1 ---	K.AVPPQEVKMMVPEDQCK.K
2211.1045	2210.0972	2210.0424	24.8	2004	-	2023	2 ---	R.RNSRTDEPAVASESVENGHR.K
No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.7970, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9955, 1919.0038, 1925.9418, 1928.0103, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

10. [A7Z060](#) Mass: 81637 Score: 22 Expect: 1.4e+002 Matches: 21

RNF219 protein OS=Bos taurus GN=RNF219 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
807.3893	806.3820	806.3923	-12.72	653	-	658	0 ---	R.LFEDQR.F
823.3846	822.3774	822.3872	-11.91	226	-	231	0 ---	K.VEQYER.E
845.4100	844.4027	844.4151	-14.67	293	-	300	1 12	K.NQGDGARK.Q
845.4123	844.4050	844.4151	-11.96	293	-	300	1 ---	K.NQGDGARK.Q
916.4905	915.4832	915.4886	-5.90	693	-	700	1 ---	K.NVNSAKR.K
967.4568	966.4495	966.4658	-16.84	166	-	173	0 ---	R.TANEIYEK.V
1158.6154	1157.6081	1157.6265	-15.86	691	-	700	2 ---	R.NKNVNQSAKR.K
1315.6570	1314.6497	1314.6819	-24.51	152	-	162	1 ---	K.IDPTEVAEWKK.R
1323.6517	1322.6444	1322.6215	17.4	226	-	235	1 ---	K.VEQYERETNR.L
1382.6647	1381.6574	1381.6772	-14.31	502	-	512	1 ---	R.LNSLSRFEMNR.T + Oxidation (M)
1605.8098	1604.8025	1604.8369	-21.44	702	-	717	2 ---	K.IQSSLSNASPSKATKS.-
1768.9027	1767.8954	1767.9155	-11.37	217	-	231	1 ---	R.FTVLAALQSKVEQYER.E
1851.8488	1850.8415	1850.8833	-22.55	544	-	560	1 ---	K.SPCNNGFKSLDLGLSK.S
1880.9277	1879.9204	1879.8846	19.0	327	-	341	2 ---	K.TEPNCKNQDLYQKR.V
2036.9486	2035.9413	2035.9779	-17.95	265	-	283	2 ---	K.EAMNAICQALSTDGKGSK.G
2052.9924	2051.9851	2051.9728	6.01	265	-	283	2 ---	K.EAMNAICQALSTDGKGSK.G + Oxidation (M)
2086.8828	2085.8755	2085.9160	-19.43	561	-	577	1 ---	K.SSQSCFELEETDKLEER.T
2136.9180	2135.9107	2135.9603	-23.19	342	-	359	0 ---	R.VETMLTIVDTSDMTYLER.E + 2 Oxidation (M)
2355.0459	2354.0386	2354.0808	-17.93	321	-	340	2 ---	R.QEGTSKTEPNCKNQDLYQK.R
2510.1277	2509.1204	2509.1213	-0.35	507	-	528	2 ---	R.SFEMNRTTSSEASMDAAYLDK.I
2542.1509	2541.1436	2541.1111	12.8	507	-	528	2 ---	R.SFEMNRTTSSEASMDAAYLDK.I + 2 Oxidation (M)
No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1317.6521, 1319.6852, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.7970, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868,								

1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1867.9503, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2389.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2528.1580, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

11. [G5E523](#) Mass: 28080 Score: 20 Expect: 2.5e+002 Matches: 13

Uncharacterized protein OS=Bos taurus GN=STAU2 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
880.4403	879.4330	879.4524	-22.05	203	209	0	---	R.EFVMQVK.V
1036.5372	1035.5299	1035.5535	-22.79	202	209	1	---	R.EFVMQVK.V
1056.5488	1055.5415	1055.5335	7.64	1	8	1	---	-R.YHCPVPK.I
1113.5546	1112.5473	1112.5509	-3.19	29	38	1	---	R.QAARHNAAMK.A + Oxidation (M)
1179.6063	1178.5990	1178.6005	-1.29	84	93	0	---	R.NMPVSFEVIK.E + Oxidation (M)
1319.6852	1318.6779	1318.7067	-21.84	83	93	1	---	K.RNMPVSFEVIK.E
1335.6937	1334.6864	1334.7016	-11.40	83	93	1	---	K.RNMPVSFEVIK.E + Oxidation (M)
1354.6907	1353.6834	1353.7047	-15.75	27	38	2	---	K.TRQAARHNAAMK.A
1421.7177	1420.7104	1420.7384	-19.68	228	240	0	---	K.NAAEAMLLQGYK.A
1477.7524	1476.7451	1476.7460	-0.58	185	196	1	---	K.EKEPDYVLLSER.G
1605.8098	1604.8025	1604.8409	-23.94	184	196	2	---	K.EKEPDYVLLSER.G
1919.0038	1917.9965	1917.9618	18.1	185	200	2	---	K.EKEPDYVLLSERGMPR.R
2058.9963	2057.9890	2057.9914	-1.17	84	101	1	---	R.NMPVSFEVIKESGPPHMK.S + 2 Oxidation (M)

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1039.5402, 1042.5383, 1045.5654, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

12. [A6QR15](#) Mass: 32975 Score: 20 Expect: 2.5e+002 Matches: 14

LOC535277 protein OS=Bos taurus GN=LOC535277 PE=1 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
802.4548	801.4475	801.4344	16.3	199	205	0	---	K.NVTNNLK.S
834.4043	833.3970	833.4130	-19.20	206	213	0	---	K.SLEAASEK.Y
866.3914	865.3841	865.3851	-1.11	134	140	1	---	R.AMKDEEK.M + Oxidation (M)
894.4579	893.4507	893.4606	-11.16	162	168	1	---	K.YEEVARK.L
1165.5817	1164.5744	1164.5518	19.4	141	149	0	---	K.MEIQEMQLK.E + Oxidation (M)
1268.6498	1267.6425	1267.6156	21.2	150	160	1	---	K.EAKHIAEEADR.K
1332.6743	1331.6670	1331.6820	-11.24	249	259	1	---	K.LEKTIDDLLEK.L
1431.7961	1430.7888	1430.7616	19.0	66	77	2	---	K.DAQEKLELTEKK.A
1473.8054	1472.7981	1472.7722	17.6	252	264	1	---	K.TIDDLLEKLAQAK.E
1477.7524	1476.7451	1476.7316	9.17	141	152	1	---	K.MEIQEMQLKEAK.H
1493.7539	1492.7466	1492.7265	13.5	141	152	1	---	K.MEIQEMQLKEAK.H + Oxidation (M)
1928.0103	1927.0030	1927.0374	-17.83	102	118	2	---	R.AQERLATALQKLEEAEEK.A
1931.9463	1930.9390	1930.9232	8.22	13	29	2	---	K.LDKENAIIDRAEQAESDK.K
1953.9353	1952.9280	1952.9578	-15.25	50	65	2	---	K.LKETEDLDKYSENK.D

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1427.7872, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1475.7748, 1478.7439, 1485.7720, 1486.7664, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943,

1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1763.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

13. [G3N219](#) Mass: 3783 Score: 20 Expect: 2.7e+002 Matches: 4

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
935.4698	934.4625	934.4654	-3.11	24	-	31	1 ---	K.LRNACSSK.E
1410.7505	1409.7432	1409.7370	4.38	14	-	25	1 ---	K.SLQMVATMTMKLR.N + 2 Oxidation (M)
1421.7177	1420.7104	1420.6802	21.2	24	-	35	2 ---	K.LRNACSSKEMPL.- + Oxidation (M)
2042.0640	2041.0567	2041.0118	22.0	14	-	31	2 ---	K.SLQMVATMTMKLRNACSSK.E + Oxidation (M)
No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6882, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1411.7208, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1444.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

14. [G3X6N6](#) Mass: 52918 Score: 19 Expect: 2.8e+002 Matches: 18

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1036.5372	1035.5299	1035.5349	-4.80	366	-	374	0 ---	K.VFNQNSSLK.G
1060.5400	1059.5327	1059.5349	-2.05	216	-	224	0 ---	R.THTGEKPYK.C
1060.5442	1059.5369	1059.5349	1.91	216	-	224	0 ---	R.THTGEKPYK.C
1122.5363	1121.5290	1121.5353	-5.58	323	-	331	1 ---	K.SHTEETKYK.C
1156.5720	1155.5647	1155.5706	-5.11	231	-	240	1 ---	K.AFSRCTSLSK.H
1216.6494	1215.6421	1215.6360	5.04	215	-	224	1 ---	K.RTHTGEKPYK.C
1387.6444	1386.6371	1386.6536	-11.91	85	-	95	1 ---	R.MAFNQAKMFQR.F + Oxidation (M)
1411.7208	1410.7135	1410.7078	4.06	348	-	359	0 ---	R.HSMIHTGEKPFK.C
1421.7177	1420.7104	1420.7245	-9.91	231	-	242	2 ---	K.AFSRCTSLSKHK.R
1494.7423	1493.7350	1493.7370	-1.34	131	-	142	0 ---	R.QQEMILMPSVYR.K
1622.8137	1621.8064	1621.8320	-15.76	131	-	143	1 ---	R.QQEMILMPSVYR.K
1644.8046	1643.7973	1643.7903	4.26	319	-	331	2 ---	K.QHEKSHTTEKYK.C
1651.8245	1650.8172	1650.8114	3.53	58	-	74	0 ---	K.GSQPWAIAAAPGHSSK.D
1683.8121	1682.8048	1682.8385	-19.99	144	-	158	0 ---	K.HISPAMAMGHSILIY.V
1931.9463	1930.9390	1930.9506	-5.98	215	-	230	2 ---	K.RTHTGEKPYKCP LCGK.A
2307.9941	2306.9868	2306.9692	7.66	375	-	393	1 ---	K.GHERHTHTGEKPCCHQCGK.A
2398.0576	2397.0503	2396.9974	22.1	263	-	281	2 ---	K.EHEKAHRGNGEYCHQCEK.V
2428.0898	2427.0825	2427.0631	8.02	379	-	398	1 ---	R.THTGEKPCCHQCGKAPFQR.R
No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1065.5422, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1410.7505, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1647.8785, 1649.8463, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0								



1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1953.9353, 1975.9606, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2322.9980, 2323.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

15. [Q5E9D0](#) Mass: 38604 Score: 19 Expect: 3e+002 Matches: 13

Eukaryotic translation initiation factor 2 subunit 2 OS=Bos taurus GN=EIF2S2 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
764.4056	763.3984	763.3898	11.2	309	- 315	0	---	R.CSVASIK.T
795.4186	794.4114	794.4109	0.60	183	- 188	0	---	R.VFNIMR.E + Oxidation (M)
871.4945	870.4872	870.4923	-5.81	266	- 272	0	---	K.QIENVLR.R
1036.5372	1035.5299	1035.5535	-22.78	183	- 190	1	---	R.VFNIMREK.N
1244.6324	1243.6251	1243.6343	-7.36	191	- 201	2	---	K.NPDMVAGEKKR.F
1273.6653	1272.6580	1272.6674	-7.35	286	- 296	1	---	R.SPDTILQKDR.L
1558.8474	1557.8401	1557.8739	-21.70	262	- 273	2	---	R.FQQQKIENVLRR.Y
1615.8826	1614.8753	1614.8954	-12.43	260	- 272	2	---	K.GRFQKKIENVLR.R
1844.8907	1843.8834	1843.8518	17.1	1	- 16	2	---	-MSGDEMIFDPTMSKKK.K
2352.0571	2351.0498	2351.0176	13.7	133	- 152	1	---	K.FPDEDEVLEKDEALEDEDSK.K
2359.0532	2358.0459	2358.0919	-19.49	297	- 315	1	---	R.LYFLQCETCHSRCVSASIK.T
2510.1277	2509.1204	2509.1166	1.52	21	- 42	0	---	K.KPFMLDEEGDAQTEETQPSSEK.E
3291.4248	3290.4175	3290.4752	-17.53	154	- 182	1	---	K.DDGISFSNQTGPWAGSERDYTYEELLNR.V

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 765.3908, 767.3679, 768.3909, 772.3955, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2322.9980, 2323.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3312.2756, 3451.3933, 3453.4365

16. [A0A140T862](#) Mass: 38576 Score: 19 Expect: 3e+002 Matches: 13

Eukaryotic translation initiation factor 2 subunit 2 OS=Bos taurus GN=EIF2S2 PE=1 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
764.4056	763.3984	763.3898	11.2	309	- 315	0	---	R.CSVASIK.T
795.4186	794.4114	794.4109	0.60	183	- 188	0	---	R.VFNIMR.E + Oxidation (M)
871.4945	870.4872	870.4923	-5.81	266	- 272	0	---	K.QIENVLR.R
1036.5372	1035.5299	1035.5535	-22.78	183	- 190	1	---	R.VFNIMREK.N
1244.6324	1243.6251	1243.6343	-7.36	191	- 201	2	---	K.NPDMVAGEKKR.F
1273.6653	1272.6580	1272.6674	-7.35	286	- 296	1	---	R.SPDTILQKDR.L
1558.8474	1557.8401	1557.8739	-21.70	262	- 273	2	---	R.FQQQKIENVLRR.Y
1615.8826	1614.8753	1614.8954	-12.43	260	- 272	2	---	K.GRFQKKIENVLR.R
1844.8907	1843.8834	1843.8518	17.1	1	- 16	2	---	-MSGDEMIFDPTMSKKK.K
2352.0571	2351.0498	2351.0176	13.7	133	- 152	1	---	K.FPDEDEVLEKDEALEDEDSK.K
2359.0532	2358.0459	2358.0919	-19.49	297	- 315	1	---	R.LYFLQCETCHSRCVSASIK.T
2510.1277	2509.1204	2509.1166	1.52	21	- 42	0	---	K.KPFMLDEEGDAQTEETQPSSEK.E
3291.4248	3290.4175	3290.4752	-17.53	154	- 182	1	---	K.DDGISFSNQTGPWAGSERDYTYEELLNR.V

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 765.3908, 767.3679, 768.3909, 772.3955, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1616.8605, 1622.8137, 1628.8260, 1629.8358,



1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2355.0459, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3312.2756, 3451.3933, 3453.4365

17. [E1BDF0](#) Mass: 81113 Score: 19 Expect: 3e+002 Matches: 24

Uncharacterized protein OS=Bos taurus GN=NEXN PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
802.4548	801.4475	801.4344	16.3	531	-	536	1	R.RIEEQK.L
803.4370	802.4297	802.4184	14.1	466	-	471	1	K.KIEEER.A
816.4408	815.4335	815.4474	-17.02	46	-	51	2	R.NQRRSR.D
820.4244	819.4171	819.4351	-21.97	343	-	349	1	K.AFAEARR.S
836.4589	835.4516	835.4552	-4.29	58	-	63	1	R.KEQYIR.E
839.3696	838.3623	838.3821	-23.58	204	-	209	1	K.YEEDKR.I
851.3975	850.3902	850.3855	5.64	1	-	7	0	-.MNDISQK.A + Oxidation (M)
878.4625	877.4552	877.4406	16.7	280	-	286	1	R.AFEEARR.Q
902.4597	901.4524	901.4617	-10.33	467	-	473	1	K.IEEERAR.R
910.4410	909.4338	909.4443	-11.62	202	-	208	1	R.VKYEEDK.R
918.5391	917.5318	917.5447	-14.04	304	-	311	1	K.GYRPGK.LK.L
939.4758	938.4686	938.4531	16.4	104	-	111	1	K.GKFAEMEK.Q
949.4591	948.4518	948.4665	-15.50	406	-	412	0	K.QEFEQLR.Q
975.4650	974.4578	974.4417	16.5	525	-	531	1	R.EEEEQR.R
993.5331	992.5258	992.5039	22.1	59	-	65	1	K.EQYIRER.E
1036.5372	1035.5299	1035.5237	6.06	249	-	256	0	K.LTFEELER.R
1056.5488	1055.5415	1055.5359	5.30	393	-	400	2	R.TEEERKHK.L
1172.6301	1171.6228	1171.6448	-18.79	363	-	373	0	K.TISQESLIPGK.L
1195.6060	1194.5987	1194.5880	8.95	200	-	208	2	K.ERVKYEEDK.R
1307.6858	1306.6785	1306.6517	20.5	187	-	196	2	K.KNFEDIEKER.E
1376.6804	1375.6731	1375.6514	15.8	520	-	530	2	R.MAKAREEEQR.R
1579.7926	1578.7853	1578.7711	8.98	401	-	412	1	K.LEMEKQEFQLR.Q
1844.8907	1843.8834	1843.9250	-22.56	399	-	412	2	K.HKLEMEKQEFQLR.Q
2211.1045	2210.0972	2210.0446	23.8	221	-	239	2	K.EAKCLSLVMDDELESEAKK.E + Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 837.3853, 840.3839, 842.5085, 845.4100, 845.4123, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 912.4497, 913.5118, 916.4905, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 947.4628, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1039.5402, 1042.5383, 1045.5654, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

18. [Q2TBK0](#) Mass: 39253 Score: 19 Expect: 3e+002 Matches: 14

Uncharacterized protein C6orf163 homolog OS=Bos taurus PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
765.3908	764.3835	764.3738	12.7	247	-	253	0	K.LGSVMVK.L + Oxidation (M)
852.4056	851.3984	851.4171	-21.99	118	-	124	1	K.EMATRTK.M + Oxidation (M)
1030.5151	1029.5078	1029.5090	-1.19	130	-	137	0	K.NLEEELQR.E
1206.6770	1205.6697	1205.6438	21.5	115	-	124	2	K.ELKEMATRTK.M
1215.6627	1214.6554	1214.6295	21.3	71	-	81	0	R.IAQAEADIWAK.A
1332.6743	1331.6670	1331.6503	12.5	174	-	184	0	R.LMAQEEIQSQ.R
1616.8605	1615.8532	1615.8464	4.24	174	-	186	2	R.LMAQEEIQSQRRK.A
1662.7909	1661.7836	1661.7800	2.20	150	-	161	2	R.IQRIMMECHREK.V + 2 Oxidation (M)
1683.8121	1682.8048	1682.8410	-21.47	125	-	137	1	K.MQLHKNLEELQR.E + Oxidation (M)
1753.8948	1752.8875	1752.8716	9.09	88	-	102	2	R.QAVKKALEEANDMYK.M + Oxidation (M)
1867.9503	1866.9430	1866.9067	19.5	187	-	203	1	K.AMEELMSGVTVVKDQK.K + Oxidation (M)
1953.9353	1952.9280	1952.9479	-10.20	276	-	291	1	K.DFLEEELQETRAAFQK.Y
2047.0167	2046.0094	2045.9912	8.91	170	-	185	2	R.EQERLMAQEEIQSQRR.K + Oxidation (M)
2277.0137	2276.0064	2275.9959	4.63	1	-	18	1	-.MIRPNPNYTNFVCAVCNK.I + Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 856.4893,								

866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5363, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1668.7810, 1679.9736, 1681.8214, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9015, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1880.9277, 1887.9734, 1908.8838, 1914.9957, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

19. [Q2TBN3](#) Mass: 19797 Score: 19 Expect: 3.1e+002 Matches: 12

Centrin-2 OS=Bos taurus GN=CE2N2 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
851.3975	850.3902	850.4106	-23.94	72	-	78	0	--- K.MISEIDK.E + Oxidation (M)
1234.6317	1233.6244	1233.6540	-23.94	55	-	65	1	--- K.VAMRALGFEPK.K + Oxidation (M)
1323.6517	1322.6444	1322.6388	4.28	72	-	83	1	--- K.MISEIDKEGTGK.M + Oxidation (M)
1432.7133	1431.7060	1431.6915	10.1	19	-	30	0	--- R.MSPKPELTTEEK.Q + Oxidation (M)
1478.7439	1477.7366	1477.7697	-22.41	67	-	78	2	--- K.EEIKKMISEIDK.E + Oxidation (M)
1588.8136	1587.8063	1587.7926	8.63	18	-	30	1	--- K.RMSPKPELTTEEK.Q + Oxidation (M)
1716.8571	1715.8498	1715.8876	-22.00	17	-	30	2	--- R.KRMSPKPELTTEEK.Q + Oxidation (M)
2007.9894	2006.9821	2006.9731	4.49	152	-	168	2	--- R.DGDGEVNEQFLRIMKK.T
2036.9486	2035.9413	2035.9417	-0.18	84	-	100	1	--- K.MNFSDFLTVMQKMSK.D
2052.9924	2051.9851	2051.9366	23.6	84	-	100	1	--- K.MNFSDFLTVMQKMSK.D + Oxidation (M)
2068.8982	2067.8909	2067.9315	-19.64	84	-	100	1	--- K.MNFSDFLTVMQKMSK.D + 2 Oxidation (M)
2084.8987	2083.8914	2083.9265	-16.81	84	-	100	1	--- K.MNFSDFLTVMQKMSK.D + 3 Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5363, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9015, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9955, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

20. [G3MWY8](#) Mass: 9886 Score: 19 Expect: 3.3e+002 Matches: 7

Coiled-coil domain-containing protein 167 OS=Bos taurus GN=CCDC167 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
802.4548	801.4475	801.4596	-15.10	2	-	8	1	--- M.IDGLEKK.L
805.4229	804.4156	804.4051	13.0	1	-	7	0	--- -.MIDGLEK.K
1376.6804	1375.6731	1375.6878	-10.65	23	-	34	1	--- R.LCGVELSSEARR.S
1387.6444	1386.6371	1386.6449	-5.59	41	-	52	1	--- K.SSLMNKASNYEK.E + Oxidation (M)
1628.8260	1627.8187	1627.7875	19.2	39	-	52	2	--- K.EKSSLMNKASNYEK.E
1644.8046	1643.7973	1643.7824	9.06	39	-	52	2	--- K.EKSSLMNKASNYEK.E + Oxidation (M)
1757.8322	1756.8249	1756.8665	-23.66	41	-	55	2	--- K.SSLMNKASNYEKELK.L + Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 803.4370, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5363, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.66								

1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1377.6794, 1382.6647, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9810, 2116.9160, 2118.8835, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

21. [Q3MHQ4](#) Mass: 30565 Score: 19 Expect: 3.3e+002 Matches: 14

Zinc finger protein SNAI2 OS=Bos taurus GN=SNAI2 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
972.4793	971.4720	971.4495	23.2	245	-	252	1	--- K.SCSKTFPSR.M
972.4800	971.4727	971.4495	23.9	245	-	252	1	--- K.SCSKTFPSR.M
993.5331	992.5258	992.5477	-22.07	1	-	8	1	--- -.MPRSFLVK.K + Oxidation (M)
1060.5400	1059.5327	1059.5237	8.53	136	-	145	0	--- K.TYSTFSGLGK.H
1060.5442	1059.5369	1059.5237	12.5	136	-	145	0	--- K.TYSTFSGLGK.H
1115.5605	1114.5532	1114.5264	24.1	180	-	188	0	--- R.THTPLCVCK.I
1209.5848	1208.5775	1208.6037	-21.64	117	-	127	0	--- K.LSDPFAIEAEK.F
1325.6637	1324.6564	1324.6776	-15.95	136	-	147	1	--- K.TYSTFSGLGKHK.Q
1605.8098	1604.8025	1604.8383	-22.28	226	-	239	1	--- R.SNLRAHLQTHSDVK.K
1668.7810	1667.7737	1667.8058	-19.25	176	-	188	1	--- K.MHIRTHTPLCVCK.I + Oxidation (M)
1681.8214	1680.8141	1680.8440	-17.75	245	-	258	2	--- K.SCSKTFSRMSLLHK.H
1851.8488	1850.8415	1850.8516	-5.43	148	-	162	2	--- K.QLCHDAQSRKFSCK.Y
2098.9976	2097.9903	2098.0339	-20.79	163	-	179	2	--- K.YCDKEYVSLGALKMHIR.T + Oxidation (M)
2125.0176	2124.0103	2123.9769	15.8	128	-	145	1	--- K.FQCNCNKTYSTFSGLGK.H
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1679.9736, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1867.9503, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9810, 2116.9160, 2118.8835, 2119.8833, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

22. [F1MMB7](#) Mass: 28878 Score: 18 Expect: 3.4e+002 Matches: 11

Uncharacterized protein OS=Bos taurus GN=TP53TG5 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
902.4597	901.4524	901.4327	21.8	132	-	139	0	--- R.AQEAMPQK.E
925.4747	924.4674	924.4777	-11.19	153	-	161	0	--- R.GHGLTTSR.A
1113.5546	1112.5473	1112.5397	6.88	179	-	187	1	--- K.THQDRTPMK.D
1165.5817	1164.5744	1164.5645	8.56	224	-	231	2	--- R.WVKRCCTR.F
1328.6809	1327.6736	1327.6918	-13.69	184	-	194	2	--- R.TPMKDVKQPER.A
1337.6724	1336.6651	1336.6856	-15.35	208	-	218	1	--- R.VHLGPRVMCR.S + Oxidation (M)
1880.9277	1879.9204	1879.9462	-13.69	17	-	32	2	--- K.MQAKEPEDKIHPVSK.V + Oxidation (M)
1925.9418	1924.9345	1924.9796	-23.39	162	-	178	1	--- R.AQAQEPPTGDPVRFVWK.T
2013.8983	2012.8910	2012.8997	-4.29	99	-	115	1	--- K.ELQEEAGCSYQKLDSEK.L
2376.0264	2375.0191	2375.0531	-14.29	228	-	246	1	--- R.CCTRFCSASLETMPVHLYK.V + Oxidation (M)
2420.0718	2419.0645	2419.0631	0.58	132	-	152	1	--- R.AQEAMPQKEEQMEPEPTTSR.G + 2 Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212,								

1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2024.8591, 2025.6234, 2036.5195, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8833, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

23. [F1N6K9](#) Mass: 95221 Score: 18 Expect: 3.5e+002 Matches: 27

Uncharacterized protein OS=Bos taurus PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
807.3893	806.3820	806.3956	-16.88	583	-	589	0	--- K.NTMLNSK.L
823.3846	822.3774	822.3905	-16.01	583	-	589	0	--- K.NTMLNSK.L + Oxidation (M)
834.4043	833.3970	833.4130	-19.22	562	-	568	0	--- R.NEETLT.K.T
897.4412	896.4339	896.4239	11.1	463	-	469	1	--- K.EDQYSKK.V
902.4597	901.4524	901.4366	17.5	440	-	446	1	--- K.QEGEQRR.N
983.4664	982.4591	982.4429	16.4	447	-	454	0	--- R.NADMLYEK.I
999.4453	998.4380	998.4379	0.17	447	-	454	0	--- R.NADMLYEK.I + Oxidation (M)
1030.5151	1029.5078	1029.5317	-23.23	1	-	9	1	--- -.MKIFGFGSK.K + Oxidation (M)
1155.6113	1154.6040	1154.5859	15.7	541	-	549	0	--- K.YFEDIEIVK.G
1158.6154	1157.6081	1157.6267	-16.04	1	-	10	2	--- -.MKIFGFGSK.K + Oxidation (M)
1165.5817	1164.5744	1164.5710	2.98	622	-	630	1	--- K.RDMLAFQR.A
1173.6259	1172.6186	1172.6203	-1.43	28	-	36	1	--- R.RIHFPQGYR.I
1185.6317	1184.6244	1184.6513	-22.69	775	-	784	1	--- K.QGLVLEERNK.E
1268.6498	1267.6425	1267.6230	15.4	447	-	456	1	--- R.NADMLYEKIR.E + Oxidation (M)
1271.6696	1270.6623	1270.6339	22.3	197	-	207	1	--- K.EANIHAVDKMK.R + Oxidation (M)
1332.6743	1331.6670	1331.6364	23.0	66	-	76	2	--- K.NGLNDRDKMNR.T
1411.7208	1410.7135	1410.7401	-18.86	197	-	208	2	--- K.EANIHAVDKMKR.N
1421.7177	1420.7104	1420.7245	-9.90	633	-	643	2	--- R.DERLHLHDKMK.S
1434.7288	1433.7215	1433.7370	-10.82	683	-	693	1	--- R.EKILMLECVQR.D + Oxidation (M)
1576.7987	1575.7914	1575.8038	-7.87	583	-	595	2	--- K.NTMLNSKLENEKR.L
1588.8136	1587.8063	1587.8018	2.82	24	-	36	2	--- R.DSGRRIHFPQGYR.I
1615.8826	1614.8753	1614.9127	-23.13	469	-	481	2	--- K.KVEMKQQLTLR.A
1668.7810	1667.7737	1667.7322	24.9	607	-	621	0	--- R.LAAASHDHDQCQTSK.R
1786.9000	1785.8927	1785.8969	-2.35	10	-	27	2	6 K.KGESPLGSSISIPGRDSDGR.R
1786.9017	1785.8944	1785.8969	-1.40	10	-	27	2	--- K.KGESPLGSSISIPGRDSDGR.R
1824.8674	1823.8601	1823.8333	14.7	607	-	622	1	--- R.LAAASHDHDQCQTSKR.D
1919.0038	1917.9965	1917.9982	-0.89	751	-	766	1	--- K.EKTVISIQDQFQPMVR.E

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 824.3756, 828.3904, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 985.4842, 991.4688, 993.5331, 997.4298, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1156.5720, 1157.5952, 1159.6273, 1172.6301, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6089, 1329.6672, 1331.6763, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1427.7872, 1431.7961, 1432.7133, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1579.7926, 1584.7897, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1791.7335, 1808.8868, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8835, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0814, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

24. [Q32KL9](#) Mass: 28308 Score: 18 Expect: 3.8e+002 Matches: 12

B-cell receptor-associated protein 29 OS=Bos taurus GN=BCAP29 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
806.4631	805.4558	805.4559	-0.08	97	-	102	1	--- K.LFRSQR.N
890.4479	889.4407	889.4392	1.60	180	-	186	1	--- K.LEEDKEK.L
910.4410	909.4338	909.4556	-23.97	215	-	221	1	--- R.LSKEYDR.L
978.4976	977.4903	977.4964	-6.24	210	-	217	1	--- K.MQSERLSK.E

1018.5200 1017.5127 1017.5342 -21.10 179 - 186 2 --- K.KLEEDKEK.L  
 1018.5212 1017.5139 1017.5342 -19.92 179 - 186 2 --- K.KLEEDKEK.L  
 1065.5425 1064.5352 1064.5138 20.1 73 - 81 0 --- K.YSSTHTIEK.S  
 1193.6096 1192.6023 1192.6088 -5.41 72 - 81 1 --- R.KYSSTHTIEK.S  
 1195.6060 1194.5987 1194.5703 23.8 151 - 159 1 --- K.FMEENERLK.R  
 1323.6517 1322.6444 1322.6652 -15.72 150 - 159 2 --- K.KFMEENERLK.R  
 2095.9941 2094.9868 2095.0269 -19.12 82 - 99 1 --- K.SSASRPAPAYHTQMKLFR.S + Oxidation (M)  
 2369.0710 2368.0637 2368.1185 -23.11 194 - 214 2 --- K.ASDALSQAQNDVMIMKQSER.L + Oxidation (M)  
**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4676, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1115.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

25. [G3N097](#) Mass: 6896 Score: 18 Expect: 3.8e+002 Matches: 6

Uncharacterized protein OS=Bos taurus GN=SERF2 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1159.6273	1158.6200	1158.6105	8.22	27	-	37	2 ---	R.RDDGLSAAARK.Q
1180.6165	1179.6092	1179.5918	14.8	14	-	23	2 ---	K.NMKKQSDSVK.G + Oxidation (M)
1187.6431	1186.6358	1186.6167	16.2	26	-	36	2 ---	K.RRDDGLSAAAR.K
1234.6317	1233.6244	1233.6023	17.9	40	-	49	1 ---	R.DSEIMQQKQK.K
1250.6144	1249.6071	1249.5972	7.92	40	-	49	1 ---	R.DSEIMQQKQK.K + Oxidation (M)
1331.6763	1330.6690	1330.6888	-14.84	1	-	11	2 ---	-MTRGNQRELAR.Q
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1182.6090, 1183.6123, 1185.6317, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

26. [F1MB56](#) Mass: 24689 Score: 18 Expect: 3.8e+002 Matches: 12

Uncharacterized protein OS=Bos taurus GN=TEX35 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
756.4687	755.4614	755.4653	-5.21	5	-	10	2 ---	K.RVEPKK.T
1045.5654	1044.5581	1044.5750	-16.12	1	-	9	2 ---	-MSAKRVEPK.K
1159.6273	1158.6200	1158.6244	-3.78	58	-	66	2 ---	R.EVREELKEK.M
1215.6627	1214.6554	1214.6805	-20.64	122	-	131	1 ---	K.MQQLRLIGK.T
1421.7177	1420.7104	1420.7119	-1.03	61	-	71	2 ---	R.EELKEKMEIEK.Q + Oxidation (M)
1606.8384	1605.8311	1605.8106	12.8	67	-	79	2 ---	K.MEEIKQIKDVMDK.D
1616.8605	1615.8532	1615.8570	-2.31	39	-	53	1 ---	K.QEGPFTKPGGTKEK.N
1622.8137	1621.8064	1621.8055	0.57	67	-	79	2 ---	K.MEEIKQIKDVMDK.D + Oxidation (M)
1684.8204	1683.8131	1683.8212	-4.77	84	-	96	1 ---	K.LQEFVEIMKEMQK.D + 2 Oxidation (M)
2036.9486	2035.9413	2035.9918	-24.79	97	-	113	2 ---	K.DMDEKMDVLINIQNKS.F + Oxidation (M)



2052.9924 2051.9851 2051.9867 -0.77 97 - 113 2 --- K.DMDEKMDVLINIQKNSK.F + 2 Oxidation (M)  
 2376.0264 2375.0191 2374.9981 8.87 161 - 179 1 --- R.QQPKDPMPLHQDCSCFEK.C + Oxidation (M)  
**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1615.8826, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8426, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8833, 2024.8591, 2025.6234, 2036.5195, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8985, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2450.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

27. [G3MYV8](#) Mass: 6868 Score: 18 Expect: 3.8e+002 Matches: 6

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
765.3908	764.3835	764.3851	-1.99	12	-	17	1	R.QKNMTK.Q + Oxidation (M)
1159.6273	1158.6200	1158.6105	8.22	27	-	37	2	R.RDDGLSAAARK.Q
1187.6431	1186.6358	1186.6167	16.2	26	-	36	2	K.RRDDGLSAAAR.K
1234.6317	1233.6244	1233.6023	17.9	40	-	49	1	R.DSEIMQQKQK.K
1250.6144	1249.6071	1249.5972	7.92	40	-	49	1	R.DSEIMQQKQK.K + Oxidation (M)
1338.6471	1337.6398	1337.6609	-15.76	14	-	25	2	K.NMTKQSDSVKGR.R + Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8833, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8985, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2382.0349, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

28. [F1N3R9](#) Mass: 25138 Score: 18 Expect: 3.8e+002 Matches: 10

Uncharacterized protein OS=Bos taurus GN=TMCO5A PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
806.4631	805.4558	805.4480	9.70	197	-	202	2	R.EVMKRRK.R + Oxidation (M)
997.4298	996.4225	996.4182	4.28	75	-	82	0	K.ENTTTMER.E + Oxidation (M)
1295.7233	1294.7160	1294.6993	12.9	46	-	55	2	K.IHKKEDEIQR.L
1334.6592	1333.6519	1333.6296	16.8	20	-	30	0	K.NINSLNMDLER.D + Oxidation (M)
1446.7256	1445.7183	1445.7296	-7.81	19	-	30	1	K.NINSLNMDLER.D
1549.7388	1548.7315	1548.7566	-16.18	118	-	130	2	K.SQKATKCEQDNLK.G
1558.8474	1557.8401	1557.8297	6.70	1	-	13	2	-MQGPRSEKVEILR.L + Oxidation (M)
1848.8322	1847.8249	1847.8618	-19.94	20	-	34	1	K.NINSLNMDLERDMQR.I
1992.9642	1991.9569	1991.9516	2.65	19	-	34	2	K.KNINSLNMDLERDMQR.I + Oxidation (M)
2438.0457	2437.0384	2437.0914	-21.74	65	-	84	2	R.DLAEDDEELEKENTTTMERER.A
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630,								



978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5422, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1555.8816, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.7970, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

29. [F1MN93](#) Mass: 91564 Score: 18 Expect: 3.8e+002 Matches: 29

Uncharacterized protein OS=Bos taurus GN=TOP1 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
735.3865	734.3792	734.3931	-18.95	374	-	379	1	--- K.MGMLKR.R
795.4186	794.4114	794.4035	9.93	448	-	453	1	--- K.YETARR.L
803.4370	802.4297	802.4297	0.06	315	-	321	1	--- K.AQTEARK.Q
806.4631	805.4558	805.4558	-0.06	35	-	40	2	--- R.HKEHKK.D
842.5085	841.5012	841.4909	12.3	133	-	139	0	--- K.EDIKPLK.R
890.4479	889.4407	889.4294	12.7	441	-	447	1	--- K.GEKDWQK.Y
897.4412	896.4339	896.4464	-13.97	407	-	413	1	--- K.EVRHDNK.V
918.5391	917.5318	917.5117	21.9	456	-	462	2	--- K.KCVDKIR.N
928.5064	927.4991	927.5178	-20.18	359	-	366	0	--- K.IEPPGLFR.G
930.5048	929.4975	929.4930	4.81	659	-	666	1	--- K.KEQIADAR.R
978.4976	977.4903	977.5043	-14.29	18	-	25	1	--- R.LNDSHKHK.D
1128.5775	1127.5702	1127.5580	10.9	369	-	378	1	--- R.GNHPKMGMLK.R + Oxidation (M)
1144.5709	1143.5636	1143.5529	9.40	369	-	378	1	--- R.GNHPKMGMLK.R + 2 Oxidation (M)
1231.6174	1230.6101	1230.6357	-20.76	109	-	119	1	--- K.ENGFSPPRIK.D
1268.6498	1267.6425	1267.6641	-17.05	369	-	379	2	--- R.GNHPKMGMLK.R
1295.7233	1294.7160	1294.7033	9.80	541	-	550	2	--- R.YYNKVPVEKR.V
1325.6637	1324.6564	1324.6856	-22.03	367	-	378	2	--- R.GRGNHPKMGMLK.R
1355.7155	1354.7082	1354.6915	12.4	580	-	591	0	--- K.HLQDLMEGLTAK.V
1357.7034	1356.6961	1356.6754	15.2	367	-	378	2	--- R.GRGNHPKMGMLK.R + 2 Oxidation (M)
1365.6913	1364.6840	1364.6792	3.56	647	-	658	1	--- K.SMMNLQSKIDAK.K
1375.6798	1374.6725	1374.6891	-12.09	106	-	117	2	--- K.KEKENGFSPPRIK
1432.7133	1431.7060	1431.7101	-2.88	381	-	392	0	--- R.IMPEDIINCSK.D
1493.7539	1492.7466	1492.7471	-18.42	647	-	659	2	--- K.SMMNLQSKIDAKK.E
1537.8021	1536.7948	1536.8188	-15.58	253	-	266	1	--- K.LSPKAEAVATFFAK.M
1588.8136	1587.8063	1587.8112	-3.10	380	-	392	1	--- R.RIMPEDIINCSK.D
1604.8417	1603.8344	1603.8062	17.6	380	-	392	1	--- R.RIMPEDIINCSK.D + Oxidation (M)
1753.8948	1752.8875	1752.9087	-12.06	228	-	243	0	--- K.GPVFAPPYEPLENVK.F
1840.8225	1839.8152	1839.8136	0.88	2	-	17	0	--- M.SGDHLHNSQIEADFR.L
1919.0038	1917.9965	1917.9652	16.3	380	-	395	2	--- R.RIMPEDIINCSKDAK.V + Oxidation (M)

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 802.4548, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 893.9562, 894.4579, 897.0289, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 925.4747, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5422, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1360.6882, 1361.6670, 1368.6920, 1374.6412, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1425.7872, 1431.7961, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1590.3611, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.7970, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8835, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710,

30. [Q38X42](#) Mass: 23992 Score: 18 Expect: 3.9e+002 Matches: 10

Charged multivesicular body protein 2b OS=Bos taurus GN=CHMP2B PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
802.4548	801.4475	801.4344	16.3	31	-	37	1	--- R.DRAALEK.Q

807.3893	806.3820	806.3956	-16.90	108 - 114	0	---	K.TMQAVNK.K + Oxidation (M)
837.3853	836.3780	836.3884	-12.43	91 - 97	0	---	K.VMNSQMK.M
916.4905	915.4832	915.5025	-21.08	33 - 40	1	---	R.AALEKQEK.Q
947.4628	946.4656	946.4654	-10.43	52 - 59	1	---	K.IGNKEACR.V
1187.6431	1186.6358	1186.6306	4.44	31 - 40	2	---	R.DRAALEKQEK.Q
1740.8768	1739.8695	1739.8368	18.8	98 - 114	1	---	K.MAGAMSTAKTMQAVNK.K
1848.8322	1847.8249	1847.8427	-9.64	82 - 97	1	---	K.VTSMSTQTKVMNSQMK.M + 3 Oxidation (M)
1850.8301	1849.8228	1849.8042	10.1	91 - 107	1	---	K.VMNSQMKMAGAMSTAK.T + 4 Oxidation (M)
2036.9486	2035.9413	2035.9909	-24.36	187 - 205	1	---	R.SLPASSTSKSTISDEEIER.Q
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 803.4370, 805.4229, 806.4631, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365							

31. [F1MG70](#) Mass: 24053 Score: 18 Expect: 3.9e+002 Matches: 10

Meiotic nuclear division protein 1 homolog OS=Bos taurus GN=MND1 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
806.4631	805.4558	805.4368	23.6	41 - 48	0	---	---	K.GITAMSVK.E
894.4579	893.4507	893.4606	-11.16	139 - 145	1	---	---	K.AEVEKYR.E
916.4905	915.4832	915.4774	6.37	132 - 138	1	---	---	R.DQREQLK.A
1226.5948	1225.5875	1225.5979	-8.45	184 - 193	1	---	---	K.FGFEENKIDK.N
1268.6498	1267.6425	1267.6118	24.2	25 - 34	1	---	---	K.DVFLQKDMKE.I + Oxidation (M)
1354.6907	1353.6834	1353.6928	-6.96	183 - 193	2	---	---	R.KFGFEENKIDK.N
1579.7926	1578.7853	1578.8194	-21.61	169 - 181	1	---	---	R.WTDNIFAISWAK.R
1647.8785	1646.8712	1646.8774	-3.72	121 - 134	2	---	---	R.TMLAKELSSLRDQR.E
1953.9353	1952.9280	1952.9264	0.85	16 - 30	1	---	---	R.MMEIFYETKDVFLK.D + 2 Oxidation (M)
2211.1045	2210.0972	2210.0752	9.99	14 - 30	2	---	---	R.TRMMEIFYETKDVFLK.D + 2 Oxidation (M)

<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365							
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32. [Q32L19](#) Mass: 24083 Score: 18 Expect: 3.9e+002 Matches: 10

Meiotic nuclear division protein 1 homolog OS=Bos taurus GN=MND1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
836.4589	835.4516	835.4473	5.08	41 - 48	0	---	---	K.GITTM <sup>2</sup> SVK.E
894.4579	893.4507	893.4606	-11.16	139 - 145	1	---	---	K.AEVEKYR.E
916.4905	915.4832	915.4774	6.37	132 - 138	1	---	---	R.DQREQLK.A
1226.5948	1225.5875	1225.5979	-8.45	184 - 193	1	---	---	K.FGFEENKIDK.N
1268.6498	1267.6425	1267.6118	24.2	25 - 34	1	---	---	K.DVFLQKDMEK.I + Oxidation (M)

1354.6907 1353.6834 1353.6928 -6.96 183 - 193 2 --- R.KFGFEENKIDK.N  
 1579.7926 1578.7853 1578.8194 -21.61 169 - 181 1 --- R.WIDNIFAFAKSWAK.R  
 1647.8785 1646.8712 1646.8774 -3.72 121 - 134 2 --- R.TMLAKELSSSLRDQR.E  
 1953.9353 1952.9280 1952.9264 0.85 16 - 30 1 --- R.MMEIFYETKDVFLQK.D + 2 Oxidation (M)  
 2211.1045 2210.0972 2210.0752 9.99 14 - 30 2 --- R.TRMMEIFYETKDVFLQK.D + 2 Oxidation (M)  
**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1935.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

33. [062827](#) Mass: 21064 Score: 18 Expect: 4e+002 Matches: 10

ADM OS=Bos taurus GN=ADM PE=2 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
845.4100	844.4027	844.4039	-1.37	131	138	1	5	K.DKDGSAAPR.S
845.4123	844.4050	844.4039	1.34	131	138	1	---	K.DKDGSAAPR.S
871.4945	870.4872	870.4671	23.1	171	178	1	---	K.LRGAPDSR.V
1033.5419	1032.5346	1032.5465	-11.47	141	149	1	---	K.ISPQYGRR.R
1060.5400	1059.5327	1059.5309	1.75	131	140	2	---	K.DKDGSAAPRSK.I
1060.5442	1059.5369	1059.5309	5.71	131	140	2	---	K.DKDGSAAPRSK.I
1086.5115	1085.5042	1085.5101	-5.44	79	89	0	---	R.SPQASSPDAAR.I
1355.7155	1354.7082	1354.6953	9.54	79	91	1	---	R.SPQASSPDAARIR.V
1751.8787	1750.8714	1750.8737	-1.31	45	60	1	---	R.ELRESSSYPTGLADVK.A
1783.8499	1782.8426	1782.8584	-8.84	97	111	1	---	R.QSLNNFQGLRSFGCR.F
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1935.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

34. [Q05B49](#) Mass: 24773 Score: 18 Expect: 4.1e+002 Matches: 10

UPF0711 protein C18orf21 homolog OS=Bos taurus PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
806.4631	805.4558	805.4559	-0.10	110	116	1	---	R.TVKHHGK.S
871.4945	870.4872	870.5035	-18.70	72	78	1	---	K.LLNLEAR.N
878.4625	877.4552	877.4440	12.8	106	112	1	---	K.TCNRIVK.H
1035.5352	1034.5279	1034.5331	-5.01	203	210	2	---	K.KNPKMDFR.N
1229.6246	1228.6173	1228.5910	21.4	207	216	1	---	K.MDFRNFLLSL.-
1337.6724	1336.6651	1336.6782	-9.81	106	116	2	---	K.TCNRIVKHHGK.S
1584.7897	1583.7824	1583.7766	3.68	204	216	2	---	K.NPKMDFRNFLLSL.- + Oxidation (M)
1647.8785	1646.8712	1646.8351	21.9	1	13	2	---	-.MRQKHYLEAAAWK.L + Oxidation (M)
2225.1191	2224.1118	2224.1158	-1.78	160	180	1	---	K.SPALIFRTPTSGQSTICSSK.N

2449.0347 2448.0274 2448.0872 -24.43 37 - 56 1 --- K.STFEGTGPCYQQLLVQDKSR.V

**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9882, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

35. [Q8MJNO](#) Mass: 20622 Score: 18 Expect: 4.1e+002 Matches: 10

FUN14 domain-containing protein 2 OS=Bos taurus GN=FUNDC2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
765.3908	764.3835	764.3738	12.7	136	141	1	---	R.VEKDMK.K + Oxidation (M)
772.3955	771.3882	771.3816	8.55	64	68	0	---	K.QPWWR.T
852.4056	851.3984	851.3807	20.7	1	7	0	---	-.METSTQR.T
1128.5775	1127.5702	1127.5432	24.0	20	30	1	---	R.HSASSRGEAAR.V
1183.6123	1182.6050	1182.6105	-4.65	8	19	0	---	R.TGSHLAQTAAAR.H
1767.8036	1766.7963	1766.7781	10.3	35	51	0	---	R.DELAEMAAASQGNFEGK.F
1786.9000	1785.8927	1785.9124	-11.03	173	190	0	---	K.NVLVTGGFFGGFLMGAS.-
1786.9017	1785.8944	1785.9124	-10.07	173	190	0	---	K.NVLVTGGFFGGFLMGAS.-
1808.8868	1807.8795	1807.9037	-13.39	8	25	1	---	R.TGSHLAQTAAARHSASSR.G
1914.9995	1913.9922	1914.0074	-7.91	172	190	1	---	K.NVLVTGGFFGGFLMGAS.-

**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 767.3679, 768.3909, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1791.7335, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9882, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

36. [Q32LM7](#) Mass: 28555 Score: 18 Expect: 4.2e+002 Matches: 12

Coiled-coil domain-containing protein 152 OS=Bos taurus GN=CCDC152 PE=2 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
767.3679	766.3606	766.3531	9.86	31	37	0	---	K.MIESSGK.N + Oxidation (M)
802.4548	801.4475	801.4457	2.26	146	151	1	---	K.LRTQER.E
1035.5352	1034.5279	1034.5066	20.6	152	159	1	---	R.EKQNEMIK.L + Oxidation (M)
1130.5935	1129.5862	1129.5840	2.00	209	217	1	---	R.NTRVDLEQR.L
1180.6165	1179.6092	1179.5992	8.54	54	63	1	---	R.VMQTKEVAMK.Q + Oxidation (M)
1196.6102	1195.6029	1195.5941	7.41	54	63	1	---	R.VMQTKEVAMK.Q + 2 Oxidation (M)
1349.6991	1348.6918	1348.6955	-2.73	48	58	1	---	K.ANCLLRVMQTK.E + Oxidation (M)
1524.7848	1523.7775	1523.8017	-15.88	108	119	2	---	K.IEKTKLYQDMQK.K
1549.7388	1548.7315	1548.7566	-16.17	148	159	2	---	R.TQEREKQNEMIK.L + Oxidation (M)
1659.8241	1658.8168	1658.8410	-14.55	59	72	2	---	K.EVAMKQGENEQLKR.N
1706.8616	1705.8543	1705.8709	-9.70	154	167	1	---	K.QNEMIKLQLEFPAK.L
2051.9792	2050.9719	2050.9775	-2.74	2	19	2	---	M.NQNSEGCMKISSVNLDK.L

**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 768.3909, 772.3955, 795.4186, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846,

824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1537.8021, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

37. [F1MJJ8](#) Mass: 28543 Score: 18 Expect: 4.2e+002 Matches: 12

Coiled-coil domain-containing protein 152 OS=Bos taurus GN=CCDC152 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
767.3679	766.3606	766.3531	9.86	31	-	37	0	--- K.MIESSSGK.N + Oxidation (M)
802.4548	801.4475	801.4457	2.26	146	-	151	1	--- K.LRTQER.E
1035.5352	1034.5279	1034.5066	20.6	152	-	159	1	--- R.EKQNEMIK.L + Oxidation (M)
1130.5935	1129.5862	1129.5840	2.00	209	-	217	1	--- R.NTVRDLEQR.L
1180.6165	1179.6092	1179.5992	8.54	54	-	63	1	--- R.VMQTKEVAMK.Q + Oxidation (M)
1196.6102	1195.6029	1195.5941	7.41	54	-	63	1	--- R.VMQTKEVAMK.Q + 2 Oxidation (M)
1349.6991	1348.6918	1348.6955	-2.73	48	-	58	1	--- K.ANCLLRVMQTK.E + Oxidation (M)
1524.7848	1523.7775	1523.8017	-15.88	108	-	119	2	--- K.IEKTKLYQDMQK.K
1549.7388	1548.7315	1548.7566	-16.17	148	-	159	2	--- R.TQEREKQNEMIK.L + Oxidation (M)
1659.8241	1658.8168	1658.8410	-14.55	59	-	72	2	--- K.EVAMKQGENEQLKR.N
1706.8616	1705.8543	1705.8709	-9.70	154	-	167	1	--- K.QNEMIKLQLEFDAK.L
2051.9792	2050.9719	2050.9775	-2.74	2	-	19	2	--- M.NQNSEGCMKKISSVNLDK.L

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 768.3909, 772.3955, 795.4186, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1537.8021, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

38. [ASD7A0](#) Mass: 26902 Score: 18 Expect: 4.3e+002 Matches: 14

EF-hand domain-containing protein D2 OS=Bos taurus GN=EFHD2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
834.4043	833.3970	833.4130	-19.22	2	-	9	0	--- M.ATDELASK.L
965.4761	964.4689	964.4535	15.9	1	-	9	0	--- -.MATDELASK.L
981.4565	980.4493	980.4484	0.84	1	-	9	0	--- -.MATDELASK.L + Oxidation (M)
1035.5352	1034.5279	1034.5430	-14.57	94	-	101	2	--- R.KQIKDMEK.M + Oxidation (M)
1144.5709	1143.5636	1143.5601	3.12	81	-	89	0	--- R.VFNPYTEFK.E
1180.6165	1179.6092	1179.5845	20.9	111	-	120	0	--- R.DGFIDLMEK.L
1196.6102	1195.6029	1195.5795	19.6	111	-	120	0	--- R.DGFIDLMEK.L + Oxidation (M)
1329.6672	1328.6599	1328.6468	9.86	95	-	104	2	--- K.QIKDMEKMFK.E + 2 Oxidation (M)
1337.6724	1336.6651	1336.6656	-0.38	1	-	12	1	--- -.MATDELASKLSR.R + Oxidation (M)
1477.7524	1476.7451	1476.7718	-18.08	1	-	13	2	--- -.MATDELASKLSRR.L
1493.7539	1492.7466	1492.7667	-13.47	1	-	13	2	--- -.MATDELASKLSRR.L + Oxidation (M)
1716.8571	1715.8498	1715.8301	11.5	194	-	208	1	--- K.SFFEAKVQAMNVSSR.F + Oxidation (M)
1844.8907	1843.8834	1843.8770	3.51	111	-	125	1	--- R.DGFIDLMEKLMMKEK.L + 2 Oxidation (M)
1880.9277	1879.9204	1879.9612	-21.71	64	-	80	2	--- R.RADLNQIGEPQSPSRR.V



**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1478.7439, 1485.7720, 1486.7664, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9982, 2070.8838, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

39. [G3N365](#) Mass: 141959 Score: 17 Expect: 4.6e+002 Matches: 39

Structural maintenance of chromosomes protein OS=Bos taurus GN=SMC3 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
806.4631	805.4558	805.4731	-21.54	1053	-	1059	1	--- K.ATLVMMKK.G + Oxidation (M)
820.4244	819.4171	819.4273	-12.40	873	-	879	1	--- R.VKDTMAR.S
824.3756	823.3683	823.3568	14.0	937	-	942	1	--- K.EECMKK.I
851.3975	850.3902	850.4007	-12.29	904	-	909	1	--- R.WKNMEK.E + Oxidation (M)
852.4056	851.3984	851.3959	2.84	900	-	905	1	--- K.SMERNK.N + Oxidation (M)
894.4579	893.4507	893.4680	-19.45	572	-	578	0	--- K.LLMEFNK.M
916.4905	915.4832	915.4774	6.37	365	-	372	0	--- R.LAQATQER.T
918.5391	917.5318	917.5368	-5.47	1069	-	1076	2	--- R.MKEKGKVV.K
935.4698	934.4625	934.4793	-17.99	281	-	288	1	--- K.ISAMKEEK.E
939.4758	938.4686	938.4610	8.05	615	-	621	1	--- R.YNPRFDK.A
951.4703	950.4631	950.4742	-11.76	281	-	288	1	--- K.ISAMKEEK.E + Oxidation (M)
1056.5488	1055.5415	1055.5287	12.1	107	-	114	1	--- K.DQYFLDKK.M
1158.6154	1157.6081	1157.6346	-22.83	1185	-	1193	2	--- K.FYGVKFRNK.V
1165.5817	1164.5744	1164.5775	-2.60	428	-	436	1	--- K.EKNLEQYNN.L
1172.6301	1171.6228	1171.6084	12.3	341	-	350	1	--- K.QKELAEETPK.F
1180.6165	1179.6092	1179.6169	-6.49	279	-	288	2	--- K.TKISAMKEEK.E + Oxidation (M)
1235.5846	1234.5773	1234.5976	-16.41	1060	-	1070	1	--- K.GDVEGSQLRMK.E + Oxidation (M)
1250.6144	1249.6071	1249.6302	-18.49	828	-	837	0	--- R.VETYLNNLR.K
1301.6205	1300.6132	1300.6259	-9.71	475	-	486	0	--- R.EENAEQQAIAK.R
1334.6592	1333.6519	1333.6812	-21.96	896	-	905	2	--- K.ELQKSMERNK.N
1335.6937	1334.6864	1334.7162	-22.33	925	-	935	2	--- K.MTNRQGMILLK.K + Oxidation (M)
1338.6471	1337.6398	1337.6220	13.3	900	-	909	2	--- K.SMERNKMEK.E
1345.6760	1344.6687	1344.6772	-6.32	684	-	695	1	--- R.KAEELGELEAK.L
1434.7288	1433.7215	1433.6933	19.7	265	-	275	2	--- R.DKMEDIERQVR.E + Oxidation (M)
1485.7720	1484.7647	1484.7471	11.9	840	-	851	0	--- R.LDQVEQELNELR.E
1523.7841	1522.7768	1522.7562	13.5	747	-	758	2	--- R.QQSEKTFMPKQR.S + Oxidation (M)
1588.8136	1587.8063	1587.8039	1.55	144	-	157	1	--- K.INQMATAPDSSRLK.L + Oxidation (M)
1616.8605	1615.8532	1615.8569	-2.30	943	-	956	1	--- K.IRELGLSPQAEFAK.Y
1644.8046	1643.7973	1643.8049	-4.63	141	-	155	1	--- K.QGKINQMATAPDSSQR.L
1706.8616	1705.8543	1705.8855	-18.26	921	-	934	2	--- K.ELEKMTNRQGMILLK.K + Oxidation (M)
1734.8152	1733.8079	1733.8319	-13.83	880	-	895	1	--- R.SEDLDNSIDKTEAGIK.E
1740.8768	1739.8695	1739.8301	22.7	208	-	220	2	--- K.EELAQYQKWDKMR.R + Oxidation (M)
1742.9031	1741.8958	1741.9071	-6.45	289	-	302	2	--- K.EQLSAERQEIQQR.T
1786.9000	1785.8927	1785.9010	-4.61	373	-	388	2	--- R.TDLYAQGRGSQFTSK.E
1786.9017	1785.8944	1785.9010	-3.66	373	-	388	2	--- R.TDLYAQGRGSQFTSK.E
1844.8907	1843.8834	1843.9275	-23.91	286	-	300	2	--- K.EEKEQLSAERQEIQK.Q
1995.9020	1994.8947	1994.8826	6.06	645	-	661	0	--- R.AFTMDCITLEDQVSHR.G + Oxidation (M)
2042.0640	2041.0567	2041.0440	6.25	437	-	453	2	--- K.LDQDLNEVKARVEELDR.K
2060.0469	2059.0396	2059.0116	13.6	757	-	774	1	--- K.QRSLQSLASLHAMESTR.E + Oxidation (M)

**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 822.3905, 823.3846, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 925.4747, 928.5064, 930.5048, 933.4619, 947.4628, 949.4591, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1159.6273, 1173.6259, 1179.6063, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1240.6298, 1244.6324, 1248.6119, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1336.6715, 1337.6724, 1342.6680, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1446.7256, 1450.7079, 1473.8054, 1477.7524, 1478.7439, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1791.7335,



1808.8868, 1824.8674, 1840.8225, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

40. [E1BMK2](#) Mass: 25092 Score: 17 Expect: 4.7e+002 Matches: 10

Uncharacterized protein OS=Bos taurus PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
916.4905	915.4832	915.4814	1.97	89	96	1	---	K.FKDPNAPK.R
1036.5372	1035.5299	1035.5461	-15.63	66	73	2	---	K.VDKARYER.E
1128.5775	1127.5702	1127.5611	8.11	155	163	1	---	K.YEKDIAAYR.A
1129.6014	1128.5941	1128.6073	-11.72	1	10	2	---	-.MGKGDPKKPR.G + Oxidation (M)
1182.6090	1181.6017	1181.5750	22.6	56	65	2	---	K.EKGKFEDMAK.V
1325.6637	1324.6564	1324.6445	8.99	60	70	2	---	K.FEDMAKVDKAR.Y + Oxidation (M)
1537.8021	1536.7948	1536.7858	5.90	74	86	2	---	R.EMKTYIPPKGETK.K + Oxidation (M)
1681.8214	1680.8141	1680.7752	23.1	11	24	1	---	R.GKMSSYAFFVQTCR.E
2125.0176	2124.0103	2123.9694	19.3	31	48	2	---	K.HPDASVNFSEFSKKCSER.W
2136.9180	2135.9107	2135.9405	-13.92	13	29	1	---	K.MSSYAFFVQTCREEHTK.K + Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4711, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7979, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2132.8694, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

41. [A7MB10](#) Mass: 50969 Score: 17 Expect: 4.9e+002 Matches: 17

Protein kinase C and casein kinase substrate in neurons protein 1 OS=Bos taurus GN=PACIN1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
745.4124	744.4051	744.4018	4.51	212	218	0	---	K.VLDDVGK.T
802.4548	801.4475	801.4497	-2.76	113	118	1	---	K.VKNWQK.D
925.4747	924.4674	924.4552	13.2	205	211	1	---	K.TQEKYEK.V
935.4698	934.4625	934.4793	-17.99	150	157	1	---	K.MKELEAAK.K + Oxidation (M)
951.4703	950.4631	950.4445	18.2	134	141	1	---	K.EAEDGFRK.A
1165.5817	1164.5744	1164.6026	-24.23	209	218	1	---	K.YEKLDDVGK.T
1248.6119	1247.6046	1247.5968	6.26	159	168	1	---	K.AYHLACKEEK.L
1376.6804	1375.6731	1375.6918	-13.56	158	168	2	---	K.KAYHLACKEEK.L
1450.7079	1449.7006	1449.7364	-24.70	55	66	1	---	K.AYAQLTDWAKR.W
1523.7841	1522.7768	1522.7627	9.27	200	211	2	---	K.QDVQKTQEKYEK.V
1651.8245	1650.8172	1650.8465	-17.70	205	218	2	---	K.TQEKYEKVLDDVGK.T
1768.9027	1767.8954	1767.8614	19.3	119	133	2	---	K.DAYHKQIMGGFKETK.E + Oxidation (M)
2007.9894	2006.9821	2006.9579	12.1	174	190	2	---	R.EMNSKTEQSVTPEQQKK.L + Oxidation (M)
2092.8821	2091.8748	2091.9167	-20.03	408	425	1	---	K.AGDELTKLGEDEQGCWR.G
2390.0403	2389.0330	2389.0685	-14.86	31	49	2	---	K.RIDDGHRCLNDLMSCVQER.A + Oxidation (M)
2417.0732	2416.0659	2416.1046	-15.99	32	51	2	---	R.IDDGHRCLNDLMSCVQERAK.I
2433.0779	2432.0706	2432.0995	-11.87	32	51	2	---	R.IDDGHRCLNDLMSCVQERAK.I + Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 928.5064, 930.5048, 933.4619, 939.4758, 947.4628, 949.4591, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6680, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790,								

1635.7943, 1644.8046, 1647.8785, 1649.8463, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1767.7690, 1767.8036, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9621, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9835, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

42. [G3N0Z2](#) Mass: 40114 Score: 17 Expect: 5.1e+002 Matches: 4

Uncharacterized protein OS=Bos taurus PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1222.5994	1221.5921	1221.6210	-23.60	199	209	0	---	R.VNSSMLMLVGR.D + Oxidation (M)
1786.9000	1785.8927	1785.9301	-20.94	180	195	1	19	K.KQGAISDPVFSFYLSK.K
1786.9017	1785.8944	1785.9301	-19.99	181	196	1	---	K.QGAISDPVFSFYLSKK.C
1914.9995	1913.9922	1914.0251	-17.17	180	196	2	---	K.QGAISDPVFSFYLSKK.C
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1579.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.9743, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9882, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

43. [Q0II81](#) Mass: 14868 Score: 17 Expect: 5.2e+002 Matches: 8

Regulator of G-protein signaling 13 OS=Bos taurus GN=RGS13 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1155.6113	1154.6040	1154.6005	3.04	109	117	1	---	K.SEMYQKLLK.T + Oxidation (M)
1173.6259	1172.6186	1172.5900	24.5	106	114	1	---	R.FLKSEMYQK.L
1179.6063	1178.5990	1178.5792	16.8	39	48	1	---	K.TASQWSRTSR.A
1215.6627	1214.6554	1214.6619	-5.30	115	125	1	---	K.LLKTIQANNNS.-
1307.6858	1306.6785	1306.6742	3.33	38	48	2	---	K.KTASQWSRTSR.A
1728.8242	1727.8169	1727.7759	23.7	93	105	1	---	K.IVYMHMERDSYPR.F + 2 Oxidation (M)
2417.0732	2416.0659	2416.0827	-6.96	20	38	2	---	K.TEHSDENIKFWMACETYKK.T
2433.0779	2432.0706	2432.0777	-2.89	20	38	2	---	K.TEHSDENIKFWMACETYKK.T + Oxidation (M)
No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9882, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

44. [P35246](#) Mass: 37724 Score: 16 Expect: 5.4e+002 Matches: 14

Pulmonary surfactant-associated protein D OS=Bos taurus GN=SFTPD PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
735.3865	734.3792	734.3633	21.7	18	-	24	0	--- R.SLGAEKM.I
772.3955	771.3882	771.3875	0.96	57	-	63	1	--- R.EGPRGEK.G
965.4761	964.4689	964.4726	-3.92	163	-	173	0	--- R.GAPGEPGAPGR.A
967.4568	966.4495	966.4519	-2.49	64	-	74	0	--- K.GDPGSPGPAGR.A
1033.5419	1032.5346	1032.5538	-18.62	244	-	252	1	--- K.KAMLFPPNGR.S
1114.5396	1113.5323	1113.5275	4.31	51	-	60	2	--- R.DGRDREGPR.G
1215.6627	1214.6554	1214.6255	24.6	211	-	222	0	--- K.GESGLAEVNALR.Q
1226.5948	1225.5875	1225.5761	9.29	123	-	135	0	--- K.QGSMGPPGTPGPK.G + Oxidation (M)
1354.6907	1353.6834	1353.6962	-9.44	18	-	29	1	--- R.SLGAEMKIYSQK.T
1421.7177	1420.7104	1420.7133	-2.00	245	-	257	1	--- K.AMLFPPNGRSVGEK.I + Oxidation (M)
1493.7539	1492.7466	1492.7746	-18.77	193	-	207	2	--- R.GPPGLKDRGRTPPER.G
1588.8136	1587.8063	1587.8118	-3.42	174	-	192	0	--- R.AGAPGAGAGIQQPGPSGAR.G
2052.9924	2051.9851	2051.9557	14.3	354	-	369	2	--- K.WNDKVCGEQRLVICEF.-
2277.0137	2276.0064	2276.0058	0.28	30	-	50	0	--- K.TMANACTLVMCSPPEDGLPGR.D

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2058.9963, 2060.0469, 2064.9900, 2068.9982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

45. [F1MW00](#) Mass: 17662 Score: 16 Expect: 5.4e+002 Matches: 8

Complexin-3 OS=Bos taurus GN=CPLX3 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
745.4124	744.4051	744.4017	4.55	50	-	55	0	--- K.QLVEEK.M
993.5331	992.5258	992.5039	22.0	59	-	66	1	--- R.DAQFTQRK.A
1023.4777	1022.4704	1022.4451	24.8	32	-	41	0	--- K.SAAEAQGMRSR.E + Oxidation (M)
1349.6991	1348.6918	1348.6847	5.25	59	-	69	2	--- R.DAQFTQKRAER.A
1475.7748	1474.7675	1474.7627	3.26	141	-	154	1	--- K.AQSTLGLDKQSAEK.C
1588.8136	1587.8063	1587.7823	15.1	1	-	14	1	--- -MAFMVKTVMVGGQLK.N + 3 Oxidation (M)
1995.9020	1994.8947	1994.8626	16.1	104	-	119	1	--- R.ELAKMIEEDTEEEER.A + Oxidation (M)
2007.9894	2006.9821	2006.9843	-1.11	50	-	65	2	--- K.QLVEEKMERDAQFTQR.K

No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

46. [Q0VC09](#) Mass: 44563 Score: 16 Expect: 5.4e+002 Matches: 15

RIB43A-like with coiled-coils protein 1 OS=Bos taurus GN=RIBC1 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
965.4761	964.4689	964.4841	-15.75	269	- 275	0	---	R.VLPYCWK.G
1045.5654	1044.5581	1044.5424	15.0	83	- 90	2	---	K.EQAERTRR.L
1128.5775	1127.5702	1127.5683	1.69	167	- 175	0	---	R.QLQEQQQAR.V
1179.6063	1178.5990	1178.5787	17.2	208	- 219	0	---	R.IAMMAATASANK.A
1195.6060	1194.5987	1194.5736	21.0	208	- 219	0	---	R.IAMMAATASANK.A + Oxidation (M)
1275.6644	1274.6571	1274.6401	13.4	276	- 286	1	---	K.GMTPEQRATIR.K + Oxidation (M)
1323.6517	1322.6444	1322.6327	8.86	225	- 235	0	---	K.LAEQQGQEHQR.Q
1334.6592	1333.6519	1333.6846	-24.49	190	- 201	1	---	R.LAMDMRAAQLAK.L + Oxidation (M)
1375.6798	1374.6725	1374.6925	-14.53	196	- 207	1	---	R.AAQLAKLEESCR.I
1767.8036	1766.7963	1766.7835	7.27	109	- 121	0	---	R.CELDFWNSNQLWR.E
1953.9353	1952.9280	1952.9117	8.34	202	- 219	1	---	K.LEESCRIAMMAATASANK.A
2058.9963	2057.9890	2058.0164	-13.30	35	- 52	1	---	R.TRVMGVDVEALNNQVEER.K
2095.9941	2094.9868	2095.0368	-23.83	73	- 89	2	---	R.YDLVAQMLEKEQAERTR.R + Oxidation (M)
2125.0176	2124.0103	2124.0125	-1.04	190	- 207	2	---	R.LAMDMRAAQLAKLEESCR.I + 2 Oxidation (M)
2442.0618	2441.0545	2441.0443	4.18	176	- 195	1	---	R.VDENCADMLNDQLRLAMDMR.A + 2 Oxidation (M)
<b>No match to:</b> 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1890.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2434.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								

47. [E1BL95](#) Mass: 154749 Score: 16 Expect: 5.4e+002 Matches: 40

Uncharacterized protein OS=Bos taurus GN=CENPJ PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
735.3865	734.3792	734.3963	-23.27	996	- 1001	1	---	R.TFPDKK.E
795.4186	794.4114	794.4286	-21.74	388	- 394	1	---	R.FTNAKSK.F
803.4370	802.4297	802.4184	14.1	932	- 939	0	---	K.AENASLAK.L
816.4408	815.4335	815.4250	10.5	1288	- 1294	1	---	R.VQRDGNK.I
820.4244	819.4171	819.4199	-3.36	784	- 790	1	---	K.LSDSSRR.H
910.4410	909.4338	909.4127	23.2	483	- 489	1	---	K.KCDGQFR.E
916.4905	915.4832	915.4886	-5.90	885	- 892	2	---	K.SKSKSHSR.S
947.4628	946.4556	946.4760	-21.57	80	- 87	0	---	K.LEPNSPYK.L
981.4565	980.4493	980.4419	7.47	1075	- 1083	0	---	R.MGQCVTASK.K
997.4298	996.4225	996.4256	-3.15	838	- 845	0	---	K.SEMCVLDK.T + Oxidation (M)
1033.5419	1032.5346	1032.5273	7.05	1050	- 1057	1	---	R.EEIKVMER.F
1115.5605	1114.5532	1114.5692	-14.36	291	- 300	0	---	K.GEGLPCLEK.M
1129.6014	1128.5941	1128.6040	-8.73	1304	- 1312	1	---	R.ELHTAQFKR.R
1172.6301	1171.6228	1171.6197	2.70	351	- 359	1	---	R.LEELERQQK.Q
1187.6431	1186.6358	1186.6598	-20.17	135	- 144	1	---	K.EVYPKDPVK.K
1216.6494	1215.6421	1215.6598	-14.53	920	- 929	0	---	K.IIELETEIEK.F
1231.6174	1230.6101	1230.6356	-20.73	563	- 571	2	---	K.KLENWEREK.E
1235.5846	1234.5773	1234.5863	-7.31	1342	- 1352	1	---	K.KDKDGNVLMDTK.L
1319.6852	1318.6779	1318.7106	-24.75	381	- 392	2	---	K.RGEGLARFTNAK.S
1323.6517	1322.6444	1322.6574	-9.81	838	- 848	1	---	K.SEMCVLDKTIK.R
1331.6763	1330.6690	1330.6841	-11.32	757	- 767	2	---	K.RRDVDLDSK.D
1336.6715	1335.6642	1335.6969	-24.44	1050	- 1059	2	---	R.EEIKVMERFR.L
1338.6471	1337.6398	1337.6649	-18.74	969	- 978	2	---	R.IEEFKKEEMR.K
1354.6907	1353.6834	1353.6598	17.4	969	- 978	2	---	R.IEEFKKEEMR.K + Oxidation (M)
1360.6882	1359.6809	1359.6782	1.99	564	- 573	2	---	K.LENWEREK.E
1432.7133	1431.7060	1431.6954	7.44	1129	- 1142	1	---	R.DLGSSEKQGTASPR.E
1434.7288	1433.7215	1433.7514	-20.84	953	- 964	2	---	R.KEIADFEQQAK.E
1473.8054	1472.7981	1472.7973	0.54	918	- 929	1	---	R.EKIELETEIEK.F
1486.7664	1485.7591	1485.7899	-20.74	1011	- 1022	2	---	K.RQVSDLQEDLKR.K
1494.7423	1493.7350	1493.7218	8.86	1340	- 1352	2	---	R.MKDKDGNVLMDTK.L
1584.7897	1583.7824	1583.7566	16.3	768	- 781	0	---	K.DYSSDDSLIESLK.N
1659.8241	1658.8168	1658.7828	20.5	1143	- 1156	0	---	R.ELPEPVPFPDPKY.E
1851.8488	1850.8415	1850.8258	8.52	663	- 679	0	---	R.DSVFSPGASWAPSCEVR.R
1887.9734	1886.9661	1886.9711	-2.63	1288	- 1303	2	---	R.VQRDGNKIEFNQGR.E
1931.9463	1930.9390	1930.9555	22.5	232	- 247	1	---	K.KHPSNLSSEQNGDFCR.T
2051.9792	2050.9719	2050.9744	-1.21	866	- 884	0	---	R.GSPPPPTSGLMMEFFPSLK.S + 2 Oxidation (M)
2058.9963	2057.9890	2058.0242	-17.11	1111	- 1128	2	---	K.NYLPQTQGNFSQRSKSEPR.D
2170.1467	2169.1394	2169.1641	-11.37	1004	- 1021	2	---	R.EEIQVLKRVQVSDLQEDLK.R

2542.1509 2541.1436 2541.1626 -7.48 629 - 652 1 --- K.TATLGSVSQHNQNEPDGRAQCGSK.A  
 2565.1543 2564.1470 2564.2064 -23.15 279 - 300 2 --- K.NDLKEENDNYSKGGILPCLEK.M  
**No match to:** 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 802.4548, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 912.4497, 913.5118, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 983.4664, 985.4842, 991.4688, 993.5331, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1118.5529, 1122.5363, 1128.5775, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1222.5994, 1226.5948, 1229.6246, 1234.6317, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1325.6637, 1328.6809, 1329.6672, 1332.6743, 1334.6592, 1335.6937, 1337.6724, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1355.7155, 1357.7034, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1446.7256, 1450.7079, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1493.7539, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1867.9503, 1880.9277, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2052.9924, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2545.1558, 2547.1531, 2552.1038, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

48. [P31976](#) Mass: 68832 Score: 16 Expect: 5.5e+002 Matches: 21

Ezrin OS=Bos taurus GN=EZR PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
726.2899	725.2826	725.2836	-1.44	338	-	342	0	K.EQMMR.E + 2 Oxidation (M)
803.4370	802.4297	802.4184	14.1	375	-	380	1	K.LEEERK.R
816.4408	815.4335	815.4389	-6.56	231	-	237	1	K.DDKLTPK.I
852.4056	851.3984	851.4137	-18.03	144	-	151	0	K.AGYLGSER.L
890.4479	889.4407	889.4505	-11.04	331	-	337	1	R.ETVEREK.E
894.4579	893.4507	893.4719	-23.75	555	-	561	2	R.QGRDKYK.T
967.4568	966.4495	966.4263	24.1	338	-	344	1	K.EQMMREK.E + Oxidation (M)
1159.6273	1158.6200	1158.6357	-13.49	321	-	329	2	R.QQLETEKKR.R
1182.6090	1181.6017	1181.5869	12.5	264	-	273	0	K.APDFFVYAPR.L
1250.6144	1249.6071	1249.6091	-1.59	134	-	143	1	K.FG DYNKELHK.A
1332.6743	1331.6670	1331.6755	-6.36	296	-	306	0	R.KPDITIEVQMK.A + Oxidation (M)
1346.6880	1345.6807	1345.6837	-2.21	508	-	518	2	R.NEEKRITEAEK.N
1477.7524	1476.7451	1476.7606	-10.48	525	-	537	0	R.QLMTLTSELSQAR.D
1493.7539	1492.7466	1492.7555	-5.96	525	-	537	0	R.QLMTLTSELSQAR.D + Oxidation (M)
1604.8417	1603.8344	1603.8405	-3.81	172	-	184	1	R.IQVWAEHRGMLK.D
1628.8260	1627.8187	1627.8529	-20.99	399	-	412	2	R.AKEELERQAADQIK.S
1681.8214	1680.8141	1680.8206	-3.85	413	-	427	0	K.SQEQLATELAEYTAK.I
1742.9031	1741.8958	1741.9145	-10.71	296	-	310	1	R.KPDITIEVQMK.AQAR.E
1850.8301	1849.8228	1849.8602	-20.18	543	-	557	1	R.THNDIIHNENMRQGR.D + Oxidation (M)
1914.9995	1913.9922	1914.0105	-9.55	295	-	310	2	R.RKPDITIEVQMK.AQAR.E + Oxidation (M)
2083.9907	2082.9834	2083.0123	-13.85	134	-	151	2	K.FG DYNKELHKAGYLGSER.L

**No match to:** 713.4334, 719.2388, 724.3009, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 893.9562, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 949.4591, 951.4703, 954.4674, 957.4657, 963.4676, 965.4761, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1033.5419, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.1387, 1209.5848, 1210.1014, 1215.6627, 1216.6494, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.6743, 1434.7288, 1446.7256, 1450.7079, 1473.8054, 1475.7748, 1478.7439, 1485.7720, 1486.7664, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1656.8284, 1662.7909, 1668.7810, 1679.9736, 1683.8121, 1684.8204, 1706.8616, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1757.8322, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.8982, 2070.8835, 2074.8914, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365

49. [Q2YDN4](#) Mass: 58176 Score: 16 Expect: 5.5e+002 Matches: 20

Coiled-coil domain-containing protein 105 OS=Bos taurus GN=CCDC105 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
880.4403	879.4330	879.4371	-4.66	204	-	210	1	K.EELKSMK.R + Oxidation (M)
981.4565	980.4493	980.4307	19.0	212	-	219	1	R.KMEADMKEK.S
997.4298	996.4225	996.4256	-3.12	212	-	219	1	R.KMEADMKEK.S + Oxidation (M)



1035.5352	1034.5279	1034.5430	-14.57	340	-	347	1	---	K.MRETLELK.D + Oxidation (M)
1036.5372	1035.5299	1035.5382	-8.03	204	-	211	2	---	K.EELKSMKR.K + Oxidation (M)
1106.5372	1105.5299	1105.5437	-12.49	432	-	440	0	---	K.NLDELLSMR.K + Oxidation (M)
1179.6063	1178.5990	1178.5900	7.67	332	-	341	1	---	R.VCASLAQKMR.E + Oxidation (M)
1183.6123	1182.6050	1182.5856	16.5	443	-	451	1	---	K.LTWSFNCKK.I
1234.6317	1233.6244	1233.6387	-11.56	432	-	441	1	---	K.NLDELLSMR.K + Oxidation (M)
1319.6852	1318.6779	1318.6849	-5.32	348	-	358	1	---	K.DRLNMTLGLMR.G
1331.6763	1330.6690	1330.6953	-19.74	159	-	169	2	---	R.EATDRRLSEVR.K
1335.6937	1334.6864	1334.6799	4.92	348	-	358	1	---	K.DRLNMTLGLMR.G + Oxidation (M)
1494.7423	1493.7350	1493.7105	16.4	213	-	225	1	---	K.MEADMEKSEALLK.T
1579.7926	1578.7853	1578.7599	16.1	195	-	207	1	---	K.ADSMLTWEKEELK.S
1622.8137	1621.8064	1621.8055	0.59	212	-	225	2	---	R.KMEADMEKSEALLK.T
1628.8260	1627.8187	1627.8392	-12.57	367	-	379	1	---	K.FNQEMYITRGLIK.G + Oxidation (M)
1662.7909	1661.7836	1661.7930	-5.65	309	-	322	1	---	K.DTLLDMAKNNEEDIR.E
1756.8905	1755.8832	1755.8838	-0.36	400	-	414	1	---	R.MYQRHVGTQLPEAAR.L
1840.8225	1839.8152	1839.8560	-22.17	188	-	203	1	---	K.SETISDKADSMILTWEK.E
1925.9418	1924.9345	1924.9274	3.71	195	-	210	2	---	K.ADSMLTWEKEELKSMK.R
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50. [G3MZ80](#) Mass: 7701 Score: 16 Expect: 5.7e+002 Matches: 7

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
949.4591	948.4518	948.4698	-19.06	32	-	39	1 ---	R.EKVADTMR.Q
965.4761	964.4689	964.4648	4.25	32	-	39	1 ---	R.EKVADTMR.Q + Oxidation (M)
1033.5419	1032.5346	1032.5274	7.04	40	-	48	0 ---	R.QMEALQLGK.Q + Oxidation (M)
1216.6494	1215.6421	1215.6434	-1.05	49	-	58	1 ---	K.QGMHLKIFDK.I
1473.8054	1472.7981	1472.8173	-13.05	49	-	60	2 ---	K.QGMHLKIFDKIK.Y + Oxidation (M)
1706.8616	1705.8543	1705.8491	3.06	34	-	48	1 ---	K.VADTMRQMEALQLGK.Q + Oxidation (M)
1757.8322	1756.8249	1756.8340	-5.16	18	-	33	1 ---	R.QQOETPTAADQGREG.V
No match to: 713.4334, 719.2388, 724.3009, 726.2899, 732.2586, 735.3865, 745.4124, 756.4687, 764.4056, 765.3908, 767.3679, 768.3909, 772.3955, 795.4186, 802.4548, 803.4370, 805.4229, 806.4631, 807.3893, 809.4480, 811.4104, 812.3985, 816.4408, 820.4244, 822.3905, 823.3846, 824.3756, 828.3904, 834.4043, 836.4589, 837.3853, 839.3696, 840.3839, 842.5085, 845.4100, 845.4123, 851.3975, 852.4056, 856.4893, 866.3914, 867.3724, 870.5402, 871.4945, 878.4625, 880.4403, 886.3815, 888.4233, 890.4479, 893.9562, 894.4579, 897.0289, 897.4412, 902.4597, 910.4410, 912.4497, 913.5118, 916.4905, 918.5391, 925.4747, 928.5064, 930.5048, 933.4619, 935.4698, 939.4758, 947.4628, 951.4703, 954.4674, 957.4657, 963.4676, 967.4568, 969.4571, 972.4793, 972.4800, 975.4650, 977.4630, 978.4976, 981.4565, 983.4664, 985.4842, 991.4688, 993.5331, 997.4298, 999.4453, 1001.4488, 1003.4687, 1007.5668, 1018.5200, 1018.5212, 1023.4777, 1026.4922, 1027.4972, 1030.5151, 1031.3850, 1035.5352, 1036.5372, 1039.5402, 1042.5383, 1045.5654, 1056.5488, 1060.5400, 1060.5442, 1065.5425, 1086.5115, 1106.5372, 1111.5582, 1113.5546, 1114.5396, 1115.5605, 1118.5529, 1122.5363, 1128.5775, 1129.6014, 1130.5935, 1140.5485, 1144.5709, 1155.6113, 1156.5720, 1157.5952, 1158.6154, 1159.6273, 1165.5817, 1172.6301, 1173.6259, 1179.6063, 1180.6165, 1182.6090, 1183.6123, 1185.6317, 1187.6431, 1193.6096, 1195.6060, 1196.6102, 1206.6770, 1209.5848, 1210.1014, 1215.6627, 1222.5994, 1226.5948, 1229.6246, 1231.6174, 1234.6317, 1235.5846, 1240.6298, 1244.6324, 1248.6119, 1250.6144, 1268.6498, 1271.6696, 1273.6653, 1275.6644, 1291.6425, 1295.7233, 1300.6062, 1301.6205, 1307.6858, 1315.6570, 1317.6521, 1319.6852, 1323.6517, 1325.6637, 1328.6809, 1329.6672, 1331.6763, 1332.6743, 1334.6592, 1335.6937, 1336.6715, 1337.6724, 1338.6471, 1342.6680, 1345.6760, 1346.6880, 1349.6991, 1354.6907, 1355.7155, 1357.7034, 1360.6882, 1361.6670, 1365.6913, 1368.6920, 1374.6412, 1375.6798, 1376.6804, 1377.6794, 1382.6647, 1387.6444, 1410.7505, 1411.7208, 1421.7177, 1427.7872, 1431.7961, 1432.7133, 1434.7288, 1446.7256, 1450.7079, 1475.7748, 1477.7524, 1478.7439, 1485.7720, 1486.7664, 1493.7539, 1494.7423, 1505.8649, 1523.7841, 1524.7848, 1537.8021, 1549.7388, 1555.8816, 1558.8474, 1576.7987, 1579.7926, 1584.7897, 1588.8136, 1590.3611, 1604.8417, 1605.8098, 1606.8384, 1615.8826, 1616.8605, 1622.8137, 1628.8260, 1629.8358, 1630.8466, 1633.9790, 1635.7943, 1644.8046, 1647.8785, 1649.8463, 1651.8245, 1659.8241, 1662.7909, 1668.7810, 1679.9736, 1681.8214, 1683.8121, 1684.8204, 1707.7838, 1716.8571, 1725.8353, 1728.8242, 1734.8152, 1740.8768, 1742.9031, 1746.1659, 1750.8356, 1751.8787, 1753.8948, 1756.8905, 1763.8188, 1765.7690, 1767.8036, 1768.9027, 1769.4475, 1770.4261, 1774.9091, 1783.8499, 1786.9000, 1786.9017, 1791.7335, 1808.8868, 1824.8674, 1840.8225, 1844.8907, 1848.8322, 1850.8301, 1851.8488, 1867.9503, 1880.9277, 1887.9734, 1908.8838, 1914.9995, 1919.0038, 1925.9418, 1928.0103, 1931.9463, 1953.9353, 1975.9609, 1992.9642, 1995.9020, 2007.9894, 2011.8845, 2013.8983, 2024.8591, 2025.6234, 2036.5195, 2036.9486, 2042.0640, 2047.0167, 2047.9691, 2051.9792, 2052.9924, 2058.9963, 2060.0469, 2064.9900, 2068.9882, 2070.8835, 2074.8914, 2083.9907, 2084.8987, 2086.8828, 2092.8821, 2095.9941, 2098.9976, 2100.9160, 2102.8872, 2106.9011, 2108.8835, 2109.9175, 2114.9180, 2116.9160, 2118.8835, 2119.8833, 2125.0176, 2132.8694, 2136.9180, 2170.1467, 2211.1045, 2225.1191, 2273.0496, 2277.0137, 2307.9941, 2322.9980, 2341.0366, 2343.0271, 2352.0571, 2355.0459, 2359.0532, 2366.0813, 2368.0544, 2369.0710, 2376.0264, 2382.0349, 2383.6099, 2383.9600, 2390.0403, 2396.0342, 2398.0576, 2400.0652, 2406.0737, 2411.0076, 2414.0813, 2416.0752, 2417.0732, 2420.0718, 2422.0408, 2423.0466, 2428.0898, 2430.0828, 2431.0845, 2433.0779, 2436.0508, 2438.0457, 2439.0261, 2442.0618, 2449.0347, 2452.0632, 2460.0254, 2461.9956, 2463.9858, 2510.1277, 2528.1580, 2542.1509, 2545.1558, 2547.1531, 2552.1038, 2565.1543, 2585.1111, 2601.0889, 2705.2192, 2717.0693, 3129.3176, 3208.1736, 3223.2710, 3290.4131, 3291.4248, 3312.2756, 3451.3933, 3453.4365								



## Search Parameters

Type of search : MS/MS Ion Search  
 Enzyme : Trypsin  
 Fixed modifications : [Carbamidomethyl \(C\)](#)  
 Variable modifications : [Oxidation \(M\)](#)  
 Mass values : Monoisotopic  
 Protein Mass : Unrestricted  
 Peptide Mass Tolerance :  $\pm 25$  ppm  
 Fragment Mass Tolerance :  $\pm 0.5$  Da  
 Max Missed Cleavages : 2  
 Instrument type : MALDI-TOF-TOF

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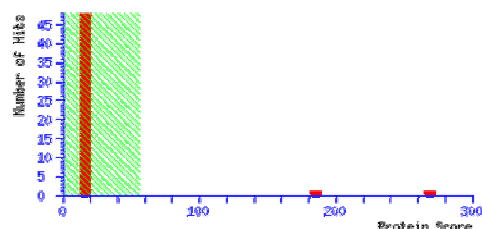
Mascot: <http://www.matrixscience.com/>

# MASCOT SCIENCE Mascot Search Results

User : 3w\_(F17\11273\_12Mar2012)  
 Email : proteomics@ipatimup.pt  
 Search title : Project: Proteomica, Spot Set: Proteomica\12Jan2012, Label: F17, Spot Id: 221880, Peak List Id: 435346, MS Job Run Id: 30  
 MS data file : C:\Documents and Settings\Administrator\Desktop\xu\xu\xu\Proteomica\12Jan2012\ppw\_F17\_146796935400.txt  
 Database : OrganismSpecie Bos\_taurus\_Reference\_Proteome\_2016\_06 (24214 sequences; 12839866 residues)  
 Timestamp : 8 Jul 2016 at 09:59:43 GMT  
 Warning : **A Peptide summary report will usually give a much clearer picture of MS/MS search results.**  
 Top Score : 269 for F1MYE4, Chondroadherin OS=Bos taurus GN=CHAD PE=4 SV=2

## Mascot Score Histogram

Protein score is  $-10 \cdot \log(P)$ , where P is the probability that the observed match is a random event.  
 Protein scores greater than 56 are significant ( $p < 0.05$ ).  
 Protein scores are derived from ion scores as a non-probabilistic basis for ranking protein hits.



## Protein Summary Report

Format As  [Help](#)

Significance threshold  $p < 0.05$  Max. number of hits

Preferred taxonomy

Re-Search All

## Index

Accession	Mass	Score	Description
1. <a href="#">F1MYE4</a>	41319	269	Chondroadherin OS=Bos taurus GN=CHAD PE=4 SV=2
2. <a href="#">Q27972</a>	41373	183	Chondroadherin OS=Bos taurus GN=CHAD PE=1 SV=1
3. <a href="#">E1BFX3</a>	11338	20	Ribosomal protein L37 OS=Bos taurus GN=RPL37 PE=3 SV=1
4. <a href="#">Q1PSA0</a>	42952	20	Uncharacterized protein OS=Bos taurus GN=ZAR1 PE=2 SV=1
5. <a href="#">E1B7W1</a>	108879	20	Uncharacterized protein OS=Bos taurus GN=THRAP3 PE=4 SV=1
6. <a href="#">G3X6N6</a>	52918	20	Uncharacterized protein OS=Bos taurus PE=4 SV=1
7. <a href="#">Q02368</a>	16615	20	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 7 OS=Bos taurus GN=NDUFB7 PE=1 SV=2
8. <a href="#">F1N1U9</a>	64259	20	Uncharacterized protein OS=Bos taurus PE=4 SV=2
9. <a href="#">F1N7L8</a>	63126	20	Uncharacterized protein OS=Bos taurus GN=BBOF1 PE=4 SV=1
10. <a href="#">G3N2J6</a>	36179	19	Uncharacterized protein OS=Bos taurus GN=TNIP3 PE=4 SV=1
11. <a href="#">Q1PSA4</a>	20552	19	Uncharacterized protein OS=Bos taurus GN=ZAR1 PE=4 SV=1
12. <a href="#">Q17Q91</a>	10021	19	Coiled-coil-helix-coiled-coil-helix domain-containing protein 7 OS=Bos taurus GN=CHCHD7 PE=3 SV=1
13. <a href="#">Q0IIC8</a>	17012	19	Phospholipase A(2) OS=Bos taurus GN=PLA2G2A PE=2 SV=1
14. <a href="#">Q5KR49</a>	32732	19	Tropomyosin alpha-1 chain OS=Bos taurus GN=TPM1 PE=2 SV=1
15. <a href="#">G1K1U4</a>	51632	19	DNA polymerase delta subunit 3 OS=Bos taurus GN=POLD3 PE=4 SV=2
16. <a href="#">Q5KR47</a>	32856	19	Tropomyosin alpha-3 chain OS=Bos taurus GN=TPM3 PE=2 SV=1
17. <a href="#">Q2T9X5</a>	23537	19	Uncharacterized protein C7orf61 homolog OS=Bos taurus PE=2 SV=1
18. <a href="#">A6QPI2</a>	49923	19	GAS7 protein OS=Bos taurus GN=GAS7 PE=2 SV=1
19. <a href="#">Q2TBU3</a>	28638	19	Golgi SNAP receptor complex member 1 OS=Bos taurus GN=GOSR1 PE=2 SV=1
20. <a href="#">Q2TBN3</a>	19797	18	Centrin-2 OS=Bos taurus GN=CETN2 PE=2 SV=1
21. <a href="#">F1MMV5</a>	66566	18	Nuclear speckle-splicing regulatory protein 1 OS=Bos taurus GN=NSRP1 PE=4 SV=2
22. <a href="#">Q2KIC0</a>	66733	18	Nuclear speckle splicing regulatory protein 1 OS=Bos taurus GN=NSRP1 PE=2 SV=1
23. <a href="#">E1BDW0</a>	49794	18	Uncharacterized protein OS=Bos taurus GN=ALS2CR12 PE=4 SV=1
24. <a href="#">G3N3V8</a>	69281	18	Uncharacterized protein OS=Bos taurus GN=C3orf67 PE=4 SV=1
25. <a href="#">F1MNR4</a>	58473	18	Uncharacterized protein OS=Bos taurus GN=C3orf67 PE=4 SV=2
26. <a href="#">Q6YFP9</a>	10868	18	Cytochrome c oxidase subunit 6B2 OS=Bos taurus GN=COX6B2 PE=2 SV=1
27. <a href="#">P11019</a>	26180	18	V-type proton ATPase subunit E 1 OS=Bos taurus GN=ATP6V1E1 PE=2 SV=1
28. <a href="#">F1MLG8</a>	9765	18	Uncharacterized protein OS=Bos taurus GN=SMIM4 PE=4 SV=2
29. <a href="#">E1BEC7</a>	19673	18	Mitin, mitochondrial OS=Bos taurus GN=NDUFAF2 PE=4 SV=2
30. <a href="#">A6QLN3</a>	7445	18	FXYD2 protein OS=Bos taurus GN=FXD2 PE=2 SV=1
31. <a href="#">F1MTI2</a>	31839	18	Transcription elongation factor A protein 1 OS=Bos taurus GN=TCEA1 PE=4 SV=1
32. <a href="#">E1BLN1</a>	117436	18	Uncharacterized protein OS=Bos taurus GN=SYCP1 PE=4 SV=1
33. <a href="#">Q3ZBL3</a>	49458	17	Inositol hexakisphosphate kinase 2 OS=Bos taurus GN=IP6K2 PE=2 SV=1
34. <a href="#">Q56JZ9</a>	16931	17	Glia maturation factor gamma OS=Bos taurus GN=GMFG PE=2 SV=1
35. <a href="#">F1MQU4</a>	106272	17	Uncharacterized protein OS=Bos taurus GN=BCLAF1 PE=4 SV=2
36. <a href="#">G3MYV8</a>	6868	17	Uncharacterized protein OS=Bos taurus PE=4 SV=1
37. <a href="#">E1B8A3</a>	13661	17	Uncharacterized protein OS=Bos taurus GN=LOC100298655 PE=4 SV=1
38. <a href="#">G3MWK4</a>	30649	17	Uncharacterized protein OS=Bos taurus GN=SRSF12 PE=4 SV=1
39. <a href="#">G3NOW0</a>	3134	17	Uncharacterized protein OS=Bos taurus PE=4 SV=1
40. <a href="#">Q2KHV2</a>	12884	17	Vesicle-associated membrane protein 5 OS=Bos taurus GN=VAMP5 PE=3 SV=1
41. <a href="#">E1BPQ7</a>	23626	17	Uncharacterized protein OS=Bos taurus GN=LNP1 PE=4 SV=1
42. <a href="#">Q5EA89</a>	36065	17	Protein FAM76A OS=Bos taurus GN=FAM76A PE=2 SV=1
43. <a href="#">Q9N287</a>	23425	17	DnaJ homolog subfamily C member 12 OS=Bos taurus GN=DNAJC12 PE=2 SV=1
44. <a href="#">F1MJH0</a>	128067	17	Uncharacterized protein OS=Bos taurus GN=SPINK5 PE=4 SV=2
45. <a href="#">F1MJ17</a>	69096	17	Uncharacterized protein OS=Bos taurus GN=LMNB2 PE=3 SV=1
46. <a href="#">G3MZ80</a>	7701	17	Uncharacterized protein OS=Bos taurus PE=4 SV=1
47. <a href="#">A5D7M3</a>	56128	16	Growth arrest-specific protein 8 OS=Bos taurus GN=GAS8 PE=2 SV=1
48. <a href="#">F1MYR3</a>	56242	16	Growth arrest-specific protein 8 OS=Bos taurus GN=GAS8 PE=4 SV=1



49. [E1BF46](#) 243942 16 Uncharacterized protein OS=Bos taurus GN=ZNF407 PE=4 SV=2  
50. [F1MYI2](#) 58389 16 Uncharacterized protein OS=Bos taurus GN=HNRNPM PE=1 SV=2

## Results List

1.	<a href="#">F1MYE4</a>	Mass: 41319	Score: 269	Expect: 3e-023	Matches: 29				
Chondroadherin OS=Bos taurus GN=CHAD PE=4 SV=2									
	Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
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	765.3959	764.3887	764.3817	9.11	166	173	0	---	R.SGAFQGAK.D
	802.4609	801.4537	801.4497	4.96	315	320	1	---	R.RWLEAK.T
	820.4252	819.4180	819.4239	-7.24	91	98	0	---	R.EVAAGAFR.G
	837.3794	836.3721	836.3633	10.5	306	311	0	---	K.CTCQLR.G
	913.5080	912.5007	912.5042	-3.82	334	340	1	---	K.FRQGHIR.D
	913.5100	912.5027	912.5042	-1.63	334	340	1	28	K.FRQGHIR.D
	985.6071	984.5998	984.5968	3.14	220	227	1	---	K.LRVVEELK.L
	993.5267	992.5195	992.5226	-3.14	347	354	2	---	R.GCKFPTKR.S
	1018.5130	1017.5057	1017.5104	-4.60	274	281	0	---	K.HVHLENNR.L
	1069.4846	1068.4773	1068.4659	10.7	341	349	1	---	R.DTDAFRGCK.F
	1149.5912	1148.5839	1148.5938	-8.61	166	176	1	---	R.SGAFQGAKDLR.W
	1163.6145	1162.6072	1162.6095	-1.92	163	173	1	---	R.ELRSGAFQGAK.D
	1315.6364	1314.6291	1314.6429	-10.48	336	346	1	---	R.GQHIRDTDAFR.G
	1338.6300	1337.6227	1337.6364	-10.23	235	246	0	---	K.SIPDNAFQSFGR.Y
	1338.6300	1337.6227	1337.6364	-10.23	235	246	0	67	K.SIPDNAFQSFGR.Y
	1349.6800	1348.6727	1348.6888	-11.89	63	74	0	80	R.NNFPVLAANSFR.A
	1349.6827	1348.6754	1348.6888	-9.89	63	74	0	---	R.NNFPVLAANSFR.A
	1355.6964	1354.6891	1354.7133	-17.84	261	273	0	---	K.FSDGAFLGVTTLK.H
	1361.6373	1360.6300	1360.6405	-7.70	321	333	0	---	K.TSRPDATCASPAK.F
	1365.6752	1364.6679	1364.6936	-18.78	207	219	0	---	R.NQLSSYPSAALS.K.L
	1505.8511	1504.8438	1504.8613	-11.61	222	234	1	---	R.VVEELKLSHNPLK.S
	1647.8730	1646.8657	1646.8780	-7.46	102	114	0	---	K.QLIYLYLSHNDIR.V
	1751.8657	1750.8584	1750.8777	-11.03	247	260	0	---	R.YLETLWLDNTNLEK.F
	1775.0302	1774.0229	1774.0465	-13.27	220	234	2	---	K.LRVVEELKLSHNPLK.S
	1916.9882	1915.9809	1915.9873	-3.31	75	90	0	---	R.AMPNLVSLHLQHCQIR.E
	1932.9813	1931.9740	1931.9822	-4.23	75	90	0	---	R.AMPNLVSLHLQHCQIR.E + Oxidation (M)
	2060.0400	2059.0327	2059.0374	-2.28	202	219	1	44	K.FYLDNRNQLSSYPSAALS.K.L
	2060.0405	2059.0332	2059.0374	-2.04	202	219	1	---	K.FYLDNRNQLSSYPSAALS.K.L
No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 764.3574, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 828.3922, 830.3668, 834.3623, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 991.4533, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1155.5768, 1157.5907, 1158.6328, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1345.6146, 1347.6653, 1354.6820, 1359.7053, 1360.6173, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1920.9862, 1930.9827, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0253, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270									

2.	<a href="#">Q27972</a>	Mass: 41373	Score: 183	Expect: 1.2e-014	Matches: 27				
Chondroadherin OS=Bos taurus GN=CHAD PE=1 SV=1									
	Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
	756.4777	755.4704	755.4653	6.75	57	62	0	---	K.LLNLR.Q.N
	765.3959	764.3887	764.3817	9.11	166	173	0	---	R.SGAFQGAK.D
	802.4609	801.4537	801.4497	4.96	315	320	1	---	R.RWLEAK.T
	820.4252	819.4180	819.4239	-7.24	91	98	0	---	R.EVAAGAFR.G
	837.3794	836.3721	836.3633	10.5	306	311	0	---	K.CTCQLR.G
	913.5080	912.5007	912.5042	-3.82	334	340	1	---	K.FRQGHIR.D
	913.5100	912.5027	912.5042	-1.63	334	340	1	28	K.FRQGHIR.D
	985.6071	984.5998	984.5968	3.14	220	227	1	---	K.LRVVEELK.L
	993.5267	992.5195	992.5226	-3.14	347	354	2	---	R.GCKFPTKR.S
	1018.5130	1017.5057	1017.5104	-4.60	274	281	0	---	K.HVHLENNR.L
	1069.4846	1068.4773	1068.4659	10.7	341	349	1	---	R.DTDAFRGCK.F
	1149.5912	1148.5839	1148.5938	-8.61	166	176	1	---	R.SGAFQGAKDLR.W
	1163.6145	1162.6072	1162.6095	-1.92	163	173	1	---	R.ELRSGAFQGAK.D
	1315.6364	1314.6291	1314.6429	-10.48	336	346	1	---	R.GQHIRDTDAFR.G
	1338.6300	1337.6227	1337.6364	-10.23	235	246	0	---	K.SIPDNAFQSFGR.Y
	1338.6300	1337.6227	1337.6364	-10.23	235	246	0	67	K.SIPDNAFQSFGR.Y
	1355.6964	1354.6891	1354.7133	-17.84	261	273	0	---	K.FSDGAFLGVTTLK.H
	1361.6373	1360.6300	1360.6405	-7.70	321	333	0	---	K.TSRPDATCASPAK.F

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1365.6752 1364.6679 1364.6936 -18.78 207 - 219 0 --- R.NQLSSYPSAALS.K.L
1505.8511 1504.8438 1504.8613 -11.61 222 - 234 1 --- R.VVEELKLSHNPLK.S
1647.8730 1646.8657 1646.8780 -7.46 102 - 114 0 --- K.QLIYLVLSHNDIR.V
1751.8657 1750.8584 1750.8777 -11.03 247 - 260 0 --- R.YLETLWLDNTNLEK.F
1775.0302 1774.0229 1774.0465 -13.27 220 - 234 2 --- K.LRVVVEELKLSHNPLK.S
1916.9882 1915.9809 1915.9873 -3.31 75 - 90 0 --- R.AMPNLVSLHLQHCQIR.E
1932.9813 1931.9740 1931.9822 -4.23 75 - 90 0 --- R.AMPNLVSLHLQHCQIR.E + Oxidation (M)
2060.0400 2059.0327 2059.0374 -2.28 202 - 219 1 44 K.FYLDNRNQLSSYPSAALS.K.L
2060.0405 2059.0332 2059.0374 -2.04 202 - 219 1 --- K.FYLDNRNQLSSYPSAALS.K.L
No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514,
748.2947, 750.2650, 764.3574, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347,
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865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475,
918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440,
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1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179,
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1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1345.6146, 1347.6653, 1349.6800,
1349.6827, 1354.6820, 1359.7053, 1360.6173, 1371.6718, 1373.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235,
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1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1783.8599, 1785.8483, 1786.8871, 1790.8822,
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1884.9191, 1908.8989, 1914.9821, 1920.9862, 1930.9827, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592,
2025.5920, 2042.0568, 2047.0238, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2065.0427, 2066.0137, 2066.9895, 2067.9763,
2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8837, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961,
2100.8787, 2101.8999, 2103.9092, 2109.9924, 2112.9372, 2116.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840,
2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670,
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2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769,
2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520,
2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833,
3454.6270

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### 3. [E1BFX3](#) Mass: 11338 Score: 20 Expect: 2.4e+002 Matches: 7

Ribosomal protein L37 OS=Bos taurus GN=RPL37 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
768.3784	767.3711	767.3602	14.2	47	52	0	---	K.YNWSAK.A
995.5177	994.5104	994.5308	-20.51	4	12	2	---	K.GTSSFGKRR.N
1037.5145	1036.5072	1036.5124	-4.97	37	44	2	---	K.CDYPARKR.R
1149.5912	1148.5839	1148.5833	0.57	56	65	2	---	R.RNTTGTGRMR.H
1215.6306	1214.6233	1214.6078	12.8	1	11	2	---	-.MTKGSSFGKRR.R + Oxidation (M)
1292.6322	1291.6249	1291.6343	-7.25	26	36	1	---	K.AYHLQKSTCGK.C
2096.9836	2095.9763	2096.0156	-18.75	15	31	2	---	K.THTLCHRCGSKAYHLQK.S
No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9822, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8835, 2090.8708, 2092.8674, 2093.8711, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9377, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

### 4. [Q1PSA0](#) Mass: 42952 Score: 20 Expect: 2.5e+002 Matches: 16

Uncharacterized protein OS=Bos taurus GN=ZAR1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1035.5314	1034.5241	1034.5219	2.18	24	33	0	---	R.CLYPAAAAA.K.G
1069.4846	1068.4773	1068.4836	-5.87	156	165	0	---	R.GPEQDSPPSR.A
1271.6423	1270.6350	1270.6266	6.65	258	269	1	---	R.VPDTAGERSPPSR.S
1276.6179	1275.6106	1275.6354	-19.40	111	121	1	---	R.DVSVCQSLGRR.T
1294.6362	1293.6289	1293.6473	-14.18	357	366	1	---	K.RPHRQDLCGR.C
1347.6653	1346.6580	1346.6289	21.6	371	381	1	---	K.RLSCDSTFSFK.Y

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1355.6964 1354.6891 1354.6953 -4.56 266 - 277 2 --- R.SSPRSPQPSKER.L
1393.6727 1392.6654 1392.6746 -6.57 156 - 168 1 --- R.GPEQDSPPSRAPR.R
1532.7472 1531.7399 1531.7453 -3.52 369 - 381 2 --- K.GKRLSCDSTFSFK.Y
1549.7833 1548.7760 1548.7757 0.22 156 - 169 2 --- R.GPEQDSPPSRAPRR.V
1680.8076 1679.8003 1679.7912 5.42 313 - 324 2 --- K.VYKQFCRTCQK.S
1870.9304 1869.9231 1869.9493 -13.98 352 - 366 2 --- R.HVDPKPRHRQDLCGR.C
1930.9827 1929.9754 1929.9769 -0.76 211 - 229 2 --- R.GPPPARPRGPEEGDGSARK.V
2383.0444 2382.0371 2382.0549 -7.45 331 - 349 2 --- R.VEDITCQCNCKQTRCSCPVK.L
2432.0962 2431.0889 2431.1009 -4.91 325 - 343 2 --- K.SYNPYRVEDITCQCNCKQTR.C
2564.1965 2563.1892 2563.1254 24.9 321 - 340 2 --- R.TCQKSYNPHYRVEDITCQCNCK.Q

No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514,
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943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772,
979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004,
1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398,
1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428,
1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030,
1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251,
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1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1400.6235, 1409.7107,
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1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981,
1665.8070, 1669.8174, 1677.8353, 1679.9403, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166,
1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152,
1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822,
1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1880.9020, 1884.9191,
1908.9899, 1914.9821, 1916.9882, 1920.9862, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592,
2025.9520, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137,
2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711,
2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243,
2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631,
2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588,
2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933,
2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520,
2528.1902, 2543.2092, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

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5. [E1B7W1](#) Mass: 108879 Score: 20 Expect: 2.5e+002 Matches: 34

Uncharacterized protein OS=Bos taurus GN=THRAP3 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
764.3574	763.3501	763.3323	23.4	423	- 428	0	---	K.MADFHK.E + Oxidation (M)
808.4378	807.4305	807.4160	18.0	371	- 376	2	---	K.EKMKEK.G + Oxidation (M)
828.3922	827.3849	827.3998	-18.03	511	- 517	1	---	R.RSESGHR.G
933.4662	932.4590	932.4716	-13.50	702	- 709	1	---	K.SPREFPGYK.A
935.4675	934.4602	934.4468	14.3	741	- 748	1	---	K.SRESVDSR.D
967.4440	966.4367	966.4308	6.14	109	- 115	0	---	R.SNWQNYR.Q
978.4772	977.4700	977.4818	-12.10	705	- 713	1	---	R.EPGYKAEKG.Y
979.4924	978.4852	978.4955	-10.56	9	- 17	2	---	K.SGSRSSRSR.S
993.5267	992.5195	992.5111	8.39	13	- 21	2	---	R.SSRSSRSASR.S
1035.5314	1034.5241	1034.5397	-15.02	683	- 691	0	---	R.IDISPSTFR.K
1042.5243	1041.5170	1041.5291	-11.55	910	- 917	2	---	R.GRGREMF.R + Oxidation (M)
1157.5907	1156.5834	1156.5697	11.9	507	- 517	2	---	R.GGSKRSESGHR.G
1158.6328	1157.6255	1157.6040	18.6	757	- 766	2	---	R.SAEKTEKTHK.G
1163.6145	1162.6072	1162.6346	-23.56	683	- 692	1	---	R.IDISPSTFRK.H
1183.6030	1182.5957	1182.6006	-4.14	63	- 71	1	---	R.NHPRVYQNR.D
1216.6482	1215.6409	1215.6288	9.97	473	- 483	0	---	K.WEGLVYAPPKG.Q
1235.6155	1234.6082	1234.5829	20.5	335	- 347	0	---	K.EEAAPGGAAYTK.R
1277.6350	1276.6277	1276.6173	8.13	72	- 81	2	---	R.DFRGHNRYR.R
1305.6523	1304.6450	1304.6725	-21.04	818	- 829	1	---	R.LGTDKDFVGPSE.R
1331.6674	1330.6601	1330.6703	-7.68	914	- 924	2	---	R.FMFRKSTSPK.W + Oxidation (M)
1334.6744	1333.6671	1333.6474	14.8	360	- 370	2	---	K.DKEQKQNTNDK.E
1361.6373	1360.6300	1360.5967	24.5	743	- 754	1	---	R.ESVDSRSDSSHSR.E
1371.6718	1370.6645	1370.6942	-21.68	918	- 929	2	---	R.KSSTSPKWAHDK.F
1377.6776	1376.6703	1376.6619	6.12	693	- 704	1	---	K.HGLAHDEMKSPE.E
1393.6727	1392.6654	1392.6568	6.18	693	- 704	1	---	K.HGLAHDEMKSPE.E + Oxidation (M)
1473.7905	1472.7832	1472.7663	11.5	473	- 485	1	---	K.WEGLVYAPPKGKEK.Q
1485.7531	1484.7458	1484.7484	-1.74	511	- 523	2	---	K.RSESGHRGVPEK.N
1669.8174	1668.8101	1668.7757	20.6	109	- 121	1	---	R.SNWQNYRQAYSP.R
1725.8188	1724.8115	1724.8370	-14.75	391	- 405	1	---	K.SDSFAPKTDTEKPEF.G
1765.7922	1764.7849	1764.8206	-20.22	869	- 882	2	---	R.EEEDWPEYTPKSKK.Y
1808.8663	1807.8590	1807.8409	10.1	157	- 173	2	---	R.SSSSRSSNNHSRVESK.R
1880.9020	1879.8947	1879.8588	19.1	867	- 881	2	---	R.SREEEDWPEYTPKSK.K
2273.0264	2272.0191	2271.9965	9.96	849	- 868	2	---	R.GNYSGNNNNNNNDFQKRSR.E
2380.0007	2378.9934	2378.9873	2.55	796	- 815	1	---	K.AEEYTEETEEREESTTGDFK.S

No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 812.4002, 814.4128, 820.4252, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 983.4706, 985.6071, 991.4533, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1036.5333, 1037.5145, 1040.5127, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6320, 1234.6500, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1332.6602, 1333.2076,

1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1365.6752, 1375.6670, 1382.6367, 1383.6619, 1387.6700, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1475.7498, 1478.7303, 1479.7468, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

6. [G3X6N6](#) Mass: 52918 Score: 20 Expect: 2.5e+002 Matches: 19

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
977.4406	976.4333	976.4284	5.00	49	-	57	0	K.SDLGLCFPSNK.G
1001.5621	1000.5548	1000.5454	9.42	170	-	177	1	R.IHTEKAFR.N
1036.5333	1035.5260	1035.5349	-8.57	366	-	374	0	K.VFNQNSSLK.G
1040.5127	1039.5054	1039.4934	11.6	178	-	186	0	R.NYSNLSSQK.K
1060.5398	1059.5325	1059.5349	-2.24	216	-	224	0	R.THTGKPKYK.C
1122.5701	1121.5628	1121.5353	24.6	323	-	331	1	K.SHTEEKTYK.C
1178.6060	1177.5987	1177.5840	12.5	166	-	174	1	K.EHERIHTEK.A
1195.5924	1194.5851	1194.5638	17.9	225	-	234	1	K.CPLCGKAFSR.C
1216.6482	1215.6409	1215.6360	4.05	215	-	224	1	K.RTHTGKPKYK.C
1310.6051	1309.5978	1309.5696	21.6	329	-	337	1	K.TYKCHQCKW.V
1371.6718	1370.6645	1370.6587	4.23	85	-	95	1	R.MAFNQAKMFQR.F
1387.6700	1386.6627	1386.6536	6.55	85	-	95	1	R.MAFNQAKMFQR.F + Oxidation (M)
1503.7690	1502.7617	1502.7664	-3.08	255	-	266	2	R.LCGRFSLKEHEK.A
1644.8083	1643.8010	1643.7903	6.52	319	-	331	2	K.QHEKSHTTEKTYK.C
1804.9026	1803.8953	1803.8648	16.9	407	-	421	0	K.IHTGKPKYLCLECGK.F
1930.9827	1929.9754	1929.9917	-8.43	187	-	202	2	K.KIHTGKPFKQCLCGK.V
2307.9631	2306.9558	2306.9692	-5.78	375	-	393	1	K.GHERHTHTGKPECHQCGK.A
2398.0447	2397.0374	2396.9974	16.7	263	-	281	2	K.EHEKAHRGENGYECHQCEK.V
2428.0725	2427.0652	2427.0631	0.89	379	-	398	1	R.THTGKPECHQCGKAFQQR.R
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 999.4602, 1001.4565, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1037.5145, 1042.5243, 1045.5603, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1199.6785, 1206.6066, 1215.6306, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1315.6364, 1320.6128, 1321.6134, 1323.6330, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2277.9500, 2283.1741, 2290.9570, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

7. [Q02368](#) Mass: 16615 Score: 20 Expect: 2.5e+002 Matches: 8

NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 7 OS=Bos taurus GN=NDUFB7 PE=1 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
927.4970	926.4897	926.4868	3.13	1	-	8	1	-MGAHLARR.Y + Oxidation (M)
995.5177	994.5104	994.5018	8.67	98	-	104	2	K.RMKFEFER.E
1233.6230	1232.6157	1232.5931	18.3	115	-	124	2	R.REQREADMAK.G
1354.6820	1353.6747	1353.6499	18.3	71	-	81	1	K.RDSFPNFLACK.H
1697.7845	1696.7772	1696.7919	-8.67	22	-	35	1	R.MPTFFPPDYGFPERK.E + Oxidation (M)
2232.0229	2231.0156	2231.0674	-23.22	38	-	56	0	R.EMVATQGEEMDAQLVLQQR.D
2283.1741	2282.1668	2282.1212	20.0	116	-	137	2	R.EQREADMAKGLGPGEVAPEVAL.- + Oxidation (M)
2358.0854	2357.0781	2357.0396	16.4	82	-	98	2	K.HERHDWDYCEHLDYVKR.M
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846,								

1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428,  
1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030,  
1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251,  
1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449,  
1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134,  
1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653,  
1349.6800, 1349.6827, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619,  
1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905,  
1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347,  
1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592,  
1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730,  
1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780,  
1696.8055, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798,  
1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615,  
1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608,  
1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827,  
1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805,  
2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792,  
2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999,  
2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2233.0840, 2238.1050, 2250.0259, 2257.9934,  
2262.9368, 2263.9700, 2273.0264, 2277.9500, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320,  
2349.9844, 2352.0308, 2355.0315, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020,  
2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962,  
2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655,  
2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

8. [F1N1U9](#) Mass: 64259 Score: 20 Expect: 2.5e+002 Matches: 20

Uncharacterized protein OS=Bos taurus PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
969.4496	968.4423	968.4577	-15.85	456	463	0	---	K.SHFSAHQR.I
979.4924	978.4852	978.4995	-14.69	272	279	0	---	K.THLSTHQR.I
1018.5130	1017.5057	1017.4920	13.5	96	103	0	---	R.FTNAFYQK.L
1060.5398	1059.5325	1059.5574	-23.44	160	167	0	---	K.EHLIQHQR.T
1113.5419	1112.5346	1112.5107	21.5	44	52	0	---	K.TATLFNCMR.T
1192.6014	1191.5941	1191.5918	1.99	24	33	1	---	K.RLLTGEESCK.D
1216.6482	1215.6409	1215.6546	-11.26	414	422	1	---	R.NLICNIWRK.T
1332.6602	1331.6529	1331.6517	0.93	516	526	1	---	K.VHHTRMHTGEK.N
1432.6987	1431.6914	1431.7153	-16.71	328	339	2	---	K.HCAHQKTHTGKK.L
1486.7472	1485.7399	1485.7688	-19.44	211	223	1	---	K.TFADNSVLKAHQQR.I
1500.7242	1499.7169	1499.7225	-3.70	44	56	1	---	K.TATLFNCMRITGK.T
1539.7711	1538.7638	1538.7365	17.8	112	123	2	---	R.THKEEKFYQSDK.Y
1697.7845	1696.7772	1696.7726	2.71	25	38	1	---	R.LLTGEESCKDNEFR.E
1707.7931	1706.7858	1706.7869	-0.60	196	210	1	---	R.THMGVNLKCNEGGK.T
1773.8615	1772.8542	1772.8549	-0.40	44	58	2	---	K.TATLFNCMRITGTEK.C + Oxidation (M)
1804.9026	1803.8953	1803.8978	-1.35	258	271	2	---	K.LYKCNFEQKTFQAQ.T
2233.0840	2232.0767	2232.0382	17.3	220	237	1	---	K.AHQRIHTGEKPYECSEYK.K
2307.9631	2306.9558	2306.9606	-2.07	280	298	0	---	R.INTGEEKPYECECGTFQSK.S
2421.0769	2420.0696	2420.0307	16.1	34	52	2	---	K.DNEFRENCCKTATLFNCMR.T
3130.4312	3129.4239	3129.4971	-23.40	57	83	2	---	K.EKCFDLNICALSVKNLSQSSAHTVHQK.T

No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514,  
748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390,  
791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794,  
840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500,  
894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675,  
943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 983.4706,  
985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1022.5398,  
1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1069.4846, 1075.5515, 1092.6041,  
1106.5313, 1109.5087, 1111.5457, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907,  
1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1193.5928, 1195.5924,  
1199.6785, 1206.6066, 1215.6306, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6320, 1234.6500, 1235.6155, 1248.6078, 1250.6483,  
1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895,  
1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1333.2076,  
1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053,  
1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107,  
1411.6742, 1427.7725, 1431.7605, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1493.7345,  
1495.7502, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1549.7833,  
1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202,  
1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174,  
1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683,  
1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596,  
1769.4275, 1770.4087, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1808.8663, 1824.8685,  
1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862,  
1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238,  
2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128,  
2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787,  
2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2238.1050, 2250.0259,  
2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456,  
2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444,  
2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2422.0593, 2426.0476, 2428.0725, 2430.0947,  
2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144,  
2717.1655, 2834.2925, 2888.2483, 2904.4053, 3291.4875, 3312.3765, 3451.6833, 3454.6270

9. [F1N7L8](#) Mass: 63126 Score: 20 Expect: 2.6e+002 Matches: 22

Uncharacterized protein OS=Bos taurus GN=BBOF1 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
774.3952	773.3879	773.3919	-5.15	248	254	0	---	K.EADALQK.N
802.4609	801.4537	801.4708	-21.39	121	126	2	---	K.EKLERK.F
806.4342	805.4269	805.4116	19.0	347	352	1	---	K.EMNRIK.K + Oxidation (M)
820.4252	819.4180	819.4061	14.4	463	469	0	---	K.MNGFVPR.K
918.5267	917.5195	917.5116	8.53	347	353	2	---	K.EMNRIKK.L
952.4799	951.4726	951.4848	-12.79	407	413	1	---	R.MEYPKIR.T + Oxidation (M)
974.5051	973.4978	973.5080	-10.48	30	37	0	---	K.LEESVLER.A
978.4772	977.4700	977.4535	16.8	399	406	1	---	K.MREACVGR.M
1001.5621	1000.5548	1000.5739	-19.08	337	344	0	---	K.LQLQLQMK.D

1118.5659 1117.5586 1117.5615 -2.54 114 - 122 2 --- K.EKAQEEKEK.L  
1177.6130 1176.6057 1176.6060 -0.24 144 - 153 0 --- K.EIGMIQTELK.T + Oxidation (M)  
1183.6030 1182.5957 1182.5954 0.24 83 - 92 0 --- K.DTMSVLNLYK.K  
1195.5924 1194.5851 1194.6105 -21.25 57 - 65 2 --- R.IEYRDTSSR.L  
1216.6482 1215.6409 1215.6360 4.07 38 - 48 1 --- R.AKANASLWEAR.L  
1231.6115 1230.6042 1230.6204 -13.14 248 - 258 1 --- K.EADALQKNSQK.L  
1359.7053 1358.6980 1358.6677 22.3 94 - 104 1 --- K.QDQEKDNLIEK.L  
1479.7468 1478.7395 1478.7473 -5.25 298 - 310 0 --- K.VVSLLENALVCMTK.E + Oxidation (M)  
1495.7502 1494.7429 1494.7249 12.1 69 - 79 2 --- R.CNEELKQKQYK.M  
1790.8822 1789.8749 1789.9178 -23.97 337 - 350 2 --- K.LQQLLQMKDKEMNR.I + Oxidation (M)  
1808.8663 1807.8590 1807.8563 1.49 127 - 141 0 --- K.FTMQVSELEGQFHQK.A  
1824.8685 1823.8612 1823.8512 5.47 127 - 141 0 --- K.FTMQVSELEGQFHQK.A + Oxidation (M)  
2394.0181 2393.0108 2393.0554 -18.61 414 - 434 1 --- R.TFDGREHSTNSVNQDLMEADK.W  
**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347, 807.3921, 808.4378, 812.4002, 814.4128, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 975.4521, 977.4406, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1121.5419, 1122.5701, 1131.5602, 1136.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1187.6376, 1192.6014, 1193.5928, 1199.6785, 1206.6066, 1215.6306, 1226.5839, 1227.6051, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1293.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1485.7531, 1486.7472, 1493.7345, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1792.7894, 1801.9315, 1804.9026, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

10. [G3N2J6](#) Mass: 36179 Score: 19 Expect: 2.8e+002 Matches: 13

Uncharacterized protein OS=Bos taurus GN=TNIP3 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
782.3223	781.3150	781.3098	6.59	221	226	0	---	K.ACQMEK.E + Oxidation (M)
905.4637	904.4564	904.4614	-5.50	55	62	1	---	K.SKLDASER.F
1183.6030	1182.5957	1182.6066	-9.23	41	49	2	---	R.SMKELYERK.V
1268.6208	1267.6135	1267.6408	-21.51	97	107	0	---	K.ESLINGELHELK.I
1449.7479	1448.7406	1448.7115	20.1	215	226	1	---	R.LNSQIKACQMEK.E
1525.7864	1524.7791	1524.7783	0.52	95	107	1	---	K.EKESLINGELHELK.I
1801.9315	1800.9242	1800.9080	9.01	251	266	0	---	R.DPYLLMDPGAVQNQK.H
1868.9441	1867.9368	1867.9111	13.8	77	91	2	---	R.ESFPPLHCRTEPLRR.A
1914.9821	1913.9748	1913.9806	-3.04	199	214	0	---	K.EELQQIIQTSQSQNLNR.L
2058.9988	2057.9915	2057.9775	6.83	117	132	2	---	K.NALMNHKKQHYECEIK.R + Oxidation (M)
2321.9558	2320.9485	2320.9643	-6.81	157	174	2	---	K.SEMECRSREEMRTEMEVLK.Q + 3 Oxidation (M)
2417.0933	2416.0860	2416.0873	-0.52	267	286	0	---	K.HPPDDQWYAPDQFPDPVQHK.A
2834.2925	2833.2852	2833.3150	-10.50	164	185	2	---	R.EEMRTEMEVLKQQVQIYEEDFK.K + 2 Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1293.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								



11. [Q1PSA4](#) Mass: 20552 Score: 19 Expect: 2.8e+002 Matches: 9

Uncharacterized protein OS=Bos taurus GN=ZAR1 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1035.5314	1034.5241	1034.5219	2.18	24	-	33	0	--- R.CLYPAAAAAK.G
1294.6362	1293.6289	1293.6473	-14.18	143	-	152	1	--- K.RPHRQDLCGR.C
1347.6653	1346.6580	1346.6289	21.6	157	-	167	1	--- K.RLSCDSTFSFK.Y
1532.7472	1531.7399	1531.7453	-3.52	155	-	167	2	--- K.GKRLSCDSTFSFK.Y
1680.8076	1679.8003	1679.7912	5.42	99	-	110	2	--- K.VYKQFCRTCQK.S
1870.9304	1869.9231	1869.9493	-13.98	138	-	152	2	--- R.HVDPKRPHRQDLCGR.C
2383.0444	2382.0371	2382.0549	-7.45	117	-	135	2	--- R.VEDITCQNCKQTRCSCPVK.L
2432.0962	2431.0889	2431.1009	-4.91	111	-	129	2	--- K.SYNPYRVEDITCQNCKQTR.C
2564.1965	2563.1892	2563.1254	24.9	107	-	126	2	--- R.TCQKSYNPYRVEDITCQNCK.Q
No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1417.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1838.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0364, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

12. [Q17Q91](#) Mass: 10021 Score: 19 Expect: 2.9e+002 Matches: 7

Coiled-coil-helix-coiled-coil-helix domain-containing protein 7 OS=Bos taurus GN=CHCHD7 PE=3 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1028.5991	1027.5918	1027.6073	-15.05	2	-	9	2	--- M.PMVTTRLR.D
1180.6001	1179.5928	1179.5859	5.88	50	-	58	0	--- K.FWNSVMIQRR.R
1292.6322	1291.6249	1291.6482	-18.03	74	-	85	1	--- R.DEILGGLGKMPY.-
1308.6443	1307.6370	1307.6431	-4.67	74	-	85	1	--- R.DEILGGLGKMPY.- + Oxidation (M)
1336.6710	1335.6637	1335.6870	-17.42	50	-	59	1	--- K.FWNSVMIQRR.Q
1495.7502	1494.7429	1494.7613	-12.28	60	-	73	0	--- R.QNGVKPMPMTAAER.D
2888.2483	2887.2410	2887.1695	24.8	10	-	34	1	--- R.DPDVNPCLSESDASTRCAENNYDK.E
No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7742, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1838.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0364, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.9822, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2705.2144, 2717.1655, 2834.2925, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

13. [Q0IIC8](#) Mass: 17012 Score: 19 Expect: 3e+002 Matches: 8

Phospholipase A(2) OS=Bos taurus GN=PLA2G2A PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
807.3921	806.3848	806.3705	17.8	134	-	140	0	--- R.NSLCTGR.A

1023.5525 1022.5452 1022.5509 -5.51 121 - 128 2 --- R.NQKTYNKK.L  
 1037.5145 1036.5072 1036.5236 -15.83 74 - 82 1 --- K.LKHHGCCGK.F  
 1178.6060 1177.5987 1177.6026 -3.28 114 - 123 1 --- K.AALCFARNQK.T  
 1520.7347 1519.7274 1519.6984 19.1 93 - 105 1 --- R.GQITCADQGVCR.R.I  
 1658.8206 1657.8133 1657.8358 -13.58 128 - 140 2 --- K.KLQYYRNSLCTGR.A  
 2058.9988 2057.9915 2058.0330 -20.15 76 - 92 2 --- K.HHCGGTGKFLNINVSI.RR.G  
 2834.2925 2833.2852 2833.3276 -14.95 31 - 57 2 --- K.HTTGKGALLSYSAYGCGYCGVSGRGS.PK.D  
**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

14. [Q5KR49](#) Mass: 32732 Score: 19 Expect: 3.1e+002 Matches: 14

Tropomyosin alpha-1 chain OS=Bos taurus GN=TPM1 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
894.4534	893.4461	893.4606	-16.29	162	168	1	---	K.YEEVARK.L
1022.5398	1021.5325	1021.5300	2.47	8	15	1	---	K.MQMLKLDK.E + Oxidation (M)
1109.5087	1108.5014	1108.4819	17.7	119	128	1	---	K.AADESERGMK.V + Oxidation (M)
1308.6443	1307.6370	1307.6106	20.2	234	244	1	---	K.EAETRAEFAER.S
1332.6602	1331.6529	1331.6317	15.9	78	90	0	---	K.ATDAEADVASLN.R
1431.7605	1430.7532	1430.7365	11.7	129	140	2	---	K.VIESRAQKDEEK.M
1475.7498	1474.7425	1474.7701	-18.69	141	152	1	---	K.MEIQEIQLKEAK.H + Oxidation (M)
1549.7833	1548.7760	1548.7896	-8.74	232	244	2	---	K.LKEAETRAEFAER.S
1677.8353	1676.8280	1676.8151	7.68	119	133	2	---	K.AADESERGMKVIESR.A
1727.8683	1726.8610	1726.8849	-13.85	92	105	1	---	R.IQLVEELDRAQER.L
1808.8663	1807.8590	1807.8257	18.4	113	128	2	---	K.LEEAKEADESERGMK.V + Oxidation (M)
1908.8989	1907.8916	1907.9364	-23.45	249	264	1	---	K.LEKSIDDELDELAYAQK.L
2049.9497	2048.9424	2048.9724	-14.64	267	284	1	---	K.YKAISEELDHALNDMTSI.-
2066.0137	2065.0064	2064.9673	18.9	267	284	1	---	K.YKAISEELDHALNDMTSI.- + Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8055, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

15. [G1K1U4](#) Mass: 51632 Score: 19 Expect: 3.2e+002 Matches: 19

DNA polymerase delta subunit 3 OS=Bos taurus GN=POLD3 PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
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806.4342	805.4269	805.4181	10.9	209	-	215	1	---	K.ETKTEAK.E
807.3921	806.3848	806.3956	-13.39	292	-	297	1	---	R.MQQKEK.K + Oxidation (M)
957.4673	956.4600	956.4460	14.7	190	-	198	0	---	K.GIMGMFASK.A + Oxidation (M)
993.5267	992.5195	992.5179	1.61	363	-	371	0	---	K.TEPEPPPVK.G
1001.5621	1000.5548	1000.5665	-11.68	283	-	291	2	---	K.SSKKAEPVR.M
1003.5043	1002.4970	1002.5094	-12.33	199	-	208	1	---	K.AASKAQDANK.E
1045.5603	1044.5530	1044.5750	-21.02	440	-	450	2	---	K.GPKKGTAAMGK.A
1118.5659	1117.5586	1117.5437	13.3	216	-	226	0	---	K.EVMNASSVGP.K.A
1323.6320	1322.6247	1322.6024	16.9	301	-	311	1	---	R.QQMELSDDETK.E
1359.7053	1358.6980	1358.6976	0.31	287	-	297	2	---	K.AEPPVRMQQKEK.K + Oxidation (M)
1479.7468	1478.7395	1478.7035	24.4	300	-	311	2	---	R.RKQMELSDDETK.E
1615.8425	1614.8352	1614.8518	-10.28	25	-	38	0	---	K.WLSYTLGHVHNQAK.Q
1680.8076	1679.8003	1679.8002	0.05	363	-	378	1	---	K.TEPEPPPVKGS DGENK.R
1756.8782	1755.8709	1755.8284	24.2	183	-	198	1	---	K.QSSSQPKGIMGMFASK.A + 2 Oxidation (M)
1916.9882	1915.9809	1915.9673	7.11	212	-	230	2	---	K.TEAKVEMNASSVGP.KAPGK.G + Oxidation (M)
1932.9813	1931.9740	1931.9986	-12.71	241	-	257	2	---	K.AAMNKLKVNLDSEQEVK.E + Oxidation (M)
2082.0293	2081.0220	2081.0397	-8.52	183	-	202	2	---	K.QSSSQPKGIMGMFASKAASK.A
2087.8835	2086.8762	2086.9034	-13.04	302	-	318	2	---	K.QMELSDDETKETENMKK.K + 2 Oxidation (M)
2097.9961	2096.9888	2097.0347	-21.86	183	-	202	2	---	K.QSSSQPKGIMGMFASKAASK.A + Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 995.5177, 999.4602, 1001.4565, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.9899, 1914.9821, 1920.9862, 1930.9827, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2084.8977, 2086.8872, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2293.0264, 2277.9500, 2283.1741, 2290.9570, 2297.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270									

16. [Q5KR47](#) Mass: 32856 Score: 19 Expect: 3.2e+002 Matches: 14

Tropomyosin alpha-3 chain OS=Bos taurus GN=TPM3 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
802.4609	801.4537	801.4344	24.0	199	- 205	0	---	K.NVTNNLK.S
894.4534	893.4461	893.4606	-16.29	162	- 168	1	---	K.YEEVARK.L
962.4866	961.4793	961.5015	-23.07	126	- 133	1	---	R.GMKVIENR.A + Oxidation (M)
1022.5398	1021.5325	1021.5300	2.47	8	- 15	1	---	K.MQMLKLDK.E + Oxidation (M)
1109.5087	1108.5014	1108.4819	17.7	119	- 128	1	---	K.AADESERGMK.V + Oxidation (M)
1268.6208	1267.6135	1267.6156	-1.66	150	- 160	1	---	K.EAKHIAEEADR.K
1308.6443	1307.6370	1307.6106	20.2	234	- 244	1	---	K.EAETRAEFAER.S
1475.7498	1474.7425	1474.7701	-18.69	141	- 152	1	---	K.MELQEIQLKEA.H + Oxidation (M)
1549.7833	1548.7760	1548.7896	-8.74	232	- 244	2	---	K.LKEAETRAEFAER.S
1727.8683	1726.8610	1726.8849	-13.85	92	- 105	1	---	R.IQLVEEELDRAQR.L
1808.8663	1807.8590	1807.8257	18.4	113	- 128	2	---	K.LEEAKAEDSERGMK.V + Oxidation (M)
2049.9497	2048.9424	2048.9724	-14.64	267	- 284	1	---	K.YKAISEELDHALNDMTSI.-
2066.0137	2065.0064	2064.9673	18.9	267	- 284	1	---	K.YKAISEELDHALNDMTSI.- + Oxidation (M)
2119.9924	2118.9851	2119.0215	-17.16	31	- 48	2	---	K.QAEERSKQLEDELAAMQK.K + Oxidation (M)

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 995.5177, 999.4602, 1001.4565, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8057, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.9899, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2084.8977, 2086.8872, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2293.0264, 2277.9500, 2283.1741, 2290.9570, 2297.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

17. [Q2T9X5](#) Mass: 23537 Score: 19 Expect: 3.3e+002 Matches: 12

Uncharacterized protein C7orf61 homolog OS=Bos taurus PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
870.5254	869.5182	869.5195	-1.54	166	172	1	---	K.QLRQVAR.R
1177.6130	1176.6057	1176.6233	-14.92	18	25	1	---	R.WVFFWKHK.A
1276.6179	1275.6106	1275.6129	-1.78	28	38	1	---	K.SVIMDHTDSKK.N + Oxidation (M)
1331.6674	1330.6601	1330.6551	3.78	26	37	1	---	K.AKSVIMDHTDSK.K
1334.6744	1333.6671	1333.6911	-18.00	61	72	2	---	K.EAKVSKMDVSPK.V + Oxidation (M)
1347.6653	1346.6580	1346.6500	5.95	26	37	1	---	K.AKSVIMDHTDSK.K + Oxidation (M)
1359.7053	1358.6980	1358.6976	0.32	143	154	1	---	R.SPLESREAAMLR.E
1375.6670	1374.6597	1374.6925	-23.85	143	154	1	---	R.SPLESREAAMLR.E + Oxidation (M)
1475.7498	1474.7425	1474.7450	-1.66	26	38	2	---	K.AKSVIMDHTDSKK.N + Oxidation (M)
1932.9813	1931.9740	1931.9272	24.2	184	201	1	---	R.AHMGQFPDPAQGLKQDAR.S + Oxidation (M)
2225.1243	2224.1170	2224.1117	2.38	128	148	2	---	K.SSVSTSTSVASQMKTRSPLES.R
2335.9763	2334.9690	2335.0105	-17.78	108	127	0	---	K.SVSLMASALQSGWQMCSEW.S + 3 Oxidation (M)

No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6355, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1332.6602, 1333.2076, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

18. [A6QP12](#) Mass: 49923 Score: 19 Expect: 3.3e+002 Matches: 19

GAS7 protein OS=Bos taurus GN=GAS7 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
735.3820	734.3747	734.3745	0.34	185	190	1	---	K.GKQMOK.E + Oxidation (M)
764.3574	763.3501	763.3460	5.38	30	37	0	---	R.TDSAAGSR.R
911.4314	910.4241	910.4218	2.52	191	197	0	---	K.EMSEFIR.E
935.4675	934.4602	934.4542	6.42	302	308	1	---	R.QRDLEMK.T + Oxidation (M)
1001.5621	1000.5548	1000.5777	-22.91	296	303	2	---	R.KALTERQR.D
1028.5991	1027.5918	1027.5927	-0.83	60	68	1	---	R.LLSFHRAGK.A
1109.5087	1108.5014	1108.4819	17.6	331	340	0	---	K.STQAGDDLMLR.C + Oxidation (M)
1307.6600	1306.6527	1306.6768	-18.44	202	212	1	---	K.IEEEYAKNLAK.L
1325.6456	1324.6383	1324.6081	22.8	341	351	0	---	R.CVDLYNQAQSK.W
1377.6776	1376.6703	1376.6830	-9.23	329	340	2	---	R.RKSTQAGDDLMLR.C
1393.6727	1392.6654	1392.6779	-8.99	329	340	2	---	R.RKSTQAGDDLMLR.C + Oxidation (M)
1475.7498	1474.7425	1474.7701	-18.70	304	315	1	---	R.DLEMTQQLEIK.L
1493.7345	1492.7272	1492.6987	19.1	1	14	2	---	-MARGCASPRASSSR.C
1509.6786	1508.6713	1508.6936	-14.77	1	14	2	---	-MARGCASPRASSSR.C + Oxidation (M)
1615.8425	1614.8352	1614.8188	10.2	251	263	0	---	K.LHSEVEKPLMNF.R + Oxidation (M)
1783.8599	1782.8526	1782.8498	1.57	352	365	0	---	K.WFEEMVTITTELER.L
1908.8989	1907.8916	1907.8771	7.63	39	53	1	---	R.ATCSWRSLEWSPLR.R
2400.0771	2399.0698	2399.0845	-6.14	331	351	1	---	K.STQAGDDLMLRCVDLYNQAQSK.W
2528.1902	2527.1829	2527.1795	1.35	330	351	2	---	R.KSTQAGDDLMLRCVDLYNQAQSK.W

No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1331.6674, 1332.6602, 1333.2076, 1334.6744,

1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1382.6367, 1383.6619, 1387.6700, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.9822, 2383.9822, 2394.0181, 2398.0447, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

19. [Q2TBU3](#) Mass: 28638 Score: 19 Expect: 3.3e+002 Matches: 13

Golgi SNAP receptor complex member 1 OS=Bos taurus GN=GOSR1 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
774.3952	773.3879	773.3892	-1.70	44	49	2	---	R.DGRRDR.Y
865.3634	864.3561	864.3759	-22.93	189	195	0	---	K.ENMTSQRG
905.4637	904.4564	904.4436	14.1	136	143	0	---	R.ENLMGSRV.K
1007.5638	1006.5565	1006.5481	8.37	196	204	1	---	R.GMLKSIQSK.M + Oxidation (M)
1206.6066	1205.5993	1205.5822	14.2	134	143	1	---	R.ERENLMGSRV.K + Oxidation (M)
1294.6362	1293.6289	1293.6169	9.28	189	199	1	---	K.ENMTSQRGMLK.S
1310.6051	1309.5978	1309.6118	-10.70	189	199	1	---	K.ENMTSQRGMLK.S + Oxidation (M)
1334.6744	1333.6671	1333.6772	-7.56	134	144	2	---	R.ERENLMGSRV.K + Oxidation (M)
1382.6367	1381.6294	1381.6262	2.32	2	13	0	---	M.AAGTSNYWEDLR.K
1537.7886	1536.7813	1536.8049	-15.31	160	171	1	---	R.TELFLKEHDHLR.N
1768.8596	1767.8523	1767.8825	-17.06	136	150	2	---	R.ENLMGSRVKDIESYK.S
1774.8795	1773.8722	1773.8686	2.05	113	126	1	---	R.DILQDYTEHFHKT.K
2011.9012	2010.8939	2010.9243	-15.09	48	65	1	---	R.DRYSSDTTPLLNGSSQDR.M
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

20. [Q2TBN3](#) Mass: 19797 Score: 18 Expect: 3.4e+002 Matches: 12

Centrin-2 OS=Bos taurus GN=CE2N2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
979.4924	978.4852	978.5056	-20.85	71	78	1	---	K.KMISEIDK.E + Oxidation (M)
1234.6500	1233.6427	1233.6540	-9.11	55	65	1	---	K.VAMRALGFEPK.K + Oxidation (M)
1307.6600	1306.6527	1306.6438	6.80	72	83	1	---	K.MISEIDKEGTGK.M
1323.6320	1322.6247	1322.6388	-10.61	72	83	1	---	K.MISEIDKEGTGK.M + Oxidation (M)
1432.6987	1431.6914	1431.6915	-0.06	19	30	0	---	R.MSPKPELTTEEK.Q + Oxidation (M)
1716.8563	1715.8490	1715.8876	-22.47	17	30	2	---	R.KRMSPKPELTTEEK.Q + Oxidation (M)
1785.8483	1784.8410	1784.8661	-14.07	1	16	2	---	-MASNFKKANMASTTQR.K
1958.9543	1957.9470	1957.9778	-15.74	19	34	1	---	R.MSPKPELTTEEKQEI.E + Oxidation (M)
2049.9497	2048.9424	2048.9547	-6.00	79	96	1	---	K.EGTGKMNFSDFLVTMTQK.M + Oxidation (M)
2052.9905	2051.9832	2051.9366	22.7	84	100	1	---	K.MNFSDFLVTMTQKMSEK.D + Oxidation (M)
2068.9128	2067.9055	2067.9315	-12.58	84	100	1	---	K.MNFSDFLVTMTQKMSEK.D + 2 Oxidation (M)
2084.8977	2083.8904	2083.9265	-17.29	84	100	1	---	K.MNFSDFLVTMTQKMSEK.D + 3 Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 168								



1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2072.7920, 2074.8860, 2082.0293, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

21. [F1MMV5](#) Mass: 66566 Score: 18 Expect: 3.4e+002 Matches: 22

Nuclear speckle-splicing regulatory protein 1 OS=Bos taurus GN=NSRPL PE=4 SV=2

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
807.3921	806.3848	806.3896	-5.90	343	- 348	1	---	R.DSHRRH.R.E
828.3922	827.3849	827.4038	-22.90	354	- 359	1	---	R.DSHWKR.H
837.3794	836.3721	836.3698	2.79	130	- 135	1	---	R.EREMEK.G + Oxidation (M)
869.4703	868.4631	868.4627	0.39	310	- 316	2	---	R.SRGHEKR.E
927.4970	926.4897	926.4682	23.2	340	- 346	2	---	K.EKRDSHR.H
1001.4565	1000.4492	1000.4396	9.61	403	- 410	1	---	R.HNEKGCEK.E
1111.5457	1110.5384	1110.5161	20.1	472	- 480	2	---	R.ASKMRDMEK.D + Oxidation (M)
1115.5394	1114.5321	1114.5519	-17.77	372	- 379	2	---	R.EPDREWRK.E
1181.6368	1180.6295	1180.6061	19.9	360	- 368	2	---	R.HEEERLRGR.D
1234.6500	1233.6427	1233.6135	23.7	127	- 135	2	---	K.IQREEMEK.G + Oxidation (M)
1295.6366	1294.6293	1294.6564	-20.92	537	- 546	2	---	R.DRYLARQMAR.I + Oxidation (M)
1303.6643	1302.6570	1302.6415	11.9	271	- 282	1	---	R.EKGTETLSSHSK.H
1345.6146	1344.6073	1344.6058	1.13	428	- 437	2	---	R.YENSDDKYDR.E
1349.6800	1348.6727	1348.6847	-8.91	464	- 474	2	---	K.DRFVNQERASK.M
1349.6827	1348.6754	1348.6847	-6.91	464	- 474	2	---	K.DRFVNQERASK.M
1365.6752	1364.6679	1364.6983	-22.24	466	- 476	2	---	R.FVNQERASKMR.D
1434.7190	1433.7117	1433.7110	0.51	438	- 449	2	---	R.EKREVSVESSER.N
1520.7347	1519.7274	1519.7339	-4.24	526	- 538	2	---	K.RSNEETVTSARDR.Y
1786.8871	1785.8798	1785.8857	-3.26	483	- 499	1	---	K.ERNPEKPSSEASLGAK.H
1867.9100	1866.9027	1866.9184	-8.38	527	- 542	2	---	R.SNEETVTSARDRYLAR.Q
1914.9821	1913.9748	1913.9568	9.40	273	- 289	2	---	K.GTETLSSHSKHHNRPAR.S
2398.0447	2397.0374	2397.0330	1.86	317	- 335	1	---	R.EDEHQERPAEQDSYHTDR.D
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 808.4378, 812.4002, 814.4128, 820.4252, 830.3668, 834.3623, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1113.5419, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

22. [Q2KIC0](#) Mass: 66733 Score: 18 Expect: 3.4e+002 Matches: 22

Nuclear speckle-splicing regulatory protein 1 OS=Bos taurus GN=NSRPL PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
807.3921	806.3848	806.3896	-5.90	343	- 348	1	---	R.DSHRRH.R.E
828.3922	827.3849	827.4038	-22.90	354	- 359	1	---	R.DSHWKR.H
837.3794	836.3721	836.3698	2.79	130	- 135	1	---	R.EREMEK.G + Oxidation (M)
869.4703	868.4631	868.4627	0.39	310	- 316	2	---	R.SRGHEKR.E
927.4970	926.4897	926.4682	23.2	340	- 346	2	---	K.EKRDSHR.H
1001.4565	1000.4492	1000.4396	9.61	404	- 411	1	---	R.HNEKGCEK.E
1003.5043	1002.4970	1002.4995	-2.47	374	- 380	2	---	R.NDREWRK.E
1111.5457	1110.5384	1110.5161	20.1	473	- 481	2	---	R.ASKMRDMEK.D + Oxidation (M)



1181.6368	1180.6295	1180.6061	19.9	360	-	368	2	---	R.HEEERLRGR.D
1234.6500	1233.6427	1233.6135	23.7	127	-	135	2	---	K.IQREEREMEK.G + Oxidation (M)
1295.6366	1294.6293	1294.6564	-20.92	538	-	547	2	---	R.DRYLARQMAR.I + Oxidation (M)
1303.6643	1302.6570	1302.6415	11.9	271	-	282	1	---	R.EKGTETLSSHSH.H
1345.6146	1344.6073	1344.6058	1.13	429	-	438	2	---	R.YENSDDKYDR.D
1349.6800	1348.6727	1348.6847	-8.91	465	-	475	2	---	K.DRFVNQERASK.M
1349.6827	1348.6754	1348.6847	-6.91	465	-	475	2	---	K.DRFVNQERASK.M
1365.6752	1364.6679	1364.6983	-22.24	467	-	477	2	---	R.FVNQERASKMR.D
1434.7190	1433.7117	1433.7110	0.51	439	-	450	2	---	R.EKREVSVESSER.N
1520.7347	1519.7274	1519.7339	-4.24	527	-	539	2	---	K.RSNEETVTSARDR.Y
1786.8871	1785.8798	1785.8857	-3.26	484	-	500	1	---	K.ERNPEKPPSSSEASLGAK.H
1867.9100	1866.9027	1866.9184	-8.38	528	-	543	2	---	R.SNEETVTSARDRYLAR.Q
1914.9821	1913.9748	1913.9568	9.40	273	-	289	2	---	K.GTETLLSSSHKHHRNPAR.S
2398.0447	2397.0374	2397.0330	1.86	317	-	335	1	---	R.EDEHQERPAEQDSYHTDR.D
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 808.4378, 812.4002, 814.4128, 820.4252, 830.3668, 834.3623, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.5621, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1300.5895, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6072, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1347.6653, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7525, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3143.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270									

23. [E1BDW0](#) Mass: 49794 Score: 18 Expect: 3.4e+002 Matches: 17

Uncharacterized protein OS=Bos taurus GN=ALS2CR12 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
782.3223	781.3150	781.3098	6.59	164	-	169	0	R.CAEMQK.N + Oxidation (M)
918.5267	917.5195	917.4970	24.4	240	-	246	2	K.KKAWEK.D
1106.5313	1105.5240	1105.5437	-17.83	155	-	163	0	K.LLSNEMDLR.C + Oxidation (M)
1115.5394	1114.5321	1114.5255	5.99	110	-	119	1	K.KHSESEDVGK.V
1181.6368	1180.6295	1180.6200	8.07	294	-	302	1	K.EELLKQHER.D
1295.6366	1294.6293	1294.6041	19.5	267	-	276	1	K.FELESEEEERK.K
1332.6602	1331.6529	1331.6755	-16.92	202	-	213	1	K.LAAQDKLEEMGK.E
1432.6987	1431.6914	1431.6994	-5.54	242	-	252	2	K.AEWEKDEKLER.E
1473.7905	1472.7832	1472.8198	-24.85	303	-	314	2	R.DTLQLEELRKTK.E
1527.8068	1526.7995	1526.7875	7.89	64	-	76	2	K.MKVLHGKQESNKL.L
1570.7814	1569.7741	1569.8111	-23.53	111	-	124	2	K.HSESEDVGKVIKIR.T
1665.8070	1664.7997	1664.8369	-22.34	263	-	275	2	K.ITRKFELESEEEER.K
1696.8055	1695.7982	1695.8315	-19.61	177	-	191	0	R.ELEEAHAQLSELEK.N
1768.8596	1767.8523	1767.8712	-10.70	202	-	216	2	K.LAAQDKLEEMGKEYK.Y + Oxidation (M)
1783.8599	1782.8526	1782.8458	3.82	95	-	109	1	R.EQISVTLGDEMFDPRK.K + Oxidation (M)
2053.9851	2052.9778	2052.9898	-5.85	93	-	109	2	R.NREQISVTLGDEMFDPRK.K + Oxidation (M)
2211.1047	2210.0974	2210.1113	-6.29	133	-	150	1	K.EQISELTVIEQMNRDHR.S
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1109.5087, 1111.5457, 1113.5419, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1434.7190, 1449.7479, 1466.6953, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259,								

2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

**24. [G3N3V8](#) Mass: 69281 Score: 18 Expect: 3.7e+002 Matches: 12**

Uncharacterized protein OS=Bos taurus GN=C3orf67 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
735.3820	734.3747	734.3745	0.36	437	-	443	1 ---	K.AAKCASK.E
807.3921	806.3848	806.3770	9.67	384	-	390	0 ---	K.EDTSVTR.S
979.4924	978.4852	978.4917	-6.64	120	-	128	1 ---	R.GTVSMRNSK.H
995.5177	994.5104	994.4866	24.0	120	-	128	1 ---	R.GTVSMRNSK.H + Oxidation (M)
1069.4846	1068.4773	1068.4546	21.3	611	-	620	0 ---	K.EMNPPSPSPN.-
1292.6322	1291.6249	1291.6554	-23.61	267	-	278	0 ---	K.AATVLTAMSQQR.A + Oxidation (M)
1349.6800	1348.6727	1348.6517	15.6	152	-	162	1 18	R.NNMRLSNETVR.S + Oxidation (M)
1349.6827	1348.6754	1348.6517	17.6	152	-	162	1 ---	R.NNMRLSNETVR.S + Oxidation (M)
1409.7107	1408.7034	1408.7310	-19.60	502	-	514	0 ---	K.DLPTHQVSASINK.T
1679.9403	1678.9330	1678.9049	16.7	141	-	155	2 ---	K.VLGGPPPLSGRRNNMR.L + Oxidation (M)
1727.8683	1726.8610	1726.8209	23.2	126	-	140	1 ---	R.NSKHQDVCHIAFGSK.V
2211.1047	2210.0974	2210.0525	20.3	538	-	556	0 ---	R.NYQPSEISESELQMLASLR.R + Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 983.4706, 985.6071, 991.4533, 993.5267, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

**25. [F1MNR4](#) Mass: 58473 Score: 18 Expect: 3.7e+002 Matches: 11**

Uncharacterized protein OS=Bos taurus GN=C3orf67 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
735.3820	734.3747	734.3671	10.4	265	-	270	1 ---	K.STSRER.T
807.3921	806.3848	806.3770	9.67	406	-	412	0 ---	K.EDTSVTR.S
979.4924	978.4852	978.4917	-6.64	143	-	151	1 ---	R.GTVSMRNSK.H
995.5177	994.5104	994.4866	24.0	143	-	151	1 ---	R.GTVSMRNSK.H + Oxidation (M)
1069.4846	1068.4773	1068.4546	21.3	508	-	517	0 ---	K.EMNPPSPSPN.-
1292.6322	1291.6249	1291.6554	-23.61	289	-	300	0 ---	K.AATVLTAMSQQR.A + Oxidation (M)
1349.6800	1348.6727	1348.6517	15.6	175	-	185	1 18	R.NNMRLSNETVR.S + Oxidation (M)
1349.6827	1348.6754	1348.6517	17.6	175	-	185	1 ---	R.NNMRLSNETVR.S + Oxidation (M)
1679.9403	1678.9330	1678.9049	16.7	164	-	178	2 ---	K.VLGGPPPLSGRRNNMR.L + Oxidation (M)
1727.8683	1726.8610	1726.8209	23.2	149	-	163	1 ---	R.NSKHQDVCHIAFGSK.V
2211.1047	2210.0974	2210.0525	20.3	435	-	453	0 ---	R.NYQPSEISESELQMLASLR.R + Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 983.4706, 985.6071, 991.4533, 993.5267, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133,  
 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741,  
 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854,  
 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771,  
 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901,  
 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053,  
 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

26. [Q6YFP9](#) Mass: 10868 Score: 18 Expect: 3.7e+002 Matches: 6

Cytochrome c oxidase subunit 6B2 OS=Bos taurus GN=COX6B2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
808.4378	807.4305	807.4127	22.1	81	-	88	1	--- K.DGTFTAGKI.-
1193.5928	1192.5855	1192.6088	-19.51	77	-	87	1	--- K.EQIKDGTFTAGK.I
1475.7498	1474.7425	1474.7094	22.4	1	-	13	1	--- -.MLGAECPKPKCKG.W
1644.8083	1643.8010	1643.8242	-14.12	62	-	74	0	--- R.VYHSLCPISWVQR.W
2097.9961	2096.9888	2097.0181	-13.94	14	-	30	1	--- K.WPTPPDFRFPFNQNT.R
2283.1741	2282.1668	2282.1345	14.2	12	-	30	2	--- K.GKWPPTPPDFRFPFNQNT.R
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514,								
748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390,								
791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857,								
842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534,								
897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757,								
951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924,								
983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331,								
1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398,								
1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1118.5659, 1121.5419, 1122.5701, 1131.5602,								
1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368,								
1183.6030, 1187.6376, 1192.6014, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251,								
1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350,								
1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128,								
1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146,								
1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776,								
1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479,								
1466.6953, 1473.7905, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786,								
1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573,								
1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1647.8730,								
1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780,								
1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221,								
1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087,								
1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685,								
1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862,								
1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238,								
2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128,								
2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2100.8787, 2101.8999,								
2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259,								
2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456,								
2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444,								
2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725,								
2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965,								
2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

27. [P11019](#) Mass: 26180 Score: 18 Expect: 3.8e+002 Matches: 15

V-type proton ATPase subunit E 1 OS=Bos taurus GN=ATP6V1E1 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
905.4637	904.4564	904.4614	-5.52	192	-	199	0	--- K.VSNTLESRL
975.4521	974.4449	974.4419	3.07	53	-	59	0	--- K.IMEYYEK.K
985.6071	984.5998	984.6080	-8.29	45	-	52	1	--- R.LVQTRQLK.I
991.4533	990.4460	990.4368	9.26	53	-	59	0	--- K.IMEYYEK.K + Oxidation (M)
1158.6328	1157.6255	1157.6404	-12.85	61	-	69	2	--- K.EKQIEQKKK.I
1216.6482	1215.6409	1215.6209	16.5	51	-	59	1	--- R.LKIMEYYEK.K
1232.6251	1231.6178	1231.6158	1.63	51	-	59	1	--- R.LKIMEYYEK.K + Oxidation (M)
1305.6523	1304.6450	1304.6329	9.30	70	-	80	0	--- K.IQMSNLMNQAR.L
1321.6134	1320.6061	1320.6278	-16.42	70	-	80	0	--- K.IQMSNLMNQAR.L + Oxidation (M)
1337.6279	1336.6206	1336.6227	-1.57	70	-	80	0	--- K.IQMSNLMNQAR.L + 2 Oxidation (M)
1359.7053	1358.6980	1358.6929	3.77	88	-	99	0	--- R.DDLITDLLNEAK.Q
1449.7479	1448.7406	1448.7228	12.3	69	-	80	1	--- K.IQMSNLMNQAR.L + Oxidation (M)
1578.7899	1577.7826	1577.8017	-12.12	70	-	82	1	--- K.IQMSNLMNQARLK.V + 2 Oxidation (M)
1947.0288	1946.0215	1946.0553	-17.37	70	-	85	2	--- K.IQMSNLMNQARLKVL.R + 2 Oxidation (M)
2047.0238	2046.0165	2046.0494	-16.06	34	-	50	2	--- K.AEEEFNIEKGRIVQTR.L

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514,  
 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390,  
 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794,  
 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500,  
 894.4534, 897.0277, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757,  
 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 977.4406, 978.4772, 979.4924, 983.4706,  
 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525,  
 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041,  
 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768,  
 1157.5907, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928,  
 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1226.5839, 1227.6051, 1231.6115, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483,  
 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895,  
 1303.6643, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744,  
 1336.6710, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1360.6173, 1361.6373, 1365.6752,  
 1371.6718, 1375.6670, 1377.6776,

2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

28. [F1MLG8](#) Mass: 9765 Score: 18 Expect: 3.8e+002 Matches: 6

Uncharacterized protein OS=Bos taurus GN=SMIM4 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
925.4804	924.4731	924.4930	-21.53	18	-	24	1	--- K.QRFGVYR.F
1037.5145	1036.5072	1036.5050	2.17	58	-	65	1	--- K.ASERQYQR.R
1193.5928	1192.5855	1192.6061	-17.24	58	-	66	2	--- K.ASERQYQRR.L
1354.6820	1353.6747	1353.6976	-16.88	14	-	24	2	--- R.MPGKQRFQVYR.F + Oxidation (M)
1532.7472	1531.7399	1531.7419	-1.32	45	-	56	1	--- R.VGQETFYDYVRR.K
1631.8217	1630.8144	1630.8104	2.49	43	-	55	1	--- K.VRVGQETFYDYVRR.R
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.9899, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2127.9368, 2225.1243, 2232.0229, 2233.0840, 2235.0315, 2239.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0002, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

29. [E1BEC7](#) Mass: 19673 Score: 18 Expect: 3.9e+002 Matches: 10

Mimitin, mitochondrial OS=Bos taurus GN=NDUFAF2 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
764.3574	763.3501	763.3435	8.66	1	-	6	0	--- -.MGWSQR.L
780.3343	779.3271	779.3385	-14.60	1	-	6	0	--- -.MGWSQR.L + Oxidation (M)
1109.5087	1108.5014	1108.5005	0.84	94	-	101	1	--- K.CRETIQMK.S + Oxidation (M)
1138.5428	1137.5355	1137.5382	-2.37	32	-	39	0	--- K.YYYIPEYK.N
1320.6128	1319.6055	1319.6101	-3.47	80	-	90	0	--- R.QTPPTMEEIMK.N + Oxidation (M)
1449.7479	1448.7406	1448.7711	-21.02	1	-	12	1	--- -.MGWSQRLFGVIR.R
1559.8573	1558.8500	1558.8315	11.9	14	-	27	2	--- R.ALSKEVKEQVGTDR.F
1606.8213	1605.8140	1605.8111	1.83	18	-	31	2	--- K.EVKEQVGTDRFGNK.Y
1707.7931	1706.7858	1706.7855	0.19	80	-	93	1	--- R.QTPPTMEEIMKNEK.C + 2 Oxidation (M)
1932.9813	1931.9740	1931.9444	15.3	78	-	93	2	--- K.RTQTPPTMEEIMKNEK.C
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1568.7592, 1570.7814, 1578.7899, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.9899, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2212.9368, 2225.1243, 2232.0229, 2233.0840, 2235.0315, 2239.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0002, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

30. [A6QLN3](#) Mass: 7445 Score: 18 Expect: 4.1e+002 Matches: 6

FXVD2 protein OS=Bos taurus GN=FXVD2 PE=2 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
894.4534	893.4461	893.4654	-21.58	48	54	2	---	R.FRCGAKR.Q
1012.5004	1011.4931	1011.5145	-21.08	50	57	2	---	R.CGAKRQHR.Q
1178.6060	1177.5987	1177.5880	9.11	2	11	1	---	M.DRWYLGSGPK.E
1192.6014	1191.5941	1191.5996	-4.62	55	64	1	---	R.QHRQIPEDGL.-
1325.6456	1324.6383	1324.6234	11.3	1	11	1	---	-.MDRWYLGSGSPK.E + Oxidation (M)
3130.4312	3129.4239	3129.3814	13.6	1	25	2	---	-.MDRWYLGSGSPKENEDPFYYDYETVR.N

No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8300, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2233.0840, 2239.0002, 2324.9824, 2325.9763, 2329.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3291.4875, 3312.3765, 3451.6833, 3454.6270

31. [F1MIT2](#) Mass: 31839 Score: 18 Expect: 4.2e+002 Matches: 13

Transcription elongation factor A protein 1 OS=Bos taurus GN=TCEA1 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
927.4970	926.4897	926.4933	-3.90	179	186	1	---	K.DAKNPNLR.K
1206.6066	1205.5993	1205.6009	-1.27	123	132	1	---	K.CREMLAAALR.T + Oxidation (M)
1307.6600	1306.6527	1306.6252	21.0	35	46	0	---	K.QSTDEEVTSIAK.S
1375.6670	1374.6597	1374.6375	16.1	71	83	0	---	K.DTAVTSQNSPEAR.E
1431.7605	1430.7532	1430.7850	-22.18	121	132	2	---	R.LKCREMLAAALR.T
1503.7690	1502.7617	1502.7325	19.5	70	83	1	---	K.KDTAVTSQNSPEAR.E
1631.8217	1630.8144	1630.8274	-7.98	69	83	2	---	K.KDRTAVTSQNSPEAR.E
1661.8284	1660.8211	1660.8155	3.36	55	69	2	---	K.LLDGPSTDKDSEKK.K
1757.8225	1756.8152	1756.8016	7.73	97	111	1	---	K.DETNARDTVVSFPR.A
2086.8872	2085.8799	2085.8554	11.7	259	276	0	---	R.SADEPMITFVVCNEGCR.W
2087.8835	2086.8762	2086.8821	-2.82	84	102	2	---	R.EESSSSGNMSSRKDETNR.D + Oxidation (M)
2398.0447	2397.0374	2397.0876	-20.91	226	246	2	---	R.EHQMAKTGGTQDTLFTCGKCK.K
2414.1050	2413.0977	2413.0825	6.32	226	246	2	---	R.EHQMAKTGGTQDTLFTCGKCK.K + Oxidation (M)

No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8300, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2400.0771, 2405.0879, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270



32. [E1BLN1](#) Mass: 117436 Score: 18 Expect: 4.2e+002 Matches: 34

Uncharacterized protein OS=Bos taurus GN=SYCP1 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
933.4662	932.4590	932.4749	-17.10	556	562	1	---	R.QEERMLK.Q
985.6071	984.5998	984.6080	-8.25	140	147	2	---	R.KIIEAQRK.A
1001.5621	1000.5548	1000.5440	10.8	669	677	0	---	K.LEIELEGAK.Q
1030.5259	1029.5186	1029.5203	-1.61	132	139	1	---	K.ENKLQENR.K
1045.5603	1044.5530	1044.5790	-24.86	238	245	1	---	R.LEMHFKLK.E
1060.5398	1059.5325	1059.5560	-22.14	795	802	2	---	R.EEKEELKR.E
1069.4846	1068.4773	1068.4645	12.0	417	425	0	---	K.SSELEEMTK.L + Oxidation (M)
1158.6328	1157.6255	1157.6152	8.89	132	140	2	---	K.ENKLQENRK.I
1173.6122	1172.6049	1172.6149	-8.52	172	181	1	---	K.DLIKENNATR.H
1192.6014	1191.5941	1191.6169	-19.11	803	812	1	---	R.EMKENTVTLK.G
1199.6785	1198.6712	1198.6921	-17.43	710	720	1	---	K.VVADEAVKLQK.E
1231.6115	1230.6042	1230.5952	7.30	546	555	1	---	K.QQEDINNSKR.Q
1234.6500	1233.6427	1233.6605	-14.38	453	462	1	---	K.QFEKIAEELK.E
1276.6179	1275.6106	1275.6418	-24.48	594	604	2	---	K.SKLDKSEENAR.S
1277.6350	1276.6277	1276.6299	-1.70	637	646	0	---	K.FIEELQQENK.A
1294.6362	1293.6289	1293.6486	-15.19	417	427	1	---	K.SSELEEMTKLK.N
1295.6366	1294.6293	1294.6266	2.14	847	858	1	---	R.SFPSANQSRSSK.D
1305.6523	1304.6450	1304.6394	4.30	770	780	0	---	K.ASLETCLCNLR.N
1334.6744	1333.6671	1333.6548	9.26	954	966	0	---	K.TPSSLTTPGSMQK.S
1359.7053	1358.6980	1358.6902	5.76	545	555	2	---	K.KQQEDINNSKR.Q
1431.7605	1430.7532	1430.7261	18.9	730	741	1	---	K.IAEMVMALEKHK.H + 2 Oxidation (M)
1478.7303	1477.7230	1477.7446	-14.63	953	966	1	---	K.KTPSSLTTPGSMQK.S + Oxidation (M)
1495.7502	1494.7429	1494.7752	-21.58	283	294	1	---	K.MKELTFLLSESR.N
1650.8523	1649.8450	1649.8294	9.48	417	430	2	---	K.SSELEEMTKLNKNK.E
1663.7981	1662.7908	1662.7883	1.55	599	612	1	---	K.SEENARSIECEVIK.K
1669.8174	1668.8101	1668.8318	-13.00	789	801	2	---	K.HLETEREEKEELK.R
1725.8188	1724.8115	1724.8443	-19.01	238	250	2	---	R.LEMHFKLKEDYEK.I + Oxidation (M)
1773.8615	1772.8542	1772.8401	7.97	546	559	2	---	K.QQEDINNSKRQEER.M
1804.9026	1803.8953	1803.9400	-24.79	950	966	2	---	R.TPKKTPSSLTTPGSMQK.S + Oxidation (M)
1947.0288	1946.0215	1946.0619	-20.73	383	398	2	---	K.TTICNLKLLTTEQQR.L
2058.9988	2057.9915	2058.0051	-6.62	318	334	1	---	K.QDHLTSELEDIKMSLQR.S + Oxidation (M)
2060.0400	2059.0327	2059.0797	-22.80	391	407	2	---	K.LLTTEQQRLEKSEDELK.I
2060.0405	2059.0332	2059.0797	-22.55	391	407	2	---	K.LLTTEQQRLEKSEDELK.I
2066.9895	2065.9822	2066.0136	-15.19	954	972	2	---	K.TPSSLTTPGSMQKSETMRK.T
No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1163.6145, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1193.5928, 1195.5924, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1232.6251, 1233.6230, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1289.6449, 1292.6322, 1300.5895, 1303.6643, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1658.8206, 1659.8125, 1661.8284, 1665.8070, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2065.0427, 2066.0137, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

33. [Q3ZBL3](#) Mass: 49458 Score: 17 Expect: 4.5e+002 Matches: 17

Inositol hexakisphosphate kinase 2 OS=Bos taurus GN=IP6K2 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
724.3446	723.3373	723.3374	-0.09	1	6	0	---	-.MSPAFA.R + Oxidation (M)
778.4551	777.4478	777.4385	12.0	279	285	0	---	K.LSVQGFK.E
891.4706	890.4634	890.4610	2.64	126	132	1	---	K.TSKDWVR.Q
978.4772	977.4700	977.4930	-23.62	118	125	0	---	K.HHVLETDK.T
1305.6523	1304.6450	1304.6507	-4.35	243	254	0	---	K.CQGSTSAVIGVR.V
1365.6752	1364.6679	1364.6626	3.93	286	296	0	---	K.EALFQFFHNGR.Y
1375.6670	1374.6597	1374.6714	-8.50	2	13	1	---	M.SPAFRAMDVEPR.D
1522.7239	1521.7166	1521.7068	6.45	1	13	1	---	-.MSPAFRAMDVEPR.D + Oxidation (M)
1749.8406	1748.8333	1748.8338	-0.26	1	15	2	---	-.MSPAFRAMDVEPRDK.G
1765.7922	1764.7849	1764.8287	-24.81	1	15	2	---	-.MSPAFRAMDVEPRDK.G + Oxidation (M)
1768.8596	1767.8523	1767.8136	21.9	226	241	1	---	R.QHGDDASEEKAANQIR.K
1801.9315	1800.9242	1800.9410	-9.31	140	153	2	---	K.VKSHKLEEEFELWK.K
2232.0229	2231.0156	2231.0383	-10.14	62	80	1	---	K.FTPQYKGVVSVSFEEDR.N
2400.0771	2399.0698	2399.1198	-20.81	174	191	2	---	K.HYNPWSMKCHQQQLQRMK.E
2432.0962	2431.0889	2431.1096	-8.50	174	191	2	---	K.HYNPWSMKCHQQQLQRMK.E + 2 Oxidation (M)
2543.2092	2542.2019	2542.2314	-11.61	48	67	2	---	R.EHQFYETLPAEMRKFTPOYK.G
3451.6833	3450.6760	3450.5975	22.8	243	273	1	---	K.CQGSTSAVIGVRVCGMVQYAGSGQLMFMNK.Y + Oxidation (M)



**No match to:** 713.4400, 713.4415, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4793, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1371.6718, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1766.8105, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.9889, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9821, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.0308, 2350.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2435.0254, 2440.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3454.6270

34. [Q56JZ9](#) Mass: 16931 Score: 17 Expect: 4.6e+002 Matches: 8

Glia maturation factor gamma OS=Bos taurus GN=GMFG PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
774.3952	773.3879	773.3741	17.8	59	64	0	---	K.MELPER.Q
905.4637	904.4564	904.4695	-14.43	68	74	0	---	R.FVVYSYK.Y
1155.5768	1154.5695	1154.5866	-14.78	59	67	1	---	K.MELPERQPR.F
1235.6155	1234.6082	1234.6227	-11.73	25	35	1	---	R.KETDNAAIVMK.V + Oxidation (M)
1292.6322	1291.6249	1291.6296	-3.61	125	135	0	---	R.TTDDLTEAWLK.E
1449.7479	1448.7406	1448.7181	15.6	26	38	1	---	K.ETDNAAIVMKVDK.D + Oxidation (M)
1549.7833	1548.7760	1548.7671	5.74	125	137	1	---	R.TTDDLTEAWLKEK.L
2042.0568	2041.0495	2041.0455	1.98	59	74	2	---	K.MELPERQPRFVVYSYK.Y

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4793, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8402, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1766.8105, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.9889, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9821, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.0308, 2350.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

35. [F1MQU4](#) Mass: 106272 Score: 17 Expect: 4.7e+002 Matches: 30

Uncharacterized protein OS=Bos taurus GN=BCLAF1 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
807.3921	806.3848	806.3817	3.86	1	7	1	---	-LMGRNSNR.S
837.3794	836.3721	836.3889	-20.05	60	65	1	---	R.DYRNNR.G
845.4155	844.4083	844.3967	13.7	729	734	1	---	K.DYKEYK.S
894.4534	893.4461	893.4315	16.3	17	24	1	---	R.SQSSSR.S
905.4637	904.4564	904.4614	-5.52	160	167	1	---	R.GSQEQTK.K
933.4662	932.4590	932.4464	13.5	422	429	0	---	K.NFATTSHR.N
972.4781	971.4708	971.4784	-7.85	738	745	2	---	K.DDSKHSR.E
1075.5515	1074.5442	1074.5305	12.8	677	685	2	---	K.EENQKGDKK.L
1149.5912	1148.5839	1148.6010	-14.88	119	128	2	---	R.SVSSQRSSR.S
1155.5768	1154.5695	1154.5767	-6.22	66	74	1	---	R.GMRRPYGYR.G
1173.6122	1172.6049	1172.6037	1.04	492	501	1	---	K.KETQSPQVK.S
1193.5928	1192.5855	1192.5908	-4.45	135	145	2	---	R.SSRSPRSSSR.S
1232.6251	1231.6178	1231.6017	13.1	4	14	2	---	R.SNSRSHSSRSK.S
1233.6230	1232.6157	1232.6295	-11.20	685	694	2	---	K.KLRCDSDLR.H

1308.6443	1307.6370	1307.6622	-19.26	844	-	853	2	---	K.SKKYFLHDDR.D
1310.6051	1309.5978	1309.5746	17.7	752	-	765	0	---	R.SSSSSASPSSPSSR.E
1325.6456	1324.6383	1324.6524	-10.62	786	-	797	0	---	K.EYSGFAGVSRPR.G
1331.6674	1330.6601	1330.6557	3.29	507	-	517	0	---	K.DLDFYSPLHK.N
1336.6710	1335.6637	1335.6895	-19.29	518	-	528	2	---	K.NLDAREKSTFR.E
1361.6373	1360.6300	1360.6378	-5.72	1	-	12	2	---	-.MGRSNSRSHSSR.S
1409.7107	1408.7034	1408.6834	14.2	430	-	441	2	---	R.NTEEGPKYKSK.V
1478.7303	1477.7230	1477.7525	-19.93	523	-	534	2	---	R.EKSTFREESPLR.I
1539.7711	1538.7638	1538.7637	0.11	63	-	74	2	---	R.NNRGMRRPYGYR.G
1716.8563	1715.8490	1715.8869	-22.07	88	-	100	2	---	R.YHRGGRYPVWNR.R
1757.8225	1756.8152	1756.8591	-24.99	141	-	157	2	---	R.SSSSSSSSPYKSPVSK.R
1765.7922	1764.7849	1764.8206	-20.22	833	-	846	2	---	K.EEEWDPEYTPKSKK.Y
1916.9882	1915.9809	1916.0043	-12.22	502	-	517	2	---	K.SEKLDLFDYSPPLHK.N
2273.0264	2272.0191	2271.9920	11.9	369	-	387	1	---	K.GRAEGEWEDQEVLDYFSDK.E
2461.0254	2460.0181	2460.0605	-17.21	371	-	391	1	---	R.AEGEWEDQEVLDYFSDKESGK.Q
2717.1655	2716.1582	2716.2140	-20.54	371	-	393	2	---	R.AEGEWEDQEVLDYFSDKESGKQK.F
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 840.3857, 842.5100, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 897.0277, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1157.5907, 1158.6328, 1163.6145, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1332.6602, 1333.2076, 1334.6744, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1763.8152, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2126.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2272.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270									

36. [G3MYV8](#) Mass: 6868 Score: 17 Expect: 4.7e+002 Matches: 5

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
765.3959	764.3887	764.3851	4.72	12	-	17	1	--- R.QKNMTK.Q + Oxidation (M)
978.4772	977.4700	977.4488	21.7	40	-	47	0	--- R.DSEIMQKQ.K
1003.5043	1002.4970	1002.5094	-12.34	28	-	37	1	--- R.DDGLSAAARK.Q
1187.6376	1186.6303	1186.6167	11.5	26	-	36	2	--- K.RRDDGLSAAAR.K
1409.7107	1408.7034	1408.6980	3.84	12	-	23	2	--- R.QKNMTKQSDSVK.G + Oxidation (M)
No match to: 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

37. [E1B8A3](#) Mass: 13661 Score: 17 Expect: 4.7e+002 Matches: 7

Uncharacterized protein OS=Bos taurus GN=LOC100298655 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
756.4777	755.4704	755.4766	-8.14	4	-	9	1	--- K.VTRKPR.Q
911.4314	910.4241	910.4113	14.1	40	-	46	1	--- K.ARNMTR.V + 2 Oxidation (M)

979.4924 978.4852 978.5069 -22.24 14 - 21 1 --- R.VPMRFASR.M + Oxidation (M)  
 985.6071 984.5998 984.6192 -19.69 2 - 9 2 --- M.TKVRTKPR.Q  
 1045.5603 1044.5530 1044.5611 -7.70 10 - 17 2 --- R.QSRRVPMR.F + Oxidation (M)  
 1250.6483 1249.6410 1249.6383 2.16 36 - 46 2 --- R.GSVKARNMTMR.V  
 1409.7107 1408.7034 1408.7067 -2.35 14 - 25 2 --- R.VPMRFASRMNGK.K + Oxidation (M)

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 983.4706, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

38. [G3MWK4](#) Mass: 30649 Score: 17 Expect: 4.8e+002 Matches: 12

Uncharacterized protein OS=Bos taurus GN=SRSF12 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
951.4646	950.4573	950.4781	-21.88	203	- 211	1	---	K.QTSSGTKSR.S
961.4901	960.4828	960.4849	-2.22	172	- 179	2	---	R.RNSGSRER.S
1030.5259	1029.5186	1029.5428	-23.45	169	- 177	2	---	R.TPRRNSGSR.E
1177.6130	1176.6057	1176.5921	11.6	92	- 101	2	---	K.TPGQMKSKEH + Oxidation (M)
1179.5918	1178.5845	1178.5905	-5.03	120	- 129	2	---	R.TRSRSSSWGR.N
1192.6014	1191.5941	1191.5857	7.08	122	- 131	2	---	R.SRSSSWGRNR.R
1233.6230	1232.6157	1232.6361	-16.50	191	- 202	1	---	K.SIGKSQSSSPQK.Q
1295.6366	1294.6293	1294.6530	-18.32	142	- 151	2	---	R.HRRFSYSQSK.S
1393.6727	1392.6654	1392.6871	-15.60	243	- 253	2	---	K.HSHFRSHSR.S
1649.8650	1648.8577	1648.8295	17.1	238	- 251	2	---	K.AQTAHSHFRSHSR.S
1697.7845	1696.7772	1696.8090	-18.73	223	- 237	2	---	R.SPCKSPKAYINSETK.A
1930.9827	1929.9754	1929.9877	-6.34	33	- 48	0	---	R.YGPIVDVYIPLDFYTR.R

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 952.4799, 957.4673, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1234.6500, 1235.6155, 1248.6078, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

39. [G3NOW0](#) Mass: 3134 Score: 17 Expect: 4.9e+002 Matches: 4

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
765.3959	764.3887	764.3970	-10.87	20	- 25	1	---	R.WGRITVF.-
2119.9924	2118.9851	2118.9617	11.0	1	- 17	0	---	-.MLWFCYGYTMGLTVFSK.E + Oxidation (M)
2405.0879	2404.0806	2404.1054	-10.32	1	- 19	1	---	-.MLWFCYGYTMGLTVFSKER.W + Oxidation (M)
2421.0769	2420.0696	2420.1003	-12.69	1	- 19	1	---	-.MLWFCYGYTMGLTVFSKER.W + 2 Oxidation (M)

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4793, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8076, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0002, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2414.1050, 2417.0933, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

40. [Q2KHY2](#) Mass: 12884 Score: 17 Expect: 4.9e+002 Matches: 8

Vesicle-associated membrane protein 5 OS=Bos taurus GN=VAMP5 PE=3 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
802.4609	801.4537	801.4344	24.0	2	-	8	1	--- M.AGKELER.C
933.4662	932.4590	932.4749	-17.10	1	-	8	1	--- -.MAGKELER.C
991.4533	990.4460	990.4454	0.62	64	-	70	1	--- R.WENARCR.I
1158.6328	1157.6255	1157.6040	18.6	31	-	40	1	--- R.DGKLAELEQR.S
1377.6776	1376.6703	1376.6653	3.68	1	-	11	2	--- -.MAGKELERCQR.Q
1393.6727	1392.6654	1392.6602	3.77	1	-	11	2	--- -.MAGKELERCQR.Q + Oxidation (M)
1766.8105	1765.8032	1765.8192	-9.07	12	-	26	0	--- R.QADEVTEIMLNPFK.V
1774.8795	1773.8722	1773.8455	15.1	41	-	56	1	--- R.SDQLLDMSAFSKTK.T + Oxidation (M)

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1382.6367, 1383.6619, 1387.6700, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8076, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1729.7894, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.0315, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0002, 2379.0002, 2380.0002, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

41. [E1BPQ7](#) Mass: 23626 Score: 17 Expect: 4.9e+002 Matches: 9

Uncharacterized protein OS=Bos taurus GN=LNP1 PE=4 SV=1

Observed	Mr(expt)	Mr(calc)	ppm	Start	End	Miss	Ions	Peptide
1310.6051	1309.5978	1309.6123	-11.06	36	-	46	2	--- R.DRRGSQDASYR.K
1320.6128	1319.6055	1319.5894	12.2	88	-	97	1	--- R.RYSYEDQGFR.C
1336.6710	1335.6637	1335.6578	4.41	98	-	107	2	--- R.CHTQVRDHRK.C
1354.6820	1353.6747	1353.7000	-18.70	116	-	127	2	--- K.EPLESKGRGSHSK.I
1725.8188	1724.8115	1724.7974	8.17	48	-	62	1	--- K.SSLPCPVSCYNGTRK.H
1730.8236	1729.8163	1729.8522	-20.76	181	-	195	1	--- R.KEEHGEAYLPTLSEK.A
1914.9821	1913.9748	1913.9734	0.74	182	-	198	1	--- K.EEHGEAYLPTLSEKALK.-
2355.0315	2354.0242	2354.0392	-6.38	69	-	88	2	--- R.EHNHSDGQYKMMSSASHPR.Y
2888.2483	2887.2410	2887.2739	-11.38	63	-	87	2	--- K.HNQGPREHNHSDGQYKMMSSASHPR.R

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675,

943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1315.6364, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1727.8683, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8177, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

42. [Q5EA89](#) Mass: 36065 Score: 17 Expect: 4.9e+002 Matches: 14

Protein FAM76A OS=Bos taurus GN=FAM76A PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
780.3343	779.3271	779.3306	-4.48	264	269	0	---	K.MNQMEK.T
979.4924	978.4852	978.4626	23.0	262	269	1	---	R.AKMNQMEK.T
1045.5603	1044.5530	1044.5451	7.57	273	281	0	---	K.EVTEQLQAK.N
1149.5912	1148.5839	1148.5747	8.04	236	244	1	---	K.DQMILEKEK.K + Oxidation (M)
1310.6051	1309.5978	1309.5867	8.51	85	94	2	---	K.QCRCTNSEKK.Y
1361.6373	1360.6300	1360.6591	-21.37	262	272	2	---	R.AKMNQMEKTHK.E + Oxidation (M)
1371.6718	1370.6645	1370.6327	23.2	152	162	1	---	R.ASHHEKEQYSR.L
1377.6776	1376.6703	1376.6540	11.8	262	272	2	---	R.AKMNQMEKTHK.E + 2 Oxidation (M)
1478.7303	1477.7230	1477.6918	21.1	2	13	1	---	M.AALYACTKCHQR.F
1503.7690	1502.7617	1502.7486	8.72	31	42	1	---	R.IAHPVVKCTYCR.T
1786.8871	1785.8798	1785.9117	-17.84	231	244	2	---	K.MLHQKQDMILEKEK.K + Oxidation (M)
2097.9961	2096.9888	2096.9772	5.56	14	30	1	---	R.FPFEALSQQQLCKEGR.I
2379.0002	2377.9929	2378.0453	-22.02	251	269	2	---	K.ADFQYQESQMRKMNQMEK.T + Oxidation (M)
2422.0593	2421.0520	2421.0300	9.09	95	113	2	---	K.YGPPYSCEQCKQQCAFDRK.D
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1365.6752, 1375.6670, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1727.8683, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8177, 2096.9836, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

43. [Q9N287](#) Mass: 23425 Score: 17 Expect: 4.9e+002 Matches: 14

DnaJ homolog subfamily C member 12 OS=Bos taurus GN=DNAJC12 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
806.4342	805.4269	805.4181	10.9	151	157	1	---	K.ESKSVEK.S
969.4496	968.4423	968.4386	3.87	38	45	0	---	R.ALECHDPK.H
983.4706	982.4634	982.4793	-16.26	1	8	0	---	-MDAILNLYK.S + Oxidation (M)
1003.5043	1002.4970	1002.4784	18.6	73	79	1	---	R.ARYDHW.R
1018.5130	1017.5057	1017.5091	-3.28	64	72	0	---	K.DILTNEASR.A
1155.5768	1154.5695	1154.5455	20.8	137	146	1	---	K.KEEFGSTTEK.M
1338.6300	1337.6227	1337.6496	-20.12	147	157	2	---	K.MEQKESKSVEK.S + Oxidation (M)
1338.6300	1337.6227	1337.6496	-20.12	147	157	2	---	K.MEQKESKSVEK.S + Oxidation (M)
1525.7864	1524.7791	1524.7671	7.87	134	146	2	---	K.EIKKEEFGSTTEK.M
1749.8406	1748.8333	1748.8138	11.1	109	123	1	---	K.KDLMLEESDQTPDK.I
1765.7922	1764.7849	1764.8087	-13.50	109	123	1	---	K.KDLMLEESDQTPDK.I + Oxidation (M)



1934.9822 1933.9749 1933.9303 23.1 107 - 123 2 --- R.GKKDLMLEESDQTPDK.I  
 2430.0947 2429.0874 2429.0971 -3.99 158 - 178 0 --- K.SFSPQNPDSPGFANVNCWHLR.F  
 3291.4875 3290.4802 3290.4729 2.22 80 - 106 2 --- R.RSQMSMSFQQWEALSDSVKMSMHWAVR.G + 3 Oxidation (M)

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1007.5638, 1012.5004, 1014.5331, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0424, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8672, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3312.3765, 3451.6833, 3454.6270

44. [F1MJHO](#) Mass: 128067 Score: 17 Expect: 5.1e+002 Matches: 34

Uncharacterized protein OS=Bos taurus GN=SPINK5 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
805.3347	804.3274	804.3250	3.10	689	- 694	0	---	K.EEEDQR.N
869.4703	868.4631	868.4515	13.3	1066	- 1072	0	---	R.QTNTHIR.S
961.4901	960.4828	960.4811	1.75	381	- 388	0	---	K.NGQLLCTR.E
1003.5043	1002.4970	1002.5134	-16.38	49	- 57	0	---	K.KPFQSPDGK.M
1040.5127	1039.5054	1039.4869	17.8	454	- 463	1	---	R.GPDGKMHGK.N
1111.5457	1110.5384	1110.5202	16.4	195	- 203	0	---	K.CALCAEIFK.Q
1195.5924	1194.5851	1194.5849	0.19	720	- 729	2	---	K.MKDGLKSLCTR.E
1295.6366	1294.6293	1294.6339	-3.57	231	- 240	1	---	K.LCIEYQDRAK.N
1325.6456	1324.6383	1324.6194	14.3	707	- 717	2	---	R.GKAKDQCAEYR.E
1338.6300	1337.6227	1337.6254	-1.99	746	- 755	1	---	K.CTMCKEILQR.E
1338.6300	1337.6227	1337.6254	-1.99	746	- 755	1	---	K.CTMCKEILQR.E
1393.6727	1392.6654	1392.6820	-11.88	174	- 184	1	---	R.LFCTRESDFIR.G
1509.6786	1508.6713	1508.6976	-17.44	579	- 590	1	---	R.NYMRNGQLPCTR.E
1619.7972	1618.7899	1618.7733	10.3	722	- 735	2	---	K.DGKLCTRESDFVR.D
1644.8083	1643.8010	1643.8413	-24.52	789	- 802	2	---	K.NGKLICTRESDFVR.G
1725.8188	1724.8115	1724.8152	-2.11	226	- 238	2	---	K.RDTEKLCTIEYQDR.A
1757.8225	1756.8152	1756.8050	5.82	360	- 373	1	---	K.RQTEITTSFEELCR.E
1763.8152	1762.8079	1762.7931	8.41	1077	- 1091	0	---	R.CEENSIEETTPLDVK.-
1766.8105	1765.8032	1765.8166	-7.56	448	- 463	2	---	R.ENDPVRGPDGKMHGK.N
1768.8596	1767.8523	1767.8461	3.51	227	- 240	2	---	R.DTEKLCTIEYQDR.A
1773.8615	1772.8542	1772.8587	-2.55	906	- 920	2	---	R.AKPSNDAKDQCREVR.N
1808.8663	1807.8590	1807.8635	-2.49	520	- 535	2	---	R.ENDPVRGPDGKMHVKN.C + Oxidation (M)
1880.9020	1879.8947	1879.8846	5.37	425	- 439	2	---	R.EDAKELCEFRNQVR.N
2013.8700	2012.8627	2012.9005	-18.77	130	- 146	1	---	K.CAMCAELFLKEAENAK.R
2049.9497	2048.9424	2048.9109	15.4	361	- 376	1	---	R.QTEITTSFEELCREYR.K
2082.0293	2081.0220	2080.9960	12.5	311	- 329	2	---	R.NGKLPTCTRENDPVQGPDGK.M
2096.9836	2095.9763	2095.9593	8.13	583	- 601	1	---	R.NGQLPCTRENDPIEGPDGK.I
2097.9961	2096.9888	2096.9909	-1.00	381	- 399	1	---	K.NGQLLCTRENDPVQGPDGK.M
2273.0264	2272.0191	2272.0625	-19.09	49	- 67	2	---	K.KPFQSPDGKMFVNKCAMCK.M
2321.9558	2320.9485	2320.9158	14.1	1005	- 1025	0	---	R.SSEEDSSESSISSINSEMCK.H
2369.0588	2368.0515	2368.0796	-11.85	531	- 549	2	---	K.MHVKNKCAMCASLFLRLEEEK.K + Oxidation (M)
2428.0725	2427.0652	2427.0691	-1.58	459	- 478	2	---	K.MHGKNKCAMCASLFLKLEEEK.K + Oxidation (M)
2444.0901	2443.0828	2443.0640	7.71	459	- 478	2	---	K.MHGKNKCAMCASLFLKLEEEK.K + 2 Oxidation (M)
2501.2520	2500.2447	2500.2243	8.17	42	- 62	2	---	K.LFCSQDKKPFQSPDGKMFVNK.C

**No match to:** 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076,



1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1765.7922, 1769.4275, 1770.4087, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2451.0278, 2459.9802, 2461.0254, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

45. [F1MJ17](#) Mass: 69096 Score: 17 Expect: 5.2e+002 Matches: 22

Uncharacterized protein OS=Bos taurus GN=LMNB2 PE=3 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
837.3794	836.3721	836.3923	-24.12	606	612	1	---	R.TTSRGCR.V
975.4521	974.4449	974.4570	-12.43	488	495	0	---	K.DQSLGNWR.I
1045.5603	1044.5530	1044.5563	-3.16	289	298	1	---	K.AASAAAREELK.E
1060.5398	1059.5325	1059.5382	-5.39	246	254	0	---	K.MAQALEELR.A
1163.6145	1162.6072	1162.6016	4.86	187	195	1	---	K.QLEKETLMR.V + Oxidation (M)
1173.6122	1172.6049	1172.5785	22.5	38	46	1	---	K.EELRELNDR.L
1177.6130	1176.6057	1176.5921	11.6	295	303	2	---	R.EELKEARMR.V + Oxidation (M)
1215.6306	1214.6233	1214.6367	-11.04	128	138	1	---	K.REGELTVAQGR.V
1216.6482	1215.6409	1215.6360	4.05	488	497	1	---	K.DQSLGNWR.IK.R
1294.6362	1293.6289	1293.6452	-12.60	499	509	0	---	R.QVLEGEIISYK.F
1320.6128	1319.6055	1319.6326	-20.49	103	113	1	---	R.DRACLQIEMGK.L
1334.6744	1333.6671	1333.6846	-13.10	105	115	1	---	R.ACLQIEMGKLR.A + Oxidation (M)
1375.6670	1374.6597	1374.6627	-2.14	327	338	1	---	R.ELEETVAGERDK.F
1409.7107	1408.7034	1408.7384	-24.82	372	383	1	---	K.LALDMEISAYRK.L
1485.7531	1484.7458	1484.7405	3.56	3	18	0	---	R.TTAAAAAAMATPQGR.A
1665.8070	1664.7997	1664.8078	-4.85	407	424	0	---	R.ATTSSSGSSVSTAGRPR.G.S
1880.9020	1879.8947	1879.9348	-21.31	407	426	1	---	R.ATTSSSGSSVSTAGRPRGRSK.R
1932.9813	1931.9740	1931.9548	9.96	281	298	2	---	K.LSSDQNDKKAASAREELK.E
2042.0568	2041.0495	2041.0340	7.59	38	53	2	---	K.EELRELNDRLAHYIDR.V
2082.0293	2081.0220	2080.9809	19.8	355	371	0	---	R.DMMQQQLAEYQELLDVK.L
2097.9961	2096.9888	2096.9758	6.20	355	371	0	---	R.DMMQQQLAEYQELLDVK.L + Oxidation (M)
2501.2520	2500.2447	2500.2768	-12.84	149	171	2	---	R.SEAELAAALSCKRTLENDVAELR.A
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5701, 1157.5907, 1158.6328, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1884.9191, 1889.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

46. [G3MZ80](#) Mass: 7701 Score: 17 Expect: 5.2e+002 Matches: 6

Uncharacterized protein OS=Bos taurus PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
1216.6482	1215.6409	1215.6434	-2.04	49	58	1	---	K.QGMHLKIFDK.I
1232.6251	1231.6178	1231.6383	-16.64	49	58	1	---	K.QGMHLKIFDK.I + Oxidation (M)
1473.7905	1472.7832	1472.8173	-23.16	49	60	2	---	K.QGMHLKIFDK.IY + Oxidation (M)
1500.7242	1499.7169	1499.6964	13.7	18	31	0	---	R.QQQAETPTAADQGR.E
1727.8683	1726.8610	1726.8858	-14.36	40	54	1	---	R.QMEALQLGKQGMHLK.I + Oxidation (M)
1757.8225	1756.8152	1756.8340	-10.68	18	33	1	---	R.QQQAETPTAADQGREK.V
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 802.4609, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146,								

1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776,  
 1382.6367, 1383.6619, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479,  
 1466.6953, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1503.7690, 1505.8511, 1509.6786, 1520.7347,  
 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592,  
 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730,  
 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780,  
 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1730.8236, 1731.8221, 1742.8798,  
 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795,  
 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231,  
 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813,  
 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497,  
 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860,  
 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092,  
 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934,  
 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456,  
 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444,  
 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725,  
 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965,  
 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

47. [A5D7M3](#) Mass: 56128 Score: 16 Expect: 5.4e+002 Matches: 19

Growth arrest-specific protein 8 OS=Bos taurus GN=GAS8 PE=2 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
724.3446	723.3373	723.3551	-24.62	297	302	0	---	K.LGSYER.D
774.3952	773.3879	773.4032	-19.69	133	139	0	---	R.AQEGTLR.R
802.4609	801.4537	801.4344	24.0	68	73	1	---	R.RQLEEK.K
930.5015	929.4942	929.4930	1.26	38	44	1	---	R.IREELDR.E
967.4440	966.4367	966.4341	2.66	174	180	1	---	K.MRNDFER.Q
995.5177	994.5104	994.4971	13.4	184	191	1	---	R.EIEAKYDK.K
1001.5621	1000.5548	1000.5414	13.5	75	82	2	---	K.AELRNKDR.E
1177.6130	1176.6057	1176.5921	11.6	216	225	0	---	K.NGQITILMQR.H + Oxidation (M)
1215.6306	1214.6233	1214.6367	-11.01	38	46	2	---	R.IREELDRER.E
1289.6449	1288.6376	1288.6333	3.38	151	161	0	---	K.EQELANEVVMVK.N
1305.6523	1304.6450	1304.6282	12.9	151	161	0	---	K.EQELANEVVMVK.N + Oxidation (M)
1332.6602	1331.6529	1331.6728	-14.92	133	143	2	---	R.AQEGTLRRDMR.A
1360.6173	1359.6100	1359.6378	-20.44	40	49	2	---	R.EELDREREER.N
1383.6619	1382.6546	1382.6578	-2.32	47	56	1	---	R.EERNYFQLER.D
1712.9166	1711.9093	1711.9039	3.16	118	132	2	---	K.AEGTVVMKLAQKEHR.A + Oxidation (M)
1730.8236	1729.8163	1729.8557	-22.73	12	28	1	---	K.GKGTPIVDGLAPEDMSK.E + Oxidation (M)
1731.8221	1730.8148	1730.8297	-8.62	104	117	0	---	K.HLLYEHQSSLTEMK.A + Oxidation (M)
1830.8608	1829.8535	1829.8287	13.5	288	302	2	---	R.EEMSDMKKLGYSYER.D
1958.9543	1957.9470	1957.9931	-23.54	102	117	1	---	K.VKHLLYEHQSSLTEMK.A + Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 999.4602, 1001.4565, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1712.9166, 1716.8563, 1725.8188, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

48. [F1MYR3](#) Mass: 56242 Score: 16 Expect: 5.4e+002 Matches: 19

Growth arrest-specific protein 8 OS=Bos taurus GN=GAS8 PE=4 SV=1

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
724.3446	723.3373	723.3551	-24.62	297	302	0	---	K.LGSYER.D
774.3952	773.3879	773.4032	-19.69	133	139	0	---	R.AQEGTLR.R
802.4609	801.4537	801.4344	24.0	68	73	1	---	R.RQLEEK.K
930.5015	929.4942	929.4930	1.26	38	44	1	---	R.IREELDR.E
967.4440	966.4367	966.4341	2.66	174	180	1	---	K.MRNDFER.Q
995.5177	994.5104	994.4971	13.4	184	191	1	---	R.EIEAKYDK.K
1001.5621	1000.5548	1000.5414	13.5	75	82	2	---	K.AELRNKDR.E
1177.6130	1176.6057	1176.5921	11.6	216	225	0	---	K.NGQITILMQR.H + Oxidation (M)
1215.6306	1214.6233	1214.6367	-11.01	38	46	2	---	R.IREELDRER.E
1289.6449	1288.6376	1288.6333	3.38	151	161	0	---	K.EQELANEVVMVK.N
1305.6523	1304.6450	1304.6282	12.9	151	161	0	---	K.EQELANEVVMVK.N + Oxidation (M)
1332.6602	1331.6529	1331.6728	-14.92	133	143	2	---	R.AQEGTLRRDMR.A
1360.6173	1359.6100	1359.6378	-20.44	40	49	2	---	R.EELDREREER.N
1383.6619	1382.6546	1382.6578	-2.32	47	56	1	---	R.EERNYFQLER.D
1712.9166	1711.9093	1711.9039	3.16	118	132	2	---	K.AEGTVVMKLAQKEHR.A + Oxidation (M)

1730.8236 1729.8163 1729.8557 -22.73 12 - 28 1 --- K.KGTGPVVDGLAPEDMSK.E + Oxidation (M)  
 1731.8221 1730.8148 1730.8297 -8.62 104 - 117 0 --- K.HLLYEHQSSLTETMK.A + Oxidation (M)  
 1830.8608 1829.8535 1829.8287 13.5 288 - 302 2 --- R.EEMSDMQKKLGSYER.D  
 1958.9543 1957.9470 1957.9931 -23.54 102 - 117 1 --- K.VKHLLYEHQSSLTETMK.A + Oxidation (M)  
**No match to:** 713.4400, 713.4415, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 764.3574, 765.3959, 768.3784, 772.4155, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 837.3794, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.3634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 999.4602, 1001.4565, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1387.6700, 1393.6727, 1400.6235, 1409.7107, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7474, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1522.7239, 1523.7567, 1525.7864, 1527.8068, 1532.7472, 1537.7886, 1539.7711, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1663.7981, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1710.8878, 1716.8563, 1725.8188, 1727.8683, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1768.8596, 1769.4275, 1770.4087, 1773.8615, 1774.7959, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1808.8663, 1824.8685, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.8989, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.5920, 2042.0568, 2047.0238, 2047.9805, 2049.9497, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.0137, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2082.0293, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2097.9961, 2100.8787, 2101.8999, 2103.9092, 2107.8730, 2119.9924, 2122.9397, 2136.9133, 2211.1047, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2368.0815, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2705.2144, 2717.1655, 2834.2925, 2888.2483, 2904.4053, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270

49. [E1BF46](#) Mass: 243942 Score: 16 Expect: 5.4e+002 Matches: 27

Uncharacterized protein OS=Bos taurus GN=ZNF407 PE=4 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
774.3952	773.3879	773.3959	-10.38	859	-	864	0 ---	K.YYTVTK.G
905.4637	904.4564	904.4436	14.1	1359	-	1366	1 ---	K.DCAQGKVK.K
943.4757	942.4684	942.4559	13.3	308	-	315	1 ---	R.DFRGSFSK.Q
979.4924	978.4852	978.4804	4.84	361	-	369	0 ---	K.LGMAVTSEK.L + Oxidation (M)
1045.5603	1044.5530	1044.5564	-3.19	878	-	887	1 ---	K.GRVEIASGK.Q
1155.5768	1154.5695	1154.5819	-10.74	1262	-	1272	0 ---	K.DVPGDPVLESK.E
1180.6001	1179.5928	1179.6182	-21.53	1033	-	1042	2 ---	R.HAATEKHMKK.R
1323.6320	1322.6247	1322.5934	23.7	1563	-	1573	0 ---	K.CHVCGVAFVMK.K + Oxidation (M)
1332.6602	1331.6529	1331.6317	15.9	1239	-	1250	0 ---	R.DLLNLGSSDQDR.A
1349.6800	1348.6727	1348.6557	12.6	1514	-	1525	0 17	R.SSNSMAFLAHR.T + Oxidation (M)
1349.6827	1348.6754	1348.6557	14.6	1514	-	1525	0 ---	R.SSNSMAFLAHR.T + Oxidation (M)
1409.7107	1408.7034	1408.6881	10.9	1218	-	1230	1 ---	R.GCLRAVDGEHPAK.S
1606.8213	1605.8140	1605.7834	19.1	844	-	855	2 ---	R.RKHSQYSYLCK.V
1621.7831	1620.7758	1620.7718	2.46	1602	-	1614	1 ---	R.SFTEKWLNNHMK.L + Oxidation (M)
1709.8029	1708.7956	1708.7814	8.34	846	-	858	1 ---	K.HSHQYSYLCKVCK.Y
1749.8406	1748.8333	1748.8226	6.15	856	-	869	2 ---	K.VCKYYTVTKGDMER.H
1765.7922	1764.7849	1764.8175	-18.45	856	-	869	2 ---	K.VCKYYTVTKGDMER.H + Oxidation (M)
1824.8685	1823.8612	1823.8874	-14.36	474	-	490	1 ---	K.QDRTNALHPGSSDSLAR.R
1849.8231	1848.8158	1848.8312	-8.33	121	-	139	0 ---	R.DGSPGLPGHPSPGEMAAEK.E + Oxidation (M)
2096.9836	2095.9763	2095.9970	-9.86	663	-	680	1 ---	R.VSHGNEARHSSKPFQCK.K
2225.1243	2224.1170	2224.0919	11.3	663	-	681	2 ---	R.VSHGNEARHSSKPFQCK.K.C
2232.0229	2231.0156	2231.0090	2.95	52	-	71	1 ---	R.GFAESSDLHDHIVEDNGNKR.A
2233.0840	2232.0767	2232.0580	8.39	1251	-	1272	1 ---	R.AGSMQSSGDLKDVPGDPVLESK.E + Oxidation (M)
2263.9700	2262.9627	2262.9860	-10.30	1740	-	1757	1 ---	K.MYNCPKCDYGTNIPVFEFR.N
2426.0476	2425.0403	2425.0474	-2.93	522	-	541	1 ---	R.CHVGELRFHCQTGFSSTSR.R
2438.0706	2437.0633	2437.1017	-15.76	581	-	600	1 ---	K.EKHSMGFLCPCPCHLFFSSEK.D
2461.0254	2460.0181	2460.0449	-10.90	1009	-	1027	1 ---	K.HTREFAFYCMACDYAVTR.R

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50. [F1MYI2](#) Mass: 58389 Score: 16 Expect: 5.4e+002 Matches: 21

Uncharacterized protein OS=Bos taurus GN=HNRNPM PE=1 SV=2

Observed	Mr (expt)	Mr (calc)	ppm	Start	End	Miss	Ions	Peptide
764.3574	763.3501	763.3534	-4.28	441	-	446	0 ---	R.AIEMER.G + Oxidation (M)
802.4609	801.4537	801.4345	24.0	323	-	329	0 ---	R.VGQTIER.M
837.3794	836.3721	836.3884	-19.52	256	-	262	0 ---	R.MGLVMDR.M + Oxidation (M)
1393.6727	1392.6654	1392.6853	-14.31	505	-	517	2 ---	K.MENKSKGCGGVK.F
1409.7107	1408.7034	1408.6803	16.4	505	-	517	2 ---	K.MENKSKGCGGVK.F + Oxidation (M)
1522.7239	1521.7166	1521.7028	9.11	377	-	389	1 ---	R.MGANNLERMGLER.M + 2 Oxidation (M)
1532.7472	1531.7399	1531.7235	10.7	223	-	237	1 ---	R.MGPGIDRIGGAGMER.M + Oxidation (M)
1539.7711	1538.7638	1538.7955	-20.62	478	-	489	1 ---	R.NLPFDFTWKMLK.D
1663.7981	1662.7908	1662.8036	-7.66	512	-	526	1 ---	K.GCGVVKFESPEVAER.A
1710.8878	1709.8805	1709.9101	-17.28	36	-	51	1 ---	K.AGRLGSTVFVANLDYK.V
1768.8596	1767.8523	1767.8430	5.29	530	-	544	2 ---	R.MMNGMKLSGREIDVR.I + 2 Oxidation (M)
1808.8663	1807.8590	1807.8563	1.50	490	-	504	1 ---	K.DKFNECGHVLADIK.M
2042.0568	2041.0495	2041.0244	12.3	471	-	486	1 ---	K.ACQIFVRNLPFDFTWK.M
2049.9497	2048.9424	2048.9917	-24.06	385	-	402	2 ---	R.MGLERMGANSLERMGLER.M
2066.0137	2065.0064	2064.9866	9.58	385	-	402	2 ---	R.MGLERMGANSLERMGLER.M + Oxidation (M)
2082.0293	2081.0220	2080.9816	19.4	385	-	402	2 ---	R.MGLERMGANSLERMGLER.M + 2 Oxidation (M)
2097.9961	2096.9888	2096.9765	5.88	385	-	402	2 ---	R.MGLERMGANSLERMGLER.M + 3 Oxidation (M)
2211.1047	2210.0974	2210.0428	24.7	256	-	275	2 ---	R.MGLVMDRMGSVERMGSGIER.M
2368.0815	2367.0742	2367.0987	-10.35	490	-	509	2 ---	K.DKFNECGHVLADIKMENGK.S
2705.2144	2704.2071	2704.2190	-4.38	291	-	315	2 ---	R.MGQTMERIGSGVERMGAGMGFLER.M + 3 Oxidation (M)
2904.4053	2903.3980	2903.3874	3.67	398	-	425	2 ---	R.MGLERMGANSLERMGPAMGPALGAGIER.M + 2 Oxidation (M)
<b>No match to:</b> 713.4400, 713.4415, 724.3446, 728.2467, 730.2754, 732.2383, 734.2729, 735.3820, 736.3320, 740.2330, 743.2514, 748.2947, 750.2650, 756.4777, 765.3959, 768.3784, 772.4155, 774.3952, 778.4551, 780.3343, 782.3223, 783.3115, 787.2390, 791.2662, 805.3347, 806.4342, 807.3921, 808.4378, 812.4002, 814.4128, 820.4252, 828.3922, 830.3668, 834.3623, 840.3857, 842.5100, 845.4155, 851.3846, 856.5103, 865.5634, 869.4703, 870.5254, 871.4965, 872.6990, 888.3988, 891.4706, 893.9500, 894.4534, 897.0277, 905.4637, 911.4314, 912.4475, 913.5080, 913.5100, 918.5267, 925.4804, 927.4970, 930.5015, 933.4662, 935.4675, 943.4757, 951.4646, 952.4799, 957.4673, 961.4901, 962.4866, 967.4440, 969.4496, 972.4781, 974.5051, 975.4521, 977.4406, 978.4772, 979.4924, 983.4706, 985.6071, 991.4533, 993.5267, 995.5177, 999.4602, 1001.4565, 1001.5621, 1003.5043, 1007.5638, 1012.5004, 1014.5331, 1018.5130, 1022.5398, 1023.5525, 1028.5991, 1030.5259, 1035.5314, 1036.5333, 1037.5145, 1040.5127, 1042.5243, 1045.5603, 1060.5398, 1069.4846, 1075.5515, 1092.6041, 1106.5313, 1109.5087, 1111.5457, 1113.5419, 1115.5394, 1118.5659, 1121.5419, 1122.5701, 1131.5602, 1138.5428, 1149.5912, 1155.5768, 1157.5907, 1158.6328, 1163.6145, 1173.6122, 1177.6130, 1178.6060, 1179.5918, 1180.6001, 1181.6368, 1183.6030, 1187.6376, 1192.6014, 1193.5928, 1195.5924, 1199.6785, 1206.6066, 1215.6306, 1216.6482, 1226.5839, 1227.6051, 1231.6115, 1232.6251, 1233.6230, 1234.6500, 1235.6155, 1248.6078, 1250.6483, 1254.6526, 1255.6036, 1256.6123, 1268.6208, 1271.6423, 1276.6179, 1277.6350, 1289.6449, 1292.6322, 1294.6362, 1295.6366, 1300.5895, 1303.6643, 1305.6523, 1307.6600, 1308.6443, 1310.6051, 1315.6364, 1320.6128, 1321.6134, 1323.6320, 1325.6456, 1331.6674, 1332.6602, 1333.2076, 1334.6744, 1336.6710, 1337.6279, 1338.6300, 1338.6300, 1345.6146, 1347.6653, 1349.6800, 1349.6827, 1354.6820, 1355.6964, 1359.7053, 1360.6173, 1361.6373, 1365.6752, 1371.6718, 1375.6670, 1377.6776, 1382.6367, 1383.6619, 1387.6700, 1400.6235, 1411.6742, 1427.7725, 1431.7605, 1432.6987, 1434.7190, 1449.7479, 1466.6953, 1473.7905, 1475.7498, 1478.7303, 1479.7468, 1485.7531, 1486.7472, 1493.7345, 1495.7502, 1500.7242, 1503.7690, 1505.8511, 1509.6786, 1520.7347, 1523.7567, 1525.7864, 1527.8068, 1537.7886, 1549.7833, 1555.8657, 1558.8440, 1559.8573, 1568.7592, 1570.7814, 1578.7899, 1606.8213, 1615.8425, 1619.7972, 1621.7831, 1628.8156, 1630.8202, 1631.8217, 1639.9263, 1644.8083, 1647.8730, 1649.8650, 1650.8523, 1658.8206, 1659.8125, 1661.8284, 1665.8070, 1669.8174, 1677.8353, 1679.9403, 1680.8076, 1682.7780, 1696.8055, 1697.7845, 1698.7950, 1707.7931, 1709.8029, 1712.9166, 1716.8563, 1725.8188, 1727.8683, 1730.8236, 1731.8221, 1742.8798, 1746.1482, 1749.8406, 1751.8657, 1756.8782, 1757.8225, 1763.8152, 1765.7922, 1766.8105, 1769.4275, 1770.4087, 1773.8615, 1774.8795, 1775.0302, 1783.8599, 1785.8483, 1786.8871, 1790.8822, 1792.7894, 1801.9315, 1804.9026, 1824.8685, 1830.8608, 1849.8231, 1851.8430, 1867.9100, 1868.9441, 1870.9304, 1880.9020, 1884.9191, 1908.9899, 1914.9821, 1916.9882, 1920.9862, 1930.9827, 1932.9813, 1934.9822, 1947.0288, 1958.9543, 1994.8763, 2011.9012, 2013.8700, 2020.9592, 2025.9920, 2047.0238, 2047.9805, 2052.9905, 2053.9851, 2058.9988, 2060.0400, 2060.0405, 2065.0427, 2066.9895, 2067.9763, 2068.9128, 2070.8792, 2074.8860, 2084.8977, 2086.8872, 2087.8835, 2090.8708, 2092.8674, 2093.8711, 2096.9836, 2100.8787, 2101.8999, 2103.9092, 2107.8700, 2119.9924, 2122.9397, 2136.9133, 2217.9368, 2225.1243, 2232.0229, 2233.0840, 2238.1050, 2250.0259, 2257.9934, 2262.9368, 2263.9700, 2273.0264, 2277.9500, 2283.1741, 2290.9570, 2307.9631, 2321.9558, 2323.9670, 2324.9824, 2335.9763, 2339.9456, 2343.0320, 2349.9844, 2352.0308, 2355.0315, 2358.0854, 2369.0588, 2378.0020, 2379.0002, 2380.0007, 2381.9963, 2383.0444, 2383.9822, 2393.0020, 2394.0181, 2398.0447, 2400.0771, 2405.0879, 2414.1050, 2417.0933, 2421.0769, 2422.0593, 2426.0476, 2428.0725, 2430.0947, 2432.0962, 2435.0254, 2438.0706, 2444.0901, 2451.0278, 2459.9802, 2461.0254, 2501.2520, 2528.1902, 2543.2092, 2564.1965, 2717.1655, 2834.2925, 2888.2483, 3130.4312, 3291.4875, 3312.3765, 3451.6833, 3454.6270								

## Search Parameters

Type of search : MS/MS Ion Search  
 Enzyme : Trypsin  
 Fixed modifications : [Carbamidomethyl \(C\)](#)  
 Variable modifications : [Oxidation \(M\)](#)  
 Mass values : Monoisotopic  
 Protein Mass : Unrestricted  
 Peptide Mass Tolerance :  $\pm 25$  ppm  
 Fragment Mass Tolerance :  $\pm 0.5$  Da  
 Max Missed Cleavages : 2  
 Instrument type : MALDI-TOF-TOF  
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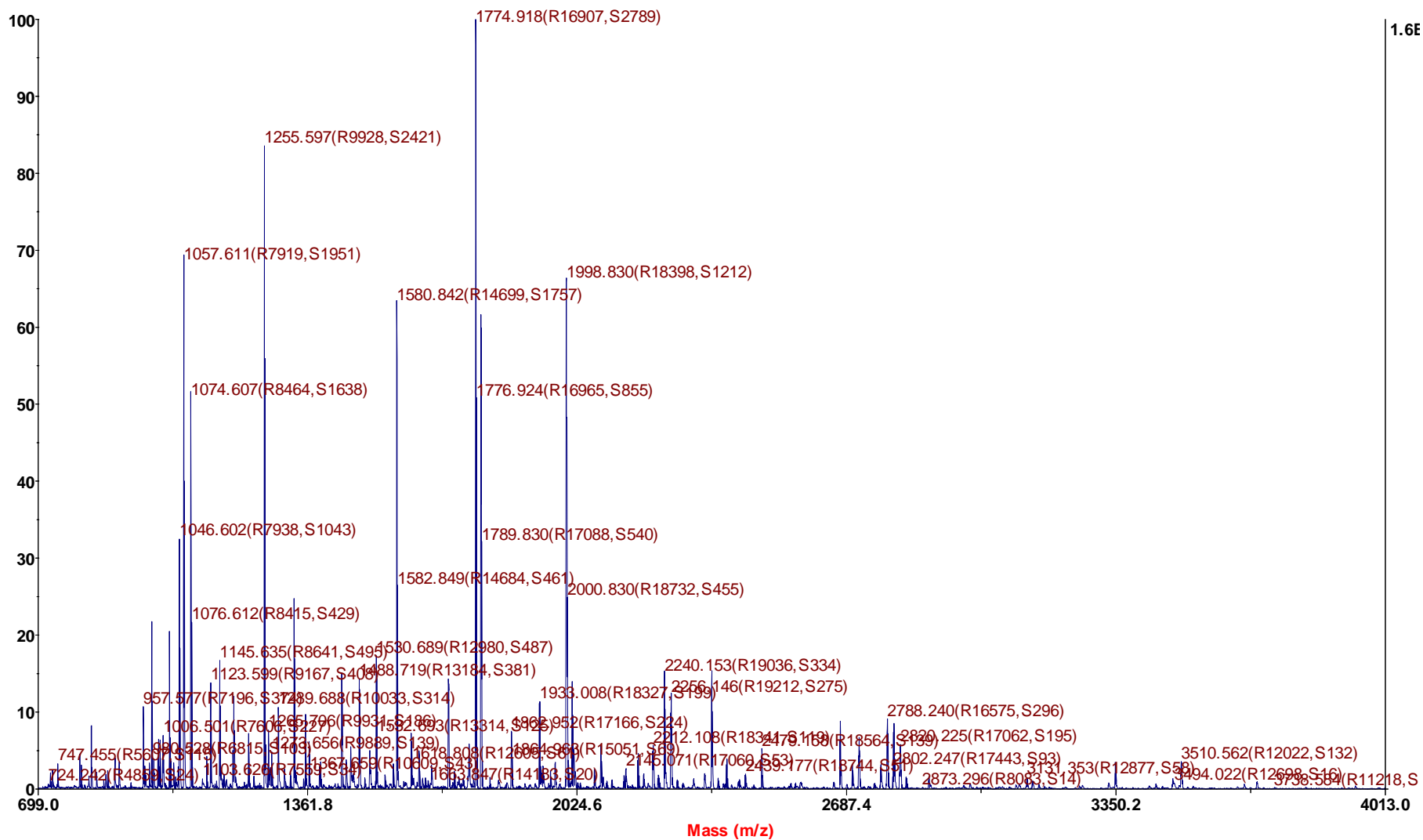
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Mascot: <http://www.matrixscience.com/>

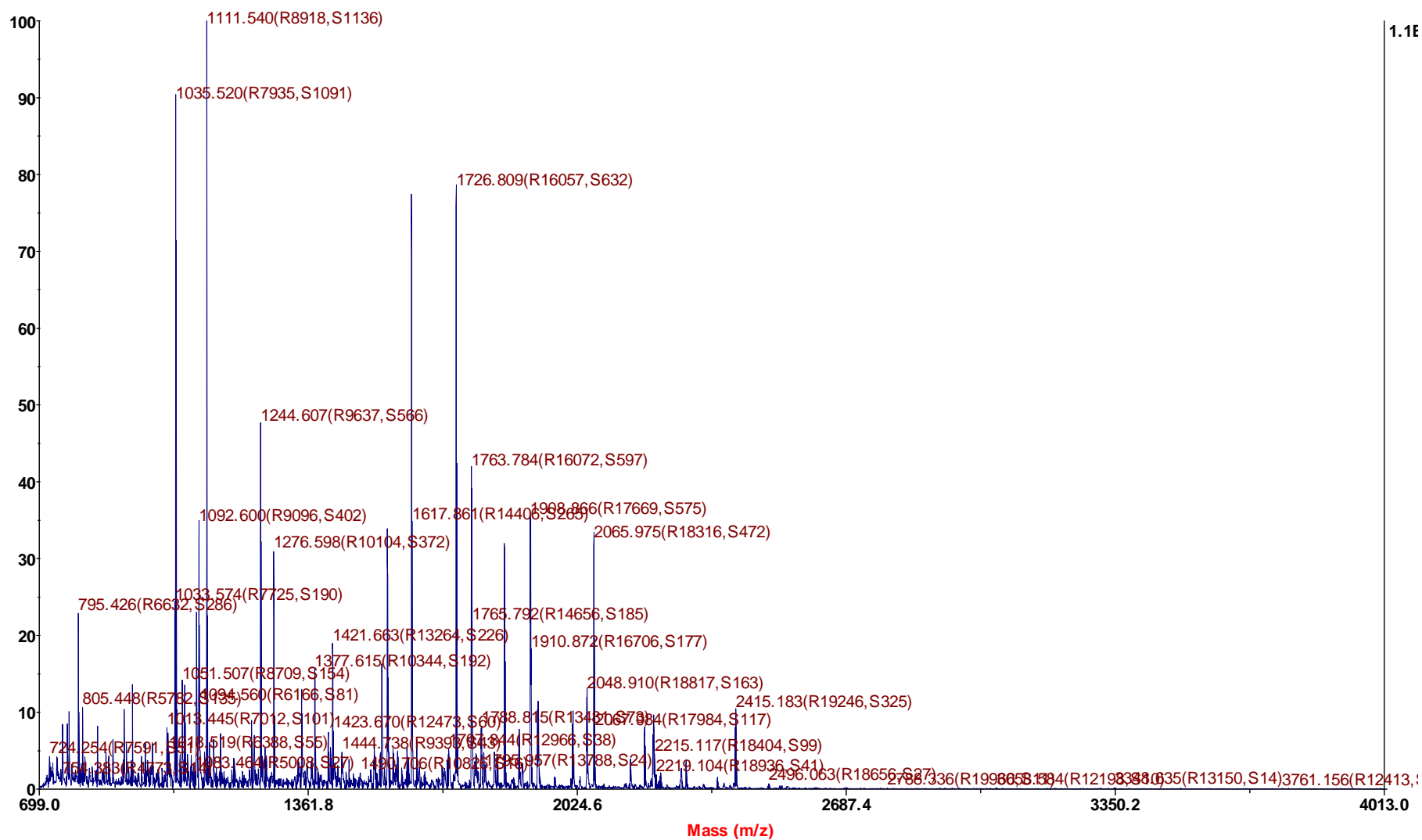
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Final - Shots 5000 - 12Jan2012; Run #59; Label G1



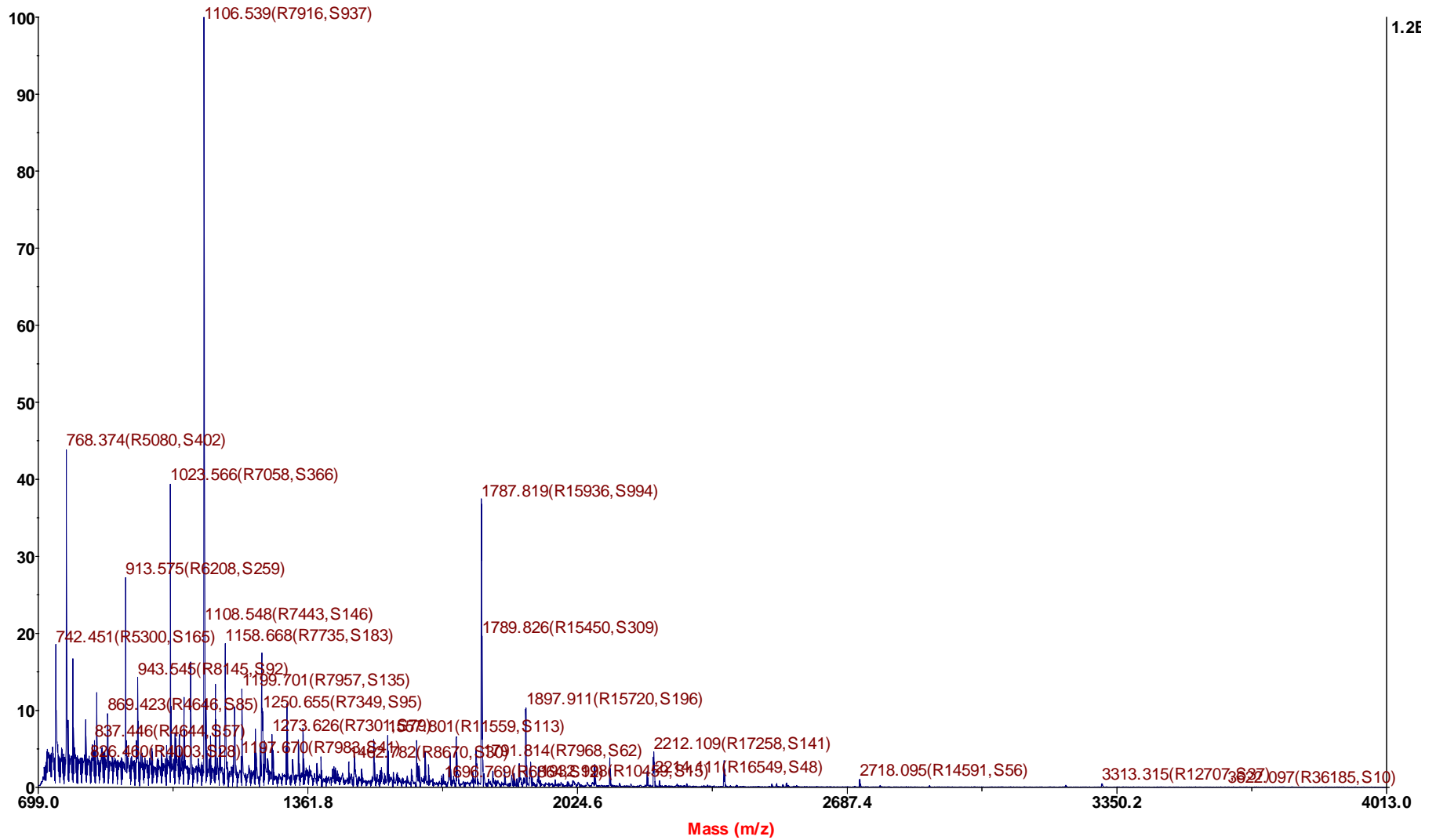
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Final - Shots 5000 - 12Jan2012; Run #59; Label G5



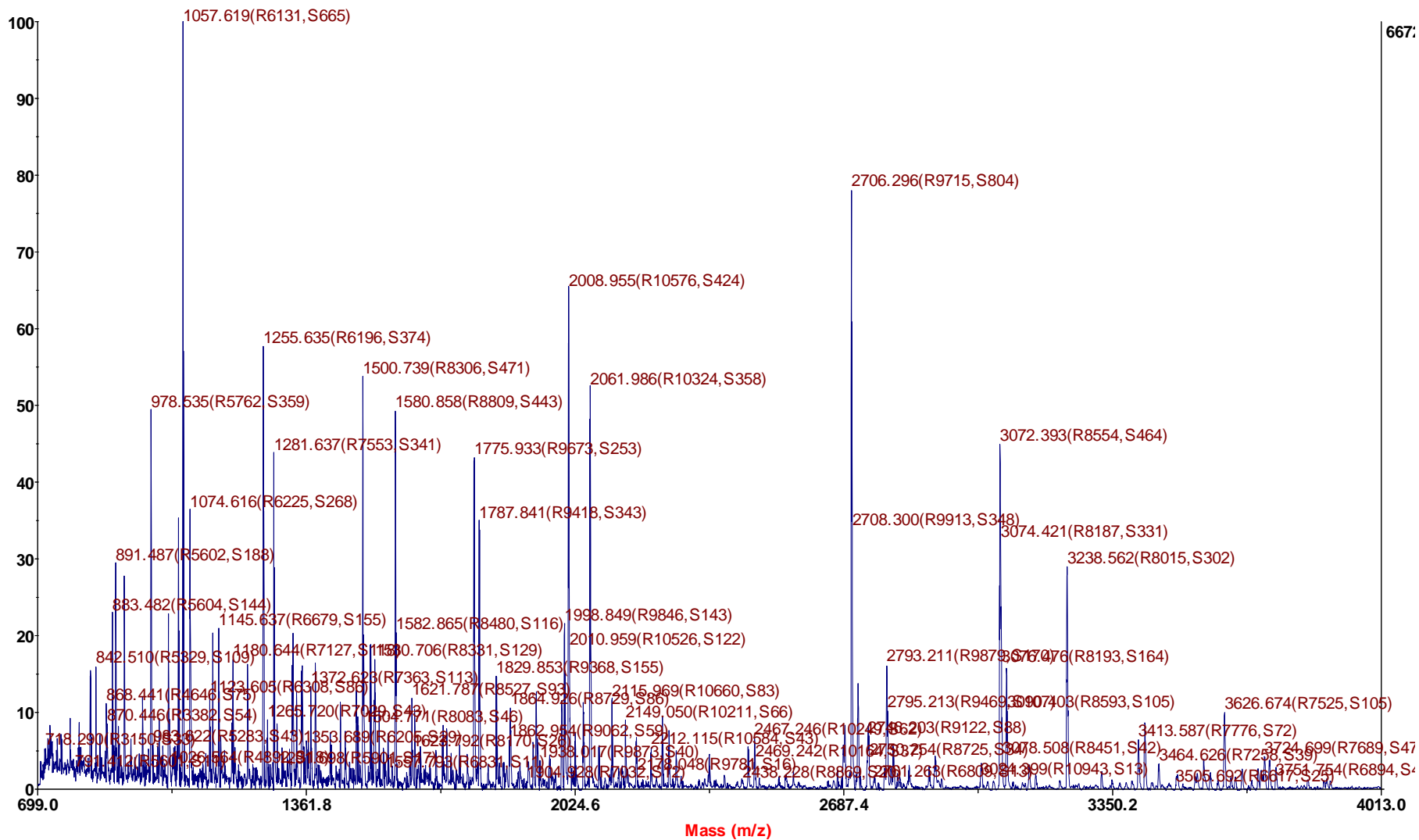
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Final - Shots 7500 - 12Jan2012; Run #59; Label G3



1w

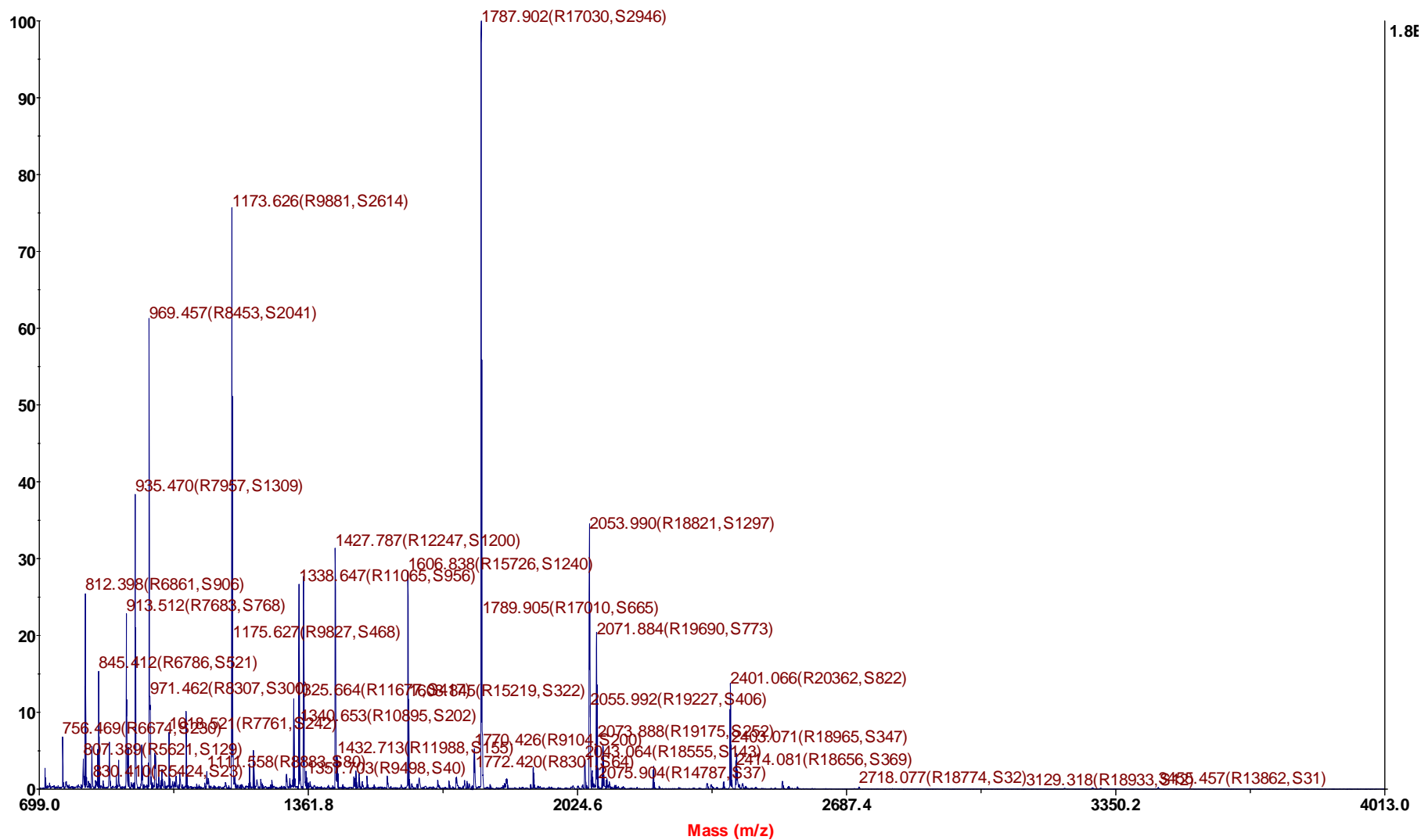
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2w

Final - Shots 5000 - 12Jan2012; Run #59; Label F19



3w

Final - Shots 5000 - 12Jan2012; Run #59; Label F17

