Supplementary Data

Low-Abundant Cerebrospinal Fluid Proteome Alterations in Dementia with Lewy Bodies

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Accepted 6 November 2012

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Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]	MS/MS analysis
1	Complement C4a	P0C0L4	193	6.7	867	22	11	Start - End
2	nd							011 010 101 001 001 001 001 001 001 001
3	nd							
4	Ganglioside GM2 activator	P17900	21	5.2	44	1	5	Start - End Observed Mr(expt) Mr(calc) Delta Miss Sequence R IESVLSSSGK.R 170 - 179 503.7948 1005.5750 1005.5342 0.0408 0 R IESVLSSSGK.R Monoisotopic mass of neutral peptide Mr(calc): 1005.5342 londs observed to the construction of the construc
5					69	2	5	Start

Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]	MS/MS analysis					
								Monoisotopic mass of neutral peptide Mr(calc): 1005.5342 lons Score: 63 Expect: 0.0006 Matches: 15/84 fragment ions using 30 most intense peaks MS/MS Fragmentation of IESVLSSSGK					
6	Chromogranin A	P10645	51	4.6	110	3	11	Start - End					
8 9 10 11					171	6	19	Matches : 23/222 fragment ions using 88 most intense peaks					
12	Alpha-Enolase	P06733	47	7	143	5	13	Start - End Observed Mr(expt) Mr(calc) Delta Miss Sequence 16 - 28 703.8824 1405.7502 1405.7502 0.0413 0 R.GNPTVEVDLFTSK.G 93 - 103 640.8121 1279.6996 0.1279.5788 0.3039 0 K.JMIEMDGTENK.S 270 - 281 713.3877 1424.7608 1424.7187 0.0421 0 R.YISPDQLADLYK.S 344 - 358 817.4378 1632.8610 1632.8141 0.0469 0 K.JMIEMDGTENK.S 1413 - 420 452.7499 903.4852 903.48549 0.0304 0 R.JEELGSK.A 1413 - 420 452.7499 903.4852 903.48549 0.0304 0 R.JEELGSK.A					
13 14	Angiotensinogen	P01019	53	5.9	96	3	7	Start – End Observed Mr(expt) Mr(calc) Delta Miss Sequence 64 – 75 649.3776 1296.7406 1296.7078 0.0329 0 K.DPTFIPAPIQAK.T 83 – 94 634.8981 1267.7816 1267.7500 0.0317 0 K.ALQDQLVLVAAK.L 238 – 250 719.3801 1436.7435 1436.7035 0.0422 0 R.SLDFTELDVAAEK.I					

Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]	MS/MS analysis
								Monoisotopic mass of neutral peptide Mr(calc): 1296.7078 lons Score: 19 Expect: 11 Matches: 16/96 fragment ions using 51 most intense peaks MSMS Fragmentation of DPTFIPAPIQAK
15	Serum albumin	P02768	69	5.9	1081	31	45	Start
16					1037	25	40	Start = End

Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]	MS/MS analysis
								376 - 383
17					812	20	32	Start - End Observed Mr(expt) Mr(calc) Delta Miss Sequence
18					429	14	20	Start - End
19								35 - 50 830,9057 1659,7968 1659,7774 0.0194 0 R.LVGCPMDASVEEEGVR.R + Oxidation (M) 35 - 51 606,2949 1815,8629 1815,8785 - 0.0156 1 R.LVGCPMDASVEEEGVR.A + Oxidation (M) 52 - 62 613.8022 1225,5998 1225,5979 - 0.0080 0 R.ALDFAVGEYNK.A
20	Cystatin-C	P01034	16	9	227	3	19	Monoisotopic mass of neutral peptide Mr(calc): 1659.7774 Variable modifications: M6 : Oxidation (M), with neutral losses 0.0000(shown in table), 63.9983 John Score: 77 Expect: 1.6e-05

Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]	MS/MS analysis			
								Matches : 18/200 fragment ions using 34 most intense peaks MS/MS Fragmentation of LVGGPMDASVEEEGVR			
21					97	2	12	Start			
22	Prostaglandin-H2 D-isomerase	P41222	21	7.7	166	3	21	Start = End			
23					156	4	21	Start			
24					77	2	12	Start – End Observed Mr(calc) Delta Miss Sequence 145 – 151 421.2380 840.4614 840.4164 0.0451 0 R.MATLYSR.T 169 – 185 955.5477 1999.808 1908.9469 0.1339 0 K.AQGFTEDTIVFLPQTDK.C			

Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]	MS/MS analysis
								Monoisotopic mass of neutral peptide Mr(calc): 840,4164 lons Score: 30 Expect: 0.99 Matches: 9/54 fragment ions using 24 most intense peaks MS/MS Fragmentation of MATLYSR
25	Transthyretin	P02766	16	5.5	498	7	63	Start - End Observed Mr(expt) Mr(calc) Delta Miss Sequence
26	Apolipoprotein A-IV	P06727	45	5.3	53	2	4	Start – End Observed Mr(expt) Mr(calc) Delta Miss Sequence 135 – 143 552 7957 1103.5768 1103.5611 0.0158 0 RLEPYADOLR T 267 – 275 492.2892 982.5638 982.5447 0.0191 0 RLAPLAEDVR.G Monoisotopic mass of neutral peptide Mr(calc): 1103.5611 lons Score: 15 Expect: 31 Matches: 9/76 fragment ions using 33 most intense peaks MSIMS Fragmentation of LEPYADOLR T
27	Pigment epithelium- derived factor	P36955	46	6	464	11	27	Start = End
28	Insulin-like growth factor-binding protein 2	P18065	35	7.5	325	6	21	Start

Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]	MS/MS analysis
								302 – 317 664.9866 1991.9380 1991.8432 0.0948 0 R.GDPECHLFYNEQQEAR.G + Carbamidomethyl (C)
29	Glutathione peroxidase 3	P22352	26	8.3	112	3	16	Start – End Observed Mr(expt) Mr(calc) Delta Miss Sequence 1777–1787 fb53-3906 fb53-3903 fo.1070 0 CEPCENSEILPTLK.Y 1632.8596 fb32.7413 0.1183 0 K.NSCPPTSELLGTSDR.L + Carbamidomethyl (C) K.MDILSYMR.R (C) C.
30	nd							MS/MS Fragmentation of QEPGENSEILPTLK
31	nd							
32	nd							
33	nd							
34	N-acetyllactosaminide beta-1,3-N- acetylglucosaminyl- transferase	Q43505	47	6.8	182	6	12	Start = End Observed Mr(expt) Mr(calc) Delta Miss Sequence
35	Gelsolin	P06396	86	5.9	87	4	6	Start – End Observed Mr(calc) Delta Miss Sequence 178 – 188 638 4065 1274.7984 1274.7998 0 K.HVVPNEVVVQR.L 585 – 597 660.3989 1318.7832 1318.6881 0.0952 0 K.AGALNSNDAFVLK.T 714 – 728 555 9647 1664.8723 1664.7740 0.0982 1 K.DSOEEEKTEALTSAK.R 741 – 748 457.3260 912.6374 912.5757 0.0618 1 R.RTPITVVK.Q
36	Contactin-1	Q12860	113	5.6	179	6	6	Start = End Observed Mr(expt) Mr(calc) Delta Miss Sequence
37	Prothrombin	P00734	70	5.6	643	20	40	Start - End Observed Mr(expt) Mr(calc) Delta Miss Sequence

Nr	Protein name	UniProt Accession	MW [kDa]	pl	Score	Queries matched	Sequence coverage [%]					MS/I	/IS analy	sis
								509 - 517 518 - 537 544 - 560 561 - 575 600 - 608	503.2841 744.8035 668.0181 763.8714 595.3350	1004.5536 2231.3887 2001.0325 1525.7282 1188.6554	1004.4927 2231.2460 2000.9084 1525.6178 1188.5716	0.0609 0.1427 0.1241 0.1105 0.0838	0 0 1 0	K.ETWTANVGK.G K.GQPSVLQVVNLPIVERPVCK.D + Carbamidomethyl (C) R.ITDNMFCAGYKPDEGKR.G + Carbamidomethyl (C) R.GDACEGDSGGPFVMK.S + Carbamidomethyl (C) K.YGFYTHVFR.L
38	Amyloid-like protein 1	P51693	72	5.5	301	14	19	Start – End 71 – 80 74 – 80 91 – 96 97 – 106 107 – 118 313 – 320 324 - 330 380 – 388 380 – 388 380 – 408 447 – 459 517 – 525 526 – 539	Observed 414.5616 464.2463 420.2317 624.8622 686.8911 496.2785 445.2590 521.3385 599.9278 656.7171 545.9923 509.2798 492.9282 590.3149	Mr(expt) 1240.6630 926.4780 838.4488 1247.7098 1371.7676 990.5424 888.5034 1040.6624 1196.7616 1967.1295 1634.9551 1016.5450 1475.7628	Mr(calc) 1240.5949 926.4246 838.4007 1247.6332 1371.6816 990.4804 888.4487 1040.5978 1196.6989 1967.0112 1634.8529 1016.4848 1475.6740 1178.5390	Delta 0.0681 0.0534 0.0481 0.0766 0.0860 0.0621 0.0547 0.0646 0.0626 0.1183 0.1022 0.0602 0.0888 0.0763	Miss 1 0 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0	Sequence R.TGRWEPDPQR.S R.WEPDPQR.S R.WEPDPQR.S R.WEPCR.O.4 - Carbamidomethyl (C) R.OMYPELQIAR.V R.VEQATOAIPMER.W R.AKMDLEER.R R.GINEWMR.E R.VIALINDQR.R R.VIALINDQR.R R.ALLEGELAALOADPPQAER.V R.FQVHTHLQVIEER.V K.DDTPMTLPK.G K.GSTEQDAASPEKEK.M K.MNPLEQYER.K
39	Complement C3	P01024	187	6	428	20	13	Start - End 749 - 764 1835 - 841 842 - 848 882 - 891 892 - 904 905 - 913 914 - 926 980 - 999 1052 - 1060 1061 - 1071 1176 - 1175 1245 - 1254 1365 - 1375 1382 - 1391 1442 - 1450 1479 - 1491	Observed 908.9800 417.2571 444.2441 5701.4422 501.7915 491.2650 725.0524 544.2247 895.4681 821.4155 595.8301 404.9079 633.8342 546.8326 834.4008 649.7972 650.8206	Mr(expt) 1815,9454 832,4996 886,4736 1147,6704 1400,8698 1001,5684 1470,7732 2172,13540 1151,6348 1788,9216 1640,8170 1189,6456 1211,7019 1265,6538 1091,6506 1666,7870 1297,5798 1299,6266 1288,6430	Mr(calc) 1815.8850 832.4807 886.4508 1147.6350 1400.8279 1001.5593 1470.7368 2172.0732 105593 1151.5957 1788.8564 1640.7617 1189.6132 1211.6761 1265.6108 1091.6226 1666.7297 1297.5431 1299.58005	Delta 0.0605 0.0190 0.0190 0.0228 0.0355 0.0420 0.0291 0.0362 0.0373 0.0554 0.0357 0.0257 0.0368 0.0457 0.0368 0.0461 0.0368 0.0461	Miss 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sequence R.SNLDEDIJAEENIVSR.S R.LPYSVVRN R.NEQVEIRA R.HQQTYTIPPKS K.SSLSVPYVIVPLK.T K.TGLQEVEVKA K.AAVYHHFISDGVR.K R.ILLQGTPVAQMTEDAVDAER.L + Oxidation (M) K.GYTQQLAFR.Q R.OPSSAFAAFVK.R K.DICEECOWNSLPGSITK.A + Carbamidomethyl (C) K.AGDFLEANYMNLQR.S K.DFOLEPVVR.W K.VTIKPAPETEK.R K.NTMILEICTR.Y + Carbamidomethyl (C): Oxidation (M) R.NTLIIYLDK.V K.VYAYYNLEESCTR.F + Carbamidomethyl (C) K.ACEPGVDYVY.W.T + Carbamidomethyl (C) K.ACEPGVDYVYK.T + Carbamidomethyl (C) K.ACEPGVDYVYK.T + Carbamidomethyl (C) K.SCSDEVQVQGQAR.T
40a 41a	Inter-alpha-trypsin inhibitor heavy chain H4*	Q14624	103	6.5	580	18	19	Start - End 48 - 56 61 - 75 97 - 111 99 - 111 140 - 151 154 - 162 163 - 170 215 - 224 225 - 240 274 - 281 300 - 307 429 - 438 497 - 512 501 - 512 568 - 668	Observed 509,3000 853,9618 522,2933 654,3599 748,9485 524,3472 484,3264 602,8656 906,5162 467,2937 464,7769 572,8363 421,9112 642,8643 586,3381 638,8841	Mr(expt) 1016.5854 1705.9090 1563.8581 1306.7052 1495.8824 1046.6798 966.6382 1203.7166 832.5728 927.5392 998.5898 1655.9503 1143.6580 11262.7118 1283.7140	Mr(calc) 1016.5403 1705.8345 1563.7892 1306.6517 1495.8174 1046.6376 966.5974 1203.6612 1810.9425 932.5331 927.5025 998.5509 1655.8843 1143.6136 1262.6554 1283.6550 1170.6496 1275.6976	Delta 0.0451 0.0745 0.0688 0.06536 0.0651 0.0423 0.0408 0.0555 0.0754 0.0397 0.0397 0.0397 0.0390 0.0660 0.0455 0.0555 0.0555	Miss 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sequence RFAHTVVTSR.V R.ANTVQEATFQMELPK.K K.EKAEAQAQYSAAVAK.G K.AEAQAQYSAAVAK.G K.ITFELVYEELLK.R R.LGYVEELLK.R R.LGYVELLLK.V K.VRPQQLVK.H R.FKFTLSQQGK.S K.SPEQQETVLDGNLIIR.Y K.NVVFVIDK.S K.ILDDLSPR.D K.LALDNGGLAR.R K.LODRGPDVLTATVSGK.L R.GPDVLTATVSGK.L R.MNFRPGVLSSR Q K.AGFSWIEVTFK.N K.TGLLLLSDPDK.V K.VTIGLLLSDPDK.V K.VTIGLLENDGR.G
40b 41b	Calsyntenin-1*	P094985	110	4.8	328	8	9	Start – End 89 – 103 235 – 244	Observed 546.6559 564.3027 549.3374 526.7722 457.7939 715.8916 1008.0316 531.2950	Mr(expt) 1636.9459 1126.5908 1096.6602 1051.5298 913.5732 1429.7686 2014.0486 1060.5754	Mr(calc) 1636.8573 1126.5329 1096.6128 1051.4856 913.5345 1429.7049 2013.9684 1060.5335	Delta 0.0885 0.0580 0.0474 0.0443 0.0387 0.0638 0.0803 0.0419	Miss 0 0 0 0 0 0 0 0	Sequence K.HGQNVPFDAVVVDK.S K.LTVTAYDCGK.K + Carbamidomethyl (C) R.IPDGWVSVSPK.E K.ETILCSSDK.T + Carbamidomethyl (C) R.GNLAGLTLR.S K.EGLDLQVLEDSGR.G R.AASEFESSEGVFLFPELR.I K.LICSELNGR.Y + Carbamidomethyl (C)

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42	Fructose-bisphosphate aldolase C	P09972	39	6.4	60	3	8	Start – End Observed Mr(expt) Mr(calc) Delta Miss Sequence 15 – 22 458 7667 915.5188 915.5025 0.0163 0 K.ELSDIALR.I 61 – 69 525 7691 10.49.5236 10.49.5142 0.0095 0 R.QVLFSADDR.V 319 – 331 711.3534 1420.6922 1420.6946 -0.0024 1 R.DNAGAATEEFIKR.A
43	Pyruvate kinase isozymes M1/M2	P14618	58	8	556	17	30	Start - End
44	nd							