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Marrix Mascot Search Results
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User
Email
Search title
MS data file
Database
Timestamp
Enzyme
                                                                                                                                                                                            :
E:\ChO Jing\20150619_Qe\20160616_EPEXP-.mgf
: TATRArapr (35386 sequences; 14482855 residues)
: 19 Jun 2016 at 14:04:07 GMT
: Trypsin
: Carbamidomethyl (C)
: Deamidated (NO)_oxidation (M)
: Monoisotopic
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Enzyme :
Fixed modifications :
Variable modifications :
Mass values |
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Peptide Mass Tolerance :
Fragment Mass Tolerance :
Max Missed Cleavages :
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Special | 1500 spitchess sizes | 17, 1, 8 and 9 | feetly process | dark (DVISI-CACCES NUMBE SENTING)

Special | 1500 spitchess | dark | da
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Symbols: | U-box domain-containing protein kinase family protein | chr4:19031360-19006669 RWEREE LENGTH-835
Symbols: | D-box domain-containing protein kinase family protein | chr4:19031360-19006669 RWEREE LENGTH-835
Symbols: | Wound-responsive family protein | chr1:7574104-7576643 FORMARD LENGTH-865
Symbols: | Wound-responsive family protein | chr1:7574104-7576643 FORMARD LENGTH-868
Symbols: | Wound-responsive family protein | chr1:7574104-7576643 FORMARD LENGTH-868
Symbols: | Wound-responsive family protein | chr1:7574104-7576643 FORMARD LENGTH-878
Symbols: | Wound-responsive family protein | chr1:7574104-7576643 FORMARD LENGTH-878
Symbols: | Wound-responsive family protein | chr1:7574104-75764349 FEVEREE LENGTH-878
Symbols: | Wound-responsive family protein | chr1:7574104-7576437 FORMARD LENGTH-878
Symbols: | Wound-responsive family protein | chr1:7574104-7576437 FORMARD LENGTH-178
Symbols: | Actin cross-linking protein | chr1:79407557-9411074 REVERSE LENGTH-878
Symbols: | Actin cross-linking protein | chr1:7407557-9411074 REVERSE LENGTH-819
Symbols: | Ribosomal L27e protein family | chr2:13678945-13679352 FORMARD LENGTH-815
Symbols: | Ribosomal L27e protein family | chr2:13678945-13679352 FORMARD LENGTH-815
Symbols: | Ankyrin repeat family protein | chr1:3194781-135255 REVERSE LENGTH-815
Symbols: | Ankyrin repeat family protein | chr1:3194781-135255 REVERSE LENGTH-815
Symbols: | Ankyrin repeat family protein | chr1:1310730-11131364 REVERSE LENGTH-815
Symbols: | Ankyrin repeat family protein | chr1:1310730-11131364 REVERSE LENGTH-815
Symbols: | Ankyrin repeat family protein | chr1:1310730-11131364 REVERSE LENGTH-816
Symbols: | Magn/RplA/COA transferase-like superfamily protein | chr1:231648 REVERSE LENGTH-816
Symbols: | Unknown protein; FUNCTIONS IN: solecular function unknown; INVOLVED IN: blological process unknown; LOCATED IN: chloroplast; EXPRESSED IN: 10 plant structures; EXPRESSED DURING: LPNGTH-811
Sym
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AT3G51880.1
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                                                                                               AT3G13782.1
AT5G22650.1
AT5G07240.1
AT3G54620.1
AT1G03950.1
                                                                                                                                                              TAIRArapr Decov False discovery rate
 Peptide matches above identity threshold 836 37
Peptide matches above homology or identity threshold 1041 83
                                                                                                                                                                                                                                              4.43 %
                                                                                                                                                                                                                                                     7.97 %
Select Summary Report
                       Select Summary (protein hits)
                                                                                                                                                                                                                                                                                            Help
                                         Significance threshold p< 0.05
                                                                                                                                                      Max. number of hits AUTO
                                                                                                                                                                                                                                                                                           Show Percolator scores
                                            Standard scoring ● MudPIT scoring ● Ions score or expect cut-off 15 Show sub-sets 0
                                          Show pop-ups ● Suppress pop-ups ●
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                                         Preferred taxonomy All entries
                           ◆ All queries ◆ Unassigned ◆ Below homology threshold ◆ Below identity threshold
                     AT4G10130.1 Mass: 136368 Score: 1717 Matches: 73(62) Sequences: 42(39) emPAI: 3.11
| Symbols: | teNA symthetase class I (I, L, M and V) family protein | chr4:6397526-6404509 REVERSE LENGTH-1190
| Ouery Observed Mrcealcy Mrcealcy pem Miss Score Expect Rank Unique Peptide
| 5 353.2015 704.3885 704.3891 -0.87 0 37 0.0075 1 U K.IDMAR.N
| 79 374.1921 746.3697 746.3711 -1.95 0 20 0.63 1 U R.DWAITSR.S
                                                                                                                                                                                                        0 37 0.0075 1 U
0 20 0.63 1 U
0 27 0.041 1 U
0 37 0.01 1 U
0 29 0.072 1 U
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0 34 0.0031 1 U
0 48 0.0003 1 U
0 48 0.0003 1 U
0 49 0.001 1 U
0 (29) 0.04 1 U
0 (29) 0.081 1 U
                                                   374.1921 746.3677 746.3711 -1.95

391.6920 781.3695 781.3759 -81.1

409.2423 816.4699 816.4705 -0.68

410.2395 818.4665 818.4650 -0.63

446.7292 891.4438 891.450 -1.42

446.7469 891.4792 891.4814 -2.45
                                                                                                                                                                                                                                                                                                                               R.DWAISR.S
K.EFSFPR.Q 243
R.IELSVTR.M
R.FLVQNAK.R
R.GDEFGVLR.R
K.FNGASLVGK.K
                                                    447.2396 892.4646
                                                                                                                                      892.4654 -0.96
                                                                                                                                                                                                                                                                                                                                 K.FNGASLVGK.K
R.EEMDAYR.L
                                                                                                                                      912.3647 -2.64
                                                   457.1884 912.3623
                                                  457.1884 912.3623 912.3647 -2.64 0 25

462.7263 923.4380 9.30 0 23

468.7606 935.5066 935.5076 -1.12 0 51

482.7565 963.4984 963.5025 -4.30 0 53

529.7341 1057.4536 1057.4573 -3.47 0 34

531.7753 1061.5361 1061.5393 -3.03 0 31

535.3147 1068.6148 1068.6179 -2.85 0 48
                                                                                                                                                                                                                                                                                                                                 R.YVAEWEK.V
K.VYIVAESR.L
                                                                                                                                                                                                                                                                                                                                 K.AEPDFSVLGK.R 1464
                                                                                                                                                                                                                                                                                                                                 R.LSALPTDKPK.A
                                                   573.7938 1145.5730 1145.5751 -1.82 0
                                                                                                                                                                                                                                                                                                                                 R.SLVPCNDTLK.Y
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396.1957 1185.5657 185.5679 -0.48 0
608.6220 1215.6314 1215.6347 -2.64 1
603.122 1215.6329 1215.6347 -1.48 1
632.3269 1262.6392 1262.6506 -9.08 0
                                                                                                                                                                                                                                                                                                                               R.FHNWLENAR.D
R.FHNWLENAR.D
K.DADKDIIEAVK.A
K.DADKDIIEAVK.A
R.EYVLEELNVR.S 3182
                                                643.3583 1284.7021 1284.7038 -1.26 0 58 7.4e-005 1 U K.QVLVSGEQNIK.D 658.3069 1314.5992 1314.6026 -2.62 1 39 0.003 1 U R.FVREMDAYR.L 439.2076 1314.6011 1314.6026 -1.18 1 (26) 0.065 1 U R.FVREEMDAYR.L 656.8172 1329.6138 1329.6248 -3.74 0 65 1e-005 1 U R.FVREEMDAYR.L 444.2142 1329.6208 1329.6248 -3.04 0 (47) 0.00072 1 U R.FVGEMBURR.R
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658.3069 1314.5992 1314.6026 -2.62

439.2076 1314.6011 1314.6026 -1.18

655.8172 1329.6198 1329.6248 -3.74

444.2142 1329.6208 1329.6248 -3.64

684.3678 1366.7210 1366.7245 -2.52
                                                                                                                                                                                                                                58 7.4e-005
                                                                                                                                                                                                                                                                                                                                 K.FLDNLTNIYVR.F
                                                    471.5834 1411.7284 1411.7320 -2.60
                                                                                                                                                                                                                                44 0.0016
                                                                                                                                                                                                                                                                                                                                 R.HHIDHITIPSSR.G 4194
                                                                                                                                                                                                                                                                                                                                   R.HHIDHITIPSSR.G 419
                                                    353.9402 1411.7318 1411.7320 -0.19
                                                                                                                                                                                                                            (27) 0.076
(28) 0.066
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706.8731 1411,7323 1411,7320 0.16
472,2045 1413,5918 1413,6017 -7.00
707.8062 1413,5977 1413,6017 -2.76
715.8041 1429,5937 1429,5936 -1.99
768.8695 1535,7245 1535,7256 -7.95
                                                                                                                                                                                                                      (58) 2e-005
77 3.1e-007
(55) 3.4e-005
                                                                                                                                                                                                                                                                                                                                 K.MGIDKYNEECR.S
K.MGIDKYNEECR.S 4211
K.MGIDKYNEECR.S
                                                                                                                                                                                                                                                                                                                                 K.SNEQTEWVPGYVK.D
                                                                                                                                                                                                                              45 0.0016
51 0.00026
                                                  768.695 15.5.7.42 15.5.7.25 -0.76

539.9153 1616.7232 -0.6

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833.9014 1665.7882 1665.7635 14.8

847.4159 1692.8270 1692.8206 -0.51
                                                                                                                                                                                                                                                                                                                                 K.GSEESVHYCSIPPR.E 5735
                                                                                                                                                                                                                                                          0.028
                                                                                                                                                                                                                                                                                                                                   K.GSERSVHYCSTPPR.E
                                                                                                                                                                                                                         54 0.00023
59 4.9e-005
(40) 0.006
                                                                                                                                                                                                                                                                                                                                 K.GSEESVHYCSIPPR.E
K.FNEEAVLALYSGDVK.S 5984
K.NFPGDFVAEGLDQTR.G
K.NFPGDFVAEGLDQTR.G
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                                                                                                                                                                                                                                                                                                                                   K.GAKPESAADSYEVLEK.
                                                                                                                                                                                                                         (53) 0.00032
56 0.00013
51 0.00053
                                                                                                                                                                                                                                                                                                                                 K.GAKPESAADSYEVLEK.F
                                                   978.9633 1955.9120 1955.9153 -1.69
988.9968 1975.9791 1975.9851 -3.03
                                                                                                                                                                                                                                                                                                                                 R.QEEDVLSFWTEIDAFK.T
                                                                                                                                                                                                                                                                                                                                 K.KGENLVVAVDDDGLFTER.I
                                             988.9968 1975.9791 1975.9851 -3.03
1009.4999 2016.9892 2016.9792 2.95
695.0397 2082.0974 2082.0997 -1.12
725.7025 2174.0855 2174.0871 -0.70
1088.5546 2175.0946 1275.0711 10.81
1124.5115 2247.0084 2247.0160 -3.40
                                                                                                                                                                                                                      51 0.00053
74 2.4e-006
75 1.7e-006
(45) 0.0023
45 0.0021
(45) 0.0011
58 6.5e-005
70 6.9e-006
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K.DILAFERAGEVTIANHLIK.E
K.VMAPFTPFFTETLYQNLR.K
K.VMAPFTPFFTETLYQNLR.K
                                                                                                                                                                                                                                                                                                                                 K.KYEPLFDYFSDFSSEAFR.V
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752.0554 2253.1443 2253.1464 -0.94
                                                                                                                                                                                                                                                                                                                                 K.KYEPLFDYFSDFSSEAFR.V
                                                                                                                                                                                                                                                                                                                                 K.EMIVVHPDADFLNDITGVLR.E
                                             752.0554 2253.1443 2253.1464 1127.5797 2253.1464 2253.1464 757.7228 2270.1465 2270.1253 828.0580 2481.1523 2481.1516 1360.6271 2719.2396 2719.2389 858.6901 3430.7214 3430.7238 1144.9147 3431.7222 3431.7078
                                                                                                                                                                                                                                                                                                                                 K.EMIVVHPDADFINDITGVIR.E

K.EMIVVHPDADFINDITGVIR.E

R.TGEDDCHTALSTLFNVLLTSCK.V

K.SGLEPTDFVEVYFQSLDEDESVSK.Q
                                                                                                                                                                                                                          (52) 0.00037
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30 0.026 1 U R.TEMLEPTITYDGPFFATGLHYGGILAGTIK.D

47 0.00078 1 U R.TEMLEPTITYDGPFATGLHYGGILAGTIK.D

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49 5.7e-006 1 U K.HALTEGGYPFYPTLATIGSANILDGMHARATGLVR.F
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        4065.0695
        14.4
        1

                                                                                                                                                                                                                         47 0.00078
(37) 0.0068
                     | AT2045130.1 | Mass: 28246 | Score: 1399 | Matches: 48(35) | Sequences: 16(13) | emPAI: 8.48 | | | | | | |
| Symbols: ATSFX3, SFX3 | SFX domain gene 3 | chr2:1860489-18607754 FORWARD LENGTH=245 |
| Query Observed Mr(expt) | Mr(calc) | ppm | Niss Score | Expect Rank Unique | Peptide |
| 14 | 360.2072 | 718.3397 | 718.4014 | -2.25 | 0 | 19 | 0.64 | 1 | U | R.SFTOK.V |
| 551 | 430.7261 | 859.4376 | 859.4399 | -2.70 | 0 | 67 | 1e-005 | 1 | U | R.SHISEITK.D |
| 1024 | 494.7738 | 987.5330 | 987.5349 | -1.84 | 1 | 29 | 0.069 | 1 | U | R.SHISEITK.D |
| 1147 | 508.2897 | 1014.5629 | 1014.5651 | -2.15 | 0 | 23 | 0.25 | 1 | U | R.SHISEITK.D |
| 1148 | 53.2891 | 2014.5629 | 1014.5651 | -2.15 | 0 | 23 | 0.25 | 1 | U | R.SHISEITK.D |
| 1158 | 53.2891 | 2014.5629 | 1014.5651 | -2.15 | 0 | 23 | 0.25 | 1 | U | R.SHISEITK.D |
| 1158 | 53.2891 | 2014.5629 | 1014.5651 | -2.15 | 0 | 23 | 0.25 | 1 | U | R.SHISEITK.D |
| 1158 | 53.2891 | 2014.5629 | 2014.5651 | -2.15 | 0 | 23 | 0.25 | 1 | U | R.SHISEITK.D |
| 1158 | 53.2891 | 2014.5629 | 2014.5651 | -2.15 | 0.25 | 0.56 | 1 | 2.005 | 1 | U | R.SHISEITK.D |
| 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 1158 | 115
                                                                                                                                                                                                                                                                                                                                    R.ENISEIR.K 550 552 553
                                                                                                                                                                                                              0 67 1e-005
1 29 0.069
0 23 0.25
0 64 1.3e-005
0 (48) 0.00073
0 49 0.00065
0 (44) 0.0018
                                                                                                                                                                                                                                                                                                                                      K.VLHQPFFK.T <u>1146</u> <u>1148</u>
K.VAEAEGYER.C <u>1177</u> <u>1179</u> <u>1180</u>
R.NTVAALLTMK.E <u>1454</u> <u>1456</u>
R.<u>N</u>TVAALLTMK.E
                                                   512.2393 1022.4640 1022.4669
531.3008 1060.5871 1060.5950
531.7965 1061.5783 1061.5791
                                                                                                                                                                                -2.15
-2.83
-7.49
-0.67
-0.80
                                                                                                                                                                                                                                                                                                                                     R.NTVAALLTMK.E 1534
                                                    539.3018 1076.5891 1076.5900
                                                                                                                                                                                                              0 (44) 0.0018
0 103 2.4e-009
0 (60) 5.2e-005
0 73 1.2e-006
1 (75) 1.6e-006
1 91 4e-008
0 44 0.0024
                                                    740.8565 1479.6983 1479.7140
494.2404 1479.6993 1479.7140
                                                                                                                                                                            -10.58
                                                                                                                                                                                                                                                                                                                                      R.CAAVTSAAAGEGIFR.N 4781 4785
                                                                                                                                                                            -10.58

-9.97

-1.12

-15.97

-13.84

-1.63

-2.02
                                                                                                                                                                                                                                                                                                                                      R.CAAVTSAAAGEGIFR.N
                                                                                                                                                                                                                                                                                                                                    R.CANTEANAGEGIFE.N
R.EMETTIGAVOPVK.V 5109
R.IKEQIQESLPEWR.D 5995
R.IKEQIQESLPEWR.D 5991
K.YNAFFVEGEOFITHHK.E 8919 8920 8922
K.NLISSPAPVESIFVGLINAEIDK.F
                                                   768.8471 1535.6797 1535.6814
828.4280 1654.8414 1654.8678
552.6223 1654.8449 1654.8678
538.2631 2149.0234 2149.0269
                                                                                                                                                                                                                         56 7.8e-005
(50) 0.00027
                                              1213.6600 2425.3055 2425.3104
                                                                                                                                                                                                                                                                                                                                      K.NLISSPAPVESIFVGLLNAEIDK.F 10527
                                                   809.4437 2425.3094 2425.3104
                                                                                                                                                                                 -0.43
                                                                                                                                                                               -0.43
0.26
0.39
-3.28
-1.77
-1.68
                                                                                                                                                                                                              0 (50) 0.00027
0 (59) 8.3e-005
0 129 8.4e-012
1 (41) 0.0032
1 64 1.5e-005
1 57 0.00013
                                                   814.0714 2439.1924 2439.1918
                                                                                                                                                                                                                                                                                                                                     R.GSSTYSAFSLPPLNISDSDNVLR.S 10572
                                              1220.6036 2439.1927 2439.1918
842.3854 2524.1345 2524.1428
1263.0764 2524.1383 2524.1428
866.1034 2595.2885 2595.2929
                                                                                                                                                                                                                                                                                                                                    R. GSSTYSAFSLPPLNISDSDNVLR.S 2057

R. EWETTMDAVDPVKVAEAEGYER. C

R. EWETTMDAVDPVKVAEAEGYER. C

R. RGSSTYSAFSLPPLNISDSDNVLR.S
```

663 664 667

726

1436 1466

1495

3313

3674 3675 3939

4212 4379

5110

6154

6155

7644

9048

9654

9687

9688

10680 12046

16282

16283

1467

1535

4782

8918

10525

10526

```
0.26 1 (54) 0.00029 1
1.12 0 (21) 0.5 1
13.9 0 43 0.003 1
7.03 1 55 9.4e-005 1
13.5 1 (21) 0.24 1
                    912.4758 4557.3428 4557.3107
1140.8424 4559.3405 4559.2788
                                                                                                                                                                                                                        K.NLISSPAPVESIFVGLLNAEIDKFNAFFVEQEEDFIIHHK.E
                                                                                                                                                                                                                        K.NLISSPAPVESIFVGLLNAEIDKFNAFFVEQEEDFIIHHK.E
 AT5652040.1 Mass: 41314 Score: 1054 Matches: 39(31) Sequences: 10(8) emPAI: 1.80
| Symbols: ATRSP41, RS41, At-RS41 | RNA-binding (RBM/RBD/RNP motifs) family protein | cfrs:21131081-21133318 FORMARD LENGTH=356
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
635 439.2129 876.4112 876.4130 -2.08 0 26 0.11 1 R.HFEFVGK.I
      Expect Rank Unique
0.11 1
1.5 1 U
                                                                                                          -2.08 0 26
-1.80 1 16
-6.10 0 45
2.15 0 41
                                                                                                                                                          0.0007
                                                                                                                                                                                                                      K.VISVEYAVK.D 1108 1110 1111 1112 1113 1116 1117
                                                                                                                                                           0.05 1
0.031 1
    1400
                  525.7448 1049.4751 1049.4778 -2.59
                                                                                                                                 0 29
                                                                                                                                                                                                                     R.GYDGADSPIR.E
    2046
                  563.7849 1125.5551 1125.5567
                                                                                                          -1.37
                                                                                                                                                                                                                     R.ALDRFEYGR.T
    2047
                  376.1924 1125.5553 1125.5567
532.6000 1594.7781 1594.7839
                                                                                                          -1.22
                                                                                                                                         (26)
                                                                                                                                                                                                                     R.ALDRFEYGR.T
                                                                                                                                                                                                                     K.VISVEYAVKDDDSR.G 5611 5612
-.MKPVFCGNFEYDAR.E
   6315
                                                                                                                                         (59) 3.3e-005 1 U -.MKPVFCGNFEYDAR.E 6317

(49) 0.00034 1 U -.MKPVFCGNFEYDAR.E

90 2.9e-008 1 U R.NFAFICYERGENAR.A 6783 6786 6787 6791

(53) 0.00014 1 U R.NFAFICYERGENAR.A

(75) 1.2e-006 1 U R.NFAFICYERGENAR.A

50 0.00031 1 U K.NFAFICYERGENAR.A

50 0.00031 1 U K.AGFAVYMKDERDAEDAIR.A 5797
    6316 578.5966 1732.7679 1732.7701 -1.32 0
                   583.9290 1748.7652 1748.7651
                                                                                                               0.10

        DOD.3290
        1/48/7652
        1746/7652
        10.16551
        0.10

        901.9094
        1801.8042
        1801.8271
        -12.73

        601.6111
        1801.8161
        1801.8271
        -8.59

        902.4213
        1802.8281
        1802.8111
        9.43

        735.6688
        2203.9845
        2203.9844
        0.02

                                                                                                          -8.59 0
9.43 0
0.02 1
    9130
  Proteins matching the same set of peptides:
AT5652040.2 Mass: 41401 Source: 1054 Matches: 39(31) Sequences: 10(8)
[Symbols: AT8541, R541, AT-R541] RAN-binding (RRM/RBD/RNP motifs) family protein | chr5:21131081-21133318 FORMARD LENGTH-357
                                       Mass: 61369 Score: 640 Matches: 22(20) Sequences: 17(16) emPAI: 2.26

        Dols:
        ENTH/ANTH/VINS superfamily protein
        chr5:13462463-13465581 REVENSE LENGTH-56

        Observed
        Mr(expt)
        Mr(call)
        ppm Miss Score
        Expect Eark Unique
        Peptide

        384.6889
        767.3632
        767.3636
        -0.52
        0
        32
        0.0082
        1
        U
        KALDMYR.R

        428.2491
        850.5389
        -1.52
        0
        42
        0.00023
        1
        U
        K.TLYVIRIA

        448.28.2491
        854.4836
        854.4851
        8-79
        0
        32
        0.01
        1
        U
        K.EMPLAGAV

        468.2559
        934.4973
        934.4971
        0.23
        0
        55
        0.00017
        1
        U
        K.DTITNSLA

        545.2629
        1088.5131
        1088.5138
        -2.31
        0
        52
        0.00017
        1
        U
        K.DTITNSLA

        4811.1945
        1230.5616
        1230.5638
        -1.73
        0
        35
        0.0081
        1
        U
        R.SIBMIMSH

        483.9833
        1388.6718
        1388.6765
        -2.47
        0
        40
        0.0048
        1
        U
        R.A
     115
                                                                                                                                                                                                                      K.TLIVIHR.A
                                                                                                                                                                                                                      K.EAPLAAGVK.K

        428.291
        854.4861
        854.4861
        -2.97
        0
        32
        0.01

        666.2559
        934.4973
        44.991
        0.23
        0
        55
        0.00017

        545.2629
        1088.5113
        1088.5118
        -2.31
        0
        52
        0.00021

        411.1945
        1230.5616
        1230.5638
        -1.73
        0
        35
        0.0081

        680.3432
        1358.6718
        1358.6765
        -2.47
        0
        0
        0.044

        453.8983
        1358.6731
        1358.6765
        -2.47
        0
        40
        0.0044

                                                                                                                                                                                                                    K.DTTTVSLAK.V 803
K.YDVEVDPPR.T
R.SHMLNMSHFK.D
R.ADVAYCIHALAR.R
     2885
     3896
     3897
                                                                                                                                                                                                                     R.ADVAYCIHALAR.R
                                                                                                                                              70 6.5e-006
                     839.4363 1676.8580 1676.8621 -2.44
                                                                                                                                                                                                                     K.IYQALTDGIDNLVDK.F 6087
     6163
7140
                  847.8811 1693.7476
933.4286 1864.8426
670.6671 2008.9793
1122.5243 2243.0340
                                                                             1693.7485
1864.8591
2008.9816
2243.0337
                                                                                                                                               56 7.4e-005
53 0.00019
31 0.054
39 0.0064
                                                                                                                                                39 0.0064
77 7.3e-007
    9643
                                                                                                                                                                                                                     K.QPDLLSMDDPAPMVSELEEK.
                                                                                                                                                                                                U K. DUTPDLISQDPALGELLFR. V
U K. DUDTPDLISQDPALGELLFR. V
U K. VUDERPASEPEVARAEKYVEK. Q
U K. IVROALTHOIDMLVDKFFDMOR. N
U K. ITVOALTHOIDMLVDKFFDMOR. N
U R. TEDLDTPDLISQDPALGELLFR. V
U R. VLDCQFEGAAVQNHIIQLALSMVISESTK. I
 10000
                       780.4202 2338.2389
                                                                               2338.2420
                                                                                                             -1.34
AT5G26710.1 Mass: 81527 Score: 636 Matches: 31(27) Sequences: 24(21) empAi: 2.34 | Symbols: | Glutamyl/glutaminyl-tRNA synthetase, class Ic | chr5:9305673-9308247 FORNARD LENGTH=719
K.VLATYVK.K
                                                                                                                                                                                                                       K.DIGTLGIK.Y 349
                   432.7170 863.4195
                                                                               863.4211 -1.87
                                                                                                                                                            0.0028
                  446.7087
466.7475
468.7238
474.7440
                                                891.4029
931.4804
935.4329
947.4735
                                                                                                           -1.87
-2.95
0.81
-2.04
-1.18
                                                                                                                                        29 0.048
45 0.0019
38 0.0055
(45) 0.0018
       796
                                                                                                                                                                                                                     K.VLEDMGLR.Q
       858
                                                                               947.4746
      912
                   479.2899
                                                956.5652
                                                                               956.5655
                                                                                                          -0.31
-0.43
                                                                                                                                  0 49 0.00045
0 49 0.00058
                                                                                                                                                                                                                     K.LNGATVLLR.Y
                   482.2663 962.5181
                                                                               962.5185
                                                                                                                                                                                                                     R.YOGEVIVR.F
                  482.2663 962.5181 962.5185
485.2606 968.5067 968.5131
497.2270 992.4394 992.4386
508.7924 1015.5702 1015.5815
542.8447 1083.6748 1083.6764
543.3367 1084.6588 1084.6604
545.2714 1088.5282 1088.5284
                                                                           968.5113

992.4386 0.88

1015.5815 -11.14

1083.6764 -1.49

1084.6604 -1.50

-0.25
                                                                                                          -4.80
                                                                                                                                                                     0.01
                                                                                                                                                                                                                     R.IIDPVCPR.H
                                                                                                                                         34 0.01
21 0.2
38 0.0087
(44) 0.00036
58 3.5e-005
63 2.2e-005
                                                                                                                                                                                                                     K.FINFVCPK.H
K.FNMQDPNK.A
R.FPTVQGIVR.R
R.KLNGATVLLR.Y
R.KLNGATVLLR.Y
     1618
     1637
    1672
                                                                                                          -0.25
-0.61
                                                                                                                                                                                                                     K.CGDVIQLER.K
    2257
                   574.3575 1146.7005 1146.7012
                                                                                                                                                51 4.8e-005
                                                                                                                                                                                                                     R.LNLVFTLLSK.R
                   585.7888 1169.5630
741.3929 1480.7712
                                                                           1169.5651
                                                                                                            -1.86
                                                                                                                                                29
                                                                                                                                                           0.033
                                                                                                                                                                                                                     K.AMRDPVYYR.C
                                                                            1480.7773
     5813
     5814
                   406.7122 1622.8197 1622.8205
                                                                                                            -0.53
                                                                                                                                          (33)
                                                                                                                                                                  0.034
                                                                                                                                                                                                                      R.FAPEPSGYLHIGHAK.A
| No. 
 ATZG42520.1 Mass: 67813 Score: 633 Matches: 19(15) Sequences: 15(12) emPAI: 1.41

| Symbols: | P-loop containing nucleoside triphosphate hydrolases superfamily protein | chr2:17705382-17708744 FORMARD LENGTH-633
 Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 

1396 525.2612 1048.5078 1048.5189 -10.60 0 56 0.00012 1 R.FLALD

        525.2612
        1048.5078
        1048.5189
        -10.60
        0
        56
        0.00012

        363.2120
        1086.6142
        1086.6186
        -4.03
        0
        (24)
        0.15

        544.3144
        1086.6142
        1086.6186
        -4.00
        0
        28
        0.062

    1658
                                                                                                                                                                                                                      K.YVKPTPVQR.H
                                                                                                                                                                                                                       K.YVKPTPVOR.H
                  549.3127 1096.6109 1096.6241 -11.98
587.8226 1173.6306 1173.6354 -4.07
613.8502 1225.6858 1225.7030 -14.09
619.7775 1237.5404 1237.5431 -2.20
                                                                                                                                                           0.0014
                                                                                                                                                                                                                       R.GVDILVATPGR.L
                                                                                                                            -4.07
-14.09
-2.20
-2.02
     2913
     3128
                    627.7750 1253.5355
                                                                           1253.5380
                                                                                                                                                                                                                      R.DLMACAQTGSGK.T
                   440.8994 1319.6765 1319.6768
                                                                                                          -0.25
                                                                                                                                                                                                                     R.SHLMDLLHAQR.E
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                                                                                                                                                                                                                      R.MLDMGFEPOIR.K
                                                                                                                                                            1.3 1 U R.ELASQIHDEAKK.F
                  456.9076 1367.7009 1367.7045 -2.63
                                                                                                                                                        1.3 1 U R.TAYPLAVILSPTR.E
3.6e-006 1 U R.WAPGGSGVUVOGGGGYR.A
0.0014 1 K.TAASCPFIISGIMS.D
0.00011 1 K.TAASCPFIISGIMS.D
0.00015 1 U K.VVVAYGGTPINQQLR.E
0.00015 1 U R.WAPGASEVAPLPANDR.V
7.5e-005 1 R.GLDIEWIANVMFPLENDIDDIVWR.I
0.0007 1 R.GLDIEWIANVMFPLENDIDDIVWR.I
    <u>4378</u> 715.4236 1428.8327 1428.8340
                                                                                                            -0.91
     4837
                    745.8602 1489.7059 1489.7063
                                                                                                            -0.24
                                                                                                                                                81 3.6e-007
                   778.4040 1554.7934 1554.7938
                                                                                                            -0.26
                                                                                                                                           46 0.0014
(42) 0.0031
                    786.4026

        5322
        786.4026
        1570.7986
        1570.7888
        1.1.9
        0
        (42)
        0.0031

        7226
        807.9374
        f613.8603
        1613.8889
        -17.73
        0
        84
        2.2e-007

        6617
        592.3107
        1773.9102
        1773.9122
        -1.11
        0
        56
        0.00015

        13108
        718.3609
        2869.4188
        2869.4148
        -0.09
        0
        60
        7.5e-005

        13109
        574.8909
        2869.4180
        2869.4148
        1.12
        0
        (40)
        0.007

Score: 569
                     614.8176 1227.6207
623.7652 1245.5158
                                                                               1227.6207
                                                                                                              -0.03
                                                                                                                                                 67 5.8e-006
60 9.7e-006
                                                                                                                                                                                                                         R.VEIIANDOGNR.T
                                                                               1245.5183
                                                                                                                -2 00
     3072
3269
                                                                                                                                                            1
0.02
3.5e-005
                                                                              1312.6122
                                                                                                                                                                                                                          R.FEELNMDLFR.K
     3584
                      657.3129 1312.6113
     3887
                     679.8048 1357.5951 1357.6084
                                                                                                                 -9.84
                                                                                                                                                 62 1.2e-005
                                                                                                                                                                                                                         K.NALENYAYNMR.N
                     687.8053 1373.5960 1373.6033
                                                                                                                -5.31
                                                                                                                                            (48) 0.00025
                                                                                                                                                                                                                          K.NALENYAYNMR.N
                     476,2593 1425,7561 1425,7576
                                                                                                                -1.07
                                                                                                                                                                       0.17
                                                                                                                                                                                                                        K.STVHDVVLVGGSTR.I
                      514.2563 1539.7470 1539.7504
                                                                                                                -2.16

        514.2663
        1539.7470
        1539.7574
        -2.16
        1
        42
        0.0031

        783.9070
        1555.7995
        1565.8011
        -0.98
        0
        34
        0.0031

        549.2828
        1644.8265
        1644.87787
        -0.90
        1
        16
        1.8

        825.3954
        1648.7763
        1648.7767
        -0.19
        0
        24
        0.2

        830.9491
        1659.833
        1659.8719
        7.08
        0
        66
        1.3e-005

        1280.6262
        2559.2379
        2559.2481
        2-2.87
        0
        20
        0.63

        1294.6353
        2575.2501
        246.76
        0.015
        0
        46
        0.0015

        917.0535
        2748.1388
        2748.1392
        -0.16
        0
        24
        0.052

                                                                                                                                                                                                                        K.ARPEELNMODER.K
K.EFAAEEISSMVLIK.M
K.MKELESICNPIIAK.M
K.NQVAMNPVNTVFDAK.R
     5945
    6018
                                                                                                                                                                       e-005 1
0.63 1
                                                                                                                                                                                                                         R.IINEPTAAAIAYGLDK.E
                                                                                                                                                                                                       υ
                                                                                                                                                                                                                        K.SINPDEAVAYGAAVQGAILSGEGNEK.V
                                                                                                                                                                                                                         K.EOVFSTYSDNOPGVLIOVYEGER.A
                                                                                                                                                                                                         υ
```

U R.RGSSTYSAFSLPPLNISDSDNVLR.S U K.DIVNFHGEMVLLVNYSNINYTGLAK.I U K.DIVNFHGEMVLLVMYSNINYTGLAK.I

 11115
 1298.6541
 2595.2935
 2595.2929

 12598
 942.1505
 2823.4297
 2823.4265

 12766
 947.8223
 2840.4450
 2840.4055

```
| 15157 | 1012.5675 | 3034.6807 | 3034.6808 | -5.98 | 0 | 71 | 1.3e-006 | 1 | U | K.VQDLLLLDVTPLSLGLETAGGVMTTLIPR.N |
| 15209 | 1017.9131 | 3050.7174 | 3050.6937 | 7.77 | 0 | (48) | 0.00014 | 1 | U | K.VQDLLLLDVTPLSLGLETAGGVMTTLIPR.N |
| 1561 | 1050.1685 | 3147.4836 | 3147.4884 | -1.53 | 1 | 88 | 1.1e-007 | 1 | U | K.KIEDSIEQAIQNLEGNQLAEADEFEDK.N |
                                                                                   Score: 467
                                                                                                                        Matches: 16(15) Sequences: 11(10) empAI: 2.54
  AT1G13440.1
                                          Mass: 37004
                                                                                                                                                                                                           chr1:4608465-4610494 REVERSE LENGTH=338
     | Symbols: GAPC-2, GAPC2 | glyceraldehyde-3-phosphate dehydrogenase C2
                       Observed Mr(expt) Mr(calc) ppm Miss Score
400.7451 799.4756 799.4803 -5.90 0 33
                                                                                                                                                                    Expect Rank Unique Peptide
0.019 1 K.VVISAPSK.D
                    σ
                                                                                                                                                                                                                           K.VLPSLNGK.L 416
R.IGINGFGR.I
                                                                                                                                                                                                                            R.IGINGFGR.I 470
K.KVVISAPSK.D
K.AATYDEIKK.A
     4394
                                                                                                                                                                                                                            R.AASFNIIPSSTGAAK.A
                                                                                                                                                                                           1 R.AMSTRIFES INGAR.A.
1 R.YPTUMSVVOLTVR.L
1 K.TILIGREFUTVGGIR.N
1 K.TILIGREFUTVGGIR.N 5083
1 R.FGIVEGLHTTUGGITATQK.T
1 K.SDLDIVSMAGTINGLAPLAK.V
1 U R.NEEDIPMGEAGADFUVESTOFTDKDK.A
     4871
     6084
 AT4035630.1 Mass: 47785 Score: 467 Matches: 18(14) Sequences: 12(11) emPAI: 1.92 |
| Symbols: PSAT | phosphoserine aminotransferase | chr4:16904205-16995497 FORMARD LENGTH-430 |
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
| 12 384.7084 707.4023 707.4040 -2.37 0 (22) 0.1 1 K.IVAJFMK.D
                 354.7084 707.4023 707.406 -2.37 0 (22) 0.1 1 E.LVAPMK.D
355.9097 717.3669 717.367 -3.94 0 25 0.18 1 U K.DYEPVEK.N
355.9097 717.3669 717.367 -3.94 0 25 0.18 1 U K.DYEPVEK.N
452.7475 903.4804 903.4814 -1.14 0 35 0.021 1 U K.TNYINGG, 6.595
520.2813 1038.5479 1038.5498 -1.82 0 43 0.0017 1 U K.TNYINGG, 6.595
520.2813 1038.5479 1038.5498 -1.82 0 43 0.0017 1 U K.FUYINGG, 6.595
580.761 1135.5376 1135.5410 -3.05 0 49 0.00063 1 U K.AQADLYNNR.G
639.3988 1277.6650 1277.6659 -1.08 0 42 0.00046 1 U K.AQADLYNNR.G
653.9389 1277.6650 1237.76699 -1.08 0 42 0.00046 1 U K.AQADLYNNR.G
662.964 123.7782 1232.7874 -7.01 0 69 1.4e-006 1 K.NVGPGUTIVIT.K
663.43556 1900.0451 1900.0458 -0.37 0 36 0.0078 1 U R.VFWRAGGFALPENVLIK.A
951.0316 1900.0467 1900.0458 -0.37 0 36 0.0078 1 U R.VFWRAGGFALPENVLIK.A
951.0316 1900.0487 1900.0458 -1.51 0 (25) 0.09 1 U R.VFWRAGGFALPENVLIK.A
953.9975 1985.8804 1985.9847 -0.86 1 (68) 9.8e-006 1 U R.KADLLYNAIEESNGFFR.C
663.0016 1985.8829 1985.9847 -0.66 1 (68) 9.8e-006 1 U R.KADLLYNAIEESNGFFR.C
663.3305 1986.9697 1986.9687 0.53 1 (67) 1.2e-005 1 U R.KADLLYNAIEESNGFFR.C
7837
     2131
     3558
     7488
     7831
     7832
     7838
 AT3G58570.1 Mass: 69484 Score: 449 Matches: 15(12) Sequences: 11(9) emPAI: 0.97

| Symbols: | P-loop containing nucleoside triphosphate hydrolases superfamily protein | chr3:21657099-21660352 FORMARD LENGTH-646

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

1386 525.2612 1048.5078 1048.5189 -10.60 0 56 0.00012 1 R.FLALDEADR.M

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Mss
        Score
        Expect)

        1395
        515.2612
        1048.5078
        1048.1319
        -10.60
        0
        56
        0.00012

        1659
        363.2120
        1086.6142
        1086.6186
        -4.03
        0
        (24)
        0.052

        1711
        549.3127
        1096.6109
        1096.6241
        -11.98
        0
        42
        0.0614

        2426
        587.8226
        1173.6306
        1173.6354
        -4.07
        0
        0
        5
        0.0001

        2856
        613.8502
        1225.6858
        1225.7030
        -14.09
        0
        45
        0.00011

                                                                                                                                                                                                                        K.YVKPTPVOR.N
    1711 549.3127 1096.6109 1096.6241 -11.98 0 42 0.0014 1 2426 587.826 1173.6306 1173.6394 -4.07 0 105 2e-099 1 2856 613.8502 1225.6858 1225.7030 -14.09 0 45 0.00071 1 2913 619.7775 1237.5404 1237.5431 -2.20 0 (62) 1.5e-005 1
                                                                                                                                                                                                                        R.TPILVATDVAAR.G
                                                                                                                                                                                                                      R.DLMACAQTGSGK.T
| 1.128 | 627.7750 | 1253.5355 | 1253.5380 | -2.02 | 0 | 78 | 3.2e-007 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 440.8994 | 1319.6765 | 1319.6766 | -0.25 | 0 | 22 | 0.39 | 1 | R.SHIMDLHAQR.E |
| 1636 | 668.8212 | 1335.6279 | 1335.6315 | -2.70 | 0 | 56 | 0.00015 | 1 | R.DLMACAQTGSGK.T |
| 1636 | 669.8212 | 1335.6279 | 1335.6315 | -2.70 | 0 | 56 | 0.00015 | 1 | R.DLMACAQTGSGK.T |
| 1636 | 668.8212 | 1335.6279 | 1335.6315 | -2.70 | 0 | 56 | 0.00015 | 1 | R.DLMACAQTGSGK.T |
| 1636 | 668.8212 | 1335.6279 | 1335.6315 | -2.70 | 0 | 56 | 0.00015 | 1 | R.DLMACAQTGSGK.T |
| 1636 | 668.8212 | 1335.6279 | 1335.6315 | -2.70 | 0 | 56 | 0.00015 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1335.6315 | -2.70 | 0 | 56 | 0.00015 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1335.6315 | 1355.6315 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1335.6315 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1335.6315 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1335.6315 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1335.6315 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1335.6315 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1335.6279 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1 | 1638.6212 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638.6212 | 1 | 1 | R.DLMACAQTGSGK.T |
| 1638 | 1638 | 1 | 1 | 
                                                                                                                                                                                                                    R.GLDIPHVAHVVNFDLPNDIDDYVHR.I
 406.2550 810.4955 810.4963 -0.98
406.7471 811.4979 811.4803 -0.77
417.2338 832.4530 832.4555 -3.08
417.7267 833.4388 833.4395 -0.88
464.7938 927.5730 927.5753 -2.52
519.7756 1037.5366 1037.5393 -2.61
                                                                                                                                                                                                                          K.VLPALNGK.L

K.VLPALNGK.L 330

R.IGINGFGR.I

R.IGINGFGR.I 470

K.KVVISAPSK.D

K.AATYDEIKK.A
                                                                                                                                      0 41 0.0012
0 (41) 0.0038
0 67 1.2e-005
1 62 1.5e-005
                                                                                                              -2.52 1 62 1.5e-005

-2.61 1 21 0.25

-2.37 0 33 0.029

-8.55 0 74 1.2e-006

-0.87 0 72 7.7e-007

-0.66 0 (51) 0.00011

-1.15 0 80 5.9e-007

-12.27 0 59 6.2e-005

4.22 1 23 0.25
     4394
                       717.8813 1433.7480 1433.7514
                                                                                                                                                                                                                           R.AASFNIIPSSTGAAK.A
     4871
                       749.9210 1497.8275 1497.8403
                                                                                                                                                                                                                           R.VPTVDVSVVDLTVR.L
    6084
6085
8030
                       838.9896 1675.9647 1675.9661
                                                                                                                                                                                                                           K.TLLFGEKPVTVFGIR.N
                      559.6623 1675.9650 1675.9661
678.3619 2032.0640 2032.0663
1125.5269 2249.0392 2249.0668
     9664
                                                                                                                                                                        0.25 1 U R.NPEDIPWAEAGADYVVESTGVFTDKDK.A
                     985.4616 2953.3630 2953.3505
78 3.2e-007
22 0.39
     3638
                   440.8994 1319.6765 1319.6768
                                                                                                             -0.25
                                                                                                                                                                                                                         R.SHLMDLLHAQR.E
                                                                                                                                                  56 0.00015
                   668.8212 1335.6279
                                                                             1335.6315
                                                                                                                                                                                                                         R.MLDMGFEPOIR.K
                                                                                                           -2.70 0 56 0.00015 1 R.MLDMGFEPQIR.K
-0.26 0 46 0.0014 1 K.TAAFCPFIISGIMK.D
1.19 0 (42) 0.0031 1 K.TAAFCPFIISGIMK.D
-0.87 0 68 3.6e-006 1 U K.VVAYGGTPIIQGIR.E
19.9 0 16 1 1 U R.VVAYGGTPIIQGIR.E
-0.09 0 60 7.5e-005 1 R.GADIPHVAHVVNFDLPHDIDDYVHR
1.12 0 (40) 0.007 1 R.GADIPHVAHVVNFDLPHDIDDYVHR
                    778.4040 1554.7934
                                                                             1554.7938
                   786.4026 1570.7986 1570.7888

546.6418 1636.9035 1636.9049

879.4020 2635.1843 2635.1319

718.3609 2869.4145 2869.4148

574.8909 2869.4180 2869.4148
     5905
  11553
  13108
                                                                                                                                                                                                                        R.GLDIPHVAHVVNFDLPNDIDDYVHR.
  13109
                                                                                                                                                                                                                        R.GLDIPHVAHVVNFDLPNDIDDYVHR.I
  Proteins matching the same set of peptides:

A73058510.2 Mass: 66327 Score: 420 Matches: 15(11) Sequences: 11(8) |

| Symbols: | DAE(D/H)-Dox NRA helcase family protein | chr3:21640608-21643464 FORWARD LENGTH-612 A73058510.3 Mass: 66327 Score: 420 Matches: 15(11) Sequences: 11(8)
                                 | DEA(D/H)-box RNA helicase family protein | chr3:21640608-21643464 FORWARD LENGTH=612
K.SVTIVELIK.R 1085
                                                                                                                                                                                                                            K.ADTPIAENEIR.I
R.GNGYVNNEYDDGGR.G
                                                                                                               765.8062 1529.5979 1529.6019
                       766.3072 1530.5998
557.9517 1670.8332
844.4206 1686.8266
     6122
                                                                                 1686.8287
     7914
                    1002.9022 2003.7899 2003.7915
     7970
                     1011.3999 2020.7852 2020.7705
                    1214.6019 3640.7840 3640.7632
                        949.7355 3794.9128 3794.8963
```

```
759.7256 2276.1549 2276.1536 0.59 0 (84) 2.5e-007 1 U R.DVIDGSSVGFVETIRADIAAIR.A
877.4231 2629.2475 2629.2483 -0.30 0 22 0.39 1 U K.TIGLIVIDGWGESDFDQYNCIHK.A
680.5596 2718.2094 2718.2416 -11.84 0 0 66 8.7e-006 1 U KAHGTAVGLPSEDDMGNSEVGHWALGAGR.I
  11469
  12041
                     913.0846 2736.2319 2736.2045 10.0 0 (32) 0.026 1 U K.ANGTAVGLPSEDDMGNSEVGNMALGAGR.T 953.4784 2857.4152 2857.4158 -1.14 0 23 0.33 1 U E.TILDAIEQVGGITVYTADHGNAEDHVK.R 953.8139 2858.4199 2858.4008 6.68 0 (20) 0.62 1 U R.TILDAIEQVGGITVYTADHGNAEDHVK.R 1066.5443 4262.1481 4262.1093 9.12 1 52 0.00027 1 U R.TILDAIEQVGGITVYTADHGNAEDHVK.R
  12112
  12936
                    1066.5443 4262.1481 4262.1093
  Proteins matching the same set of peptides:

AT3088590.2 Mass: 60897 Score: 397 Matches: 14(10) Sequences: 10(8)

| Symbols: | Phosphoglycerate mutase, 2,3-bisphosphoglycerate-independent | chr3:2608683-2611237 REVERSE LENGTH-560

        AT2021660.1
        Mass: 16937
        Score: 364
        Matches: 9(6)
        Sequences: 5(4)
        emPAI: 2.43

        | Symbols: ATCRP7, CCR2, GR-RBP7, GRP7 | cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch
        cold, circadian rhythm, and rna binding 2 | ch

                                                                                                                                                                                                                                     | chr2:9265477-9266316 REVERSE LENGTH=176
                                                                                                                                                                                                                      R.GFGFVTFK.D 694
                                                                                                                                                                                                                      R.CFVGGLAWATDDR.A
    AT3G44310.1 Mass: 38527 Score: 362 Matches: 17(15) Sequences: 10(9) emPAI: 1.70
| Symbols: NIT1, ATNIT1, NIT1 | nitrilase 1 | chr3:15986901-15988841 FORWARD LENGTH=346

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
44 440.7414 879.4628 379.4702 -2.21 0 41 0.028 1 U K.YIVEAASK,
854 473.7546 945.4947 945.4953 -0.70 0 (30) 0.076 1 K.LMPTSLER.
                                                                                                                                                                                                                            K.YIVEAASK.G 645
                                                                                                                                                                                                                           K.LMPTSLER.C
                                                                                                                                                                                                                            K.LMPTSLER.C 924
                       481.7515
                                                     961.4884
                                                                                   961.4902
                                                                                                             -1.87
                                                                                                                                                    45
                                                                                                                                                                  0.0016
                                                                                                                                     0 45 0.0016
1 (38) 0.0092
1 48 0.00095
0 44 0.0014
0 33 0.017
0 (31) 0.051
                      358.8698 1073.5876 1073.5903
                                                                                                                -2.50
                                                                                                                                                                                                                            R.KLMPTSLER.C
                                                                                                              -2.50 1 (38) 0.0092 1 R.KIMPTSLER.C
-1.92 1 48 0.0095 1 R.KIMPTSLER.C
-1.93 0 44 0.0014 1 K.GAAICWRN.H
-17.34 0 33 0.017 1 V.K.GELYCAPTADOSK.E
-0.73 0 (31) 0.051 1 U K.YHASAIRVGPEVAR.L
10.7 0 (31) 0.047 1 U K.YHASAIRVGPEVAR.L
-1.36 1 52 0.00034 1 U K.YHASAIRVGPEVAR.L
-1.33 0 64 2.5e-005 1 U K.GAELYUFPEGFIGOTPR.G
-0.90 0 (48) 0.00093 1 U K.GAELYUFPEGFIGOTPR.G
-6.72 1 26 0.15 1 R.FGLAVVUNNEGEGEFR.K
-2.51 0 71 4.9e-006 1 R.FGLAVVUNNEGEGEFR.K
                                                                                                             -2.50
-1.92
-8.37
-17.34
-0.73
-0.56
                      537.8014 1073.5882 1073.5903
595.2878 1188.5610 1188.5710
741.3378 1480.6611 1480.6868
401.7136 1602.8255 1602.8267
     4796
     5651
                       535.2825 1602.8258 1602.8267
     5652
     5653
                      802.4292 1602.8438 1602.8267
                      433.7371 1730.9193 1730.9216
                     911.4791 1820.9437 1820.9461

        5928
        911.4791
        1820.9451
        1820.9461

        6929
        607.9888
        1820.9461
        1820.9461

        7571
        644.6458
        1930.9156
        1930.9286

        8993
        1082.5199
        2163.0252
        2163.0307

  Proteins matching the same set of peptides:
ATG:44310.3 Mass: 38527 Score: 36 Matches: 17(15) Sequences: 10(9)
| Symbols: NIT1, ATNIT1, NITI: | nitrilase 1 | chr3:15986901-1598841 FORWARD LENOTH-346
 | AT1G19480.1 | Mass: 42154 | Score: 339 | Matches: 12(11) | Sequences: 9(9) | emPAI: 1.48 | | Symbols: | DNA glycosylase superfamily protein | chr1:6744520-6746144 FORNARD LENGTH-382
 U K.ASYLHDLAR.K

    323.2723
    1044.3302
    1044.3302
    -4.99

    391.8798
    1172.6175
    1172.6302
    -10.77

    587.3204
    1172.6262
    1172.6302
    -3.40

    664.8546
    1327.6947
    1327.6983
    -2.76

    742.9056
    1483.7967
    1483.7994
    -1.83

                                                                                                                                               (23) 0.27
64 2.7e-005
49 0.00055
50 0.00045
                                                                                                              -2.76 0 49 0.00055 1 U R.ITELONYSSPPSK.T
-1.83 1 050 0.00056 1 U R.ITELONYSSPPSK.T
-0.93 1 (46) 0.00096 1 U R.ITELONYSSPPSK.I
4.34 1 84 2e-007 1 U R.KYQNGILSDSAILANDEK.S
-0.04 0 38 0.00079 1 U R.KYQNGILSDSAILANDEK.S
-2.61 0 68 7.9e-006 1 U R.YSULGGGRILVYDETVLSINPQUIR.Q
-0.14 0 (55) 0.00014 1 U R.YSULGGGRILVYDETVLSINPQUIR.Q
-1.43 1 40 0.0068 1 U R.KGVQLLYGLDDLPRPSQMEQHCAK.W
     4812
                       495.6066 1483.7981 1483.7994
     8064
                      681.0009 2039.9809 2039.9721
                   798.0897 2391.2473 2391.2474
923.8226 2768.4459 2768.4531
1385.2336 2768.4527 2768.4531
696.6036 2782.3855 2782.3894
  12204
   Proteins matching the same set of peptides:

ATIG19480.2 Mass: 41625 Score: 339 Matches: 12(11) Sequences: 9(9)

Symbols: | DNA glycosylase superfamily protein | chr1:6744520-6745653 FORWARD LENGTH=377
                                                                                                                         Matches: 18(12) Sequences:
                                                                                  Score: 335
  <u>AT1G07920.1</u> Mass: 49813 Score: 335 Matches: 18(12) Sequences: 12(8) empAi: 0.98

| Symbols: | GTP binding Elongation factor Tu family protein | chr1:2455559-2457001 FORWARD LEMGTH=449
K.EVSSYLK.K
                                                                                                                                                                                                                     K.FSEILTK.I
R.OTVAVGVIK.S

        AT3609440.1
        Mass: 71559
        Score: 327
        Matches: 13(11)
        Sequences: 11(10)
        empAI: 0.93

        | Symbols: | Heat shock protein 70 (Hsp 70)
        family protein | chr3:290434-2905632
        RFVERSE LENGTH-649

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        921
        481.2606
        960.5667
        960.5127
        -6.30
        1
        33
        0.033
        1
        R.ISKDIEK.M

                                                                                                                -5.13 0 67 9.9e-006 1
                     608.3262 1214.6379 1214.6441
                                                                                                                                                                                                                          K.DAGVIAGLNVMR.I
                  3269
     3270
     3887
    5945
6018
6033
  11044
  11731
   Proteins matching the same set of peptides:

A73309440.2 Mass: 71559 Score: 327 Matches: 13(11) Sequences: 11(10)

[ Symbols: ] Heat shock protein 70 (Hsp 70) family protein | chr3:2903434-2905632 REVERSE LENGTH-649
   AT365715.1 Mass: 63329 Score: 326 Matches: 8(8) Sequences: 5(5) empAI: 0.40
Symbols: NAP57, ANNAP57, CBP5, ANCEP5 | homologue of NAP57 | chr3:21154255-21155952 REVERSE LENGTH-565
Query Observed Mr(expt) Mr(cale) ppm Miss Score Expect Rank Unique Peptide
3982 688.3311 1374.6477 1374.6514 -2.71 1 65 1.5e-005 1 U K.EVEGGERAEKYK.S
4618 486.2220 1455.6442 1455.6478 -2.44 0 (48) 0.00047 1 U K.EVEGGERAEKYK.S
4619 728.2926 1455.6464 1455.6478 -2.17 0 68 3.9e-006 1 U K.EVEGGERAEKYK.S
5656 401.9545 1603.7888 1603.7941 -3.29 2 51 0.0005 1 U K.EVEGGERAEKYK.S
7138 933.4128 1864.8111 1864.8174 -3.35 1 73 1.2e-006 1 U K.SKDTERAVDAEDESAAKK.S
7139 622.6139 1864.8104 1864.8174 -1.81 1 (7)1 1.9e-006 1 U K.SKDTERAVDAEDESAARK.S
9149 737.3355 2208.9847 2208.9869 -1.01 2 66 9.3e-006 1 U K.SKDTERAVDAEDESAARKSK.K
  AT3G57150.1
```

```
<u>AT2G40660.1</u> Mass: 42290 Score: 313 Matches: 15(9) Sequences: 13(8) emPAI: 1.23 | Symbols: | Nucleic acid-binding, OB-fold-like protein | chr2:16966011-16968866 FORWARD

        Query
        Observed
        Mr(expt)
        Mr(calo)
        ppm Miss Score

        296
        401.2438
        800.4731
        800.4756
        -3.09
        25

        817
        469.2708
        936.5271
        936.5280
        -1.01
        0
        20

        1047
        498.2453
        994.4761
        994.4760
        0.13
        0
        24

                                                                                                                                                                          Expect Rank Unique Peptide
0.16 1 U R.QVVSGLAK.E
                                                                                                                                                                                                                                           K.TLYSNVLK.A
                                                                                                                                                                              0.15
                                                                                                                                                                                                                                           K.DWFSALEK.L
                     608.8107 1215.6068 1215.6095 -2.24
                                                                                                                    -2.24 0 (19) 0.62 1 U K.EVSAQNNDVLK.W

14.7 0 51 0.0047 1 U K.EVSAQNNDVLK.W

1-0.21 0 (25) 0.016 1 U R.IVSALITHVEPGK.L

-2.49 0 45 9.3e-005 1 U R.IVSALITHVEPGK.L

-9.81 0 58 8.5e-005 1 U K.IPFSEPEVERAIK.V

-9.81 0 58 8.5e-005 1 U K.IPFSEPEVERAIK.V

-11.20 0 34 0.017 1 U K.IPFSEPEVERAIK.V

-7.97 0 65 1.5e-005 1 U K.IPFSEPEVERAIK.SIFK.A

-2.20 0 53 0.0002 1 U K.ABSUKPEVUKPEDVQDGLGTK.K

-0.32 1 26 0.061 1 U K.ABSUKPVUKPEDVQDGLGTK.K

-0.38 1 75 1.9e-006 1 U K.ABSUKPUKPEDVQDLGTK.K

1.38 1 17 1.1 1 U K.WLDPABGFSSDSKUMFSALEK.L
                                                                                                                                                       (19)
                                                                                                                                                                                      0.62
                                                                                                                                                                                                                                           K.EVSAONNDVLK.W
                    608.8107 1215.6068 1215.6095 -2.24
609.3130 1216.6114 1216.5935 14.7
626.8966 1251.7787 1251.7914 -10.21
418.2701 1251.7883 1251.7914 -2.49
534.6346 1600.8819 1600.8856 -2.84
871.4272 1740.8399 1740.8570 -9.81
     5645
     6338
                    899.4191 1796.8236 1796.8437 -11.20
    6744
                   899.4191 1796.8236 1796.8437
667.9846 2000.9320 2000.9480
693.0463 2076.1170 2076.1215
552.0612 2204.2158 2204.2165
736.7031 2207.0876 2207.1070
822.3825 2464.1257 2464.1223
 10637
| ATIG76010.1 | Mass: 37417 | Score: 308 | Matches: 19(14) | Sequences: 10(9) | emPAI: 2.11 | Symbols: | Alba DNA/RNA-binding protein | chr1:28528505-28530488 REVERSE LENGTH-350
                        Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
456.7250 911.4355 911.4349 0.67 0 29 0.037 1 U R.SDORY
473.7208 945.4271 945.4304 -3.53 0 45 0.0058 1 U R.GYDDRY
 Query
       852

        17108
        1227.9364
        3680.7874
        3680.7581
        7.95
        0
        30
        0.059
        1
        U
        R.IPDLMQNTSIGSTDITOTWEPTERGLEPLETTR.H
        17107

        17536
        1279.9694
        3836.8863
        3836.8852
        7.05
        1
        34
        0.027
        1
        U
        R.RIPDLMQNTSIGSTDITOTWEPTERGLEPLETTR.H

451.7399 901.4653 901.4698 -5.00 0 28 0.071 1 U R.GRIFFK.D.694
503.7281 1005.4417 1005.4437 -1.98 0 (54) 0.0001 1 U R.DAIEBMOKK.E 102
504.2204 1006.4227 10.137 0 56 4.12-005 1 U R.DAIEBMOKK.E 102
558.8031 1135.5915 1115.5935 -1.64 0 60 5.5e-005 1 U R.VITUWEAQSR.G 1898 1900 1901 1902
789.3574 1576.7003 1576.7039 -2.26 1 62 1.8e-005 1 U R.DAIEBMOKE.DGR.V
    1899
  Proteins matching the same set of peptides:

AT4039260.2 Mass: 12856 Score: 289 Matches: 12(10) Sequences: 4(3)

| Symbols: CCR1, ATGRP8, GR-RBP8, GR-RBP8, cold, circadian rhythm, and RNA binding 1 | chr4:18274166-18274958 REVERSE LENGTH=126

AT4039260.2 Mass: 10281 Score: 289 Matches: 12(10) Sequences: 4(3)

| Symbols: CCR1, ATGRP8, GR-RBP8, GRP8 | cold, circadian rhythm, and RNA binding 1 | chr4:18274166-18274958 REVERSE LENGTH=92
| Mass: 71456 | Score: 281 | Matches: 10(9) | Sequences: 8(8) | emPAI: 0.71 | | | | | |
| Symbols: HSF70, ATHSF70 | heat shock protein 70 | chr3:3991487-3993689 REVERSE LENGTH-650 |
| Query Observed Mr(expt) | Mr(calc) | ppm Miss Score | Expect Rank Unique | Peptide |
| 2869 | 614.8176 | 1227.6207 | 1227.6207 | 0.03 | 0.0 | 67 | 5.8e-006 | 1 | R.VEIIANDÇONR. |
| 2969 | 426.8809 | 1277.6208 | 1277.6227 | -1.44 | 0 | (17) | 1 | 1 | R.MYMHFYQEFK.R
                                                                                                                                                                          0.02
                    639.8182 1277.6219 1277.6227 -0.59 0
                                                                                                                                                                                                                                         R.MVNHFVQEFK.R
                                                                                    1312.6122 -0.64 0 60 3.5e-005
                    657.3129 1312.6113
679.8048 1357.5951
                                                                                                                                                                                                                                         R.FEELNMDLFR.K
                   657.3129 1312.6131 1312.6132 -0.64 0 60 3.5e-005 1 R.FERIMOLOFR.K
679.8048 1357.5951 1357.6044 -9.84 0 62 1.2e-005 1 K.NALENYAYNER.N
687.8053 1373.5960 1373.6033 -5.31 0 (48) 0.00025 1 K.NALENYAYNER.N
514.2563 1539.7470 1539.7504 -2.16 1 42 0.0031 1 R.AFFERIMOLOFR.K
825.3954 1648.7763 1648.7879 -7.01 0 31 0.039 1 U K.NQVANDYINIYDDAK.R
830.9491 1659.8836 1659.8719 7.08 0 66 1.3e-005 1 R.IIMETRAAIAYGLOK.K
858.7606 2573.2600 2573.2609 -0.33 0 57 0.00012 1 K.SINPDEAVAYGAAVQAAILSGEGNEK.V
     5119
     6018
 11044

        AT2G28000.1
        Mass: 62205
        Score: 274
        Matches: 9(9)
        Sequences: 8(8)
        emPAI: 0.73

        | Symbols: CPM60A, CH-CPM60A, SLP | chaperonin-6oalpha | chr2:11926603-11929184
        FORMADD LENGTH-586

        Query | Observed | Mr(expt) | Mr(expt) | Mr(expt) | mm | ss Score | Expect Rank Unique | Peptide
        Peptide Peptide

        497 | 422.2455 | 842.4845 | 842.4862 | -1.94 | 0 | 42 | 0.0023 | 1 | U | R.IGADIVQK.A

                                                                                                                     -1.94 0 42 0.0023 1 U R.IGADIYOK.A
-4.24 0 52 7.9e-005 1 U R.GVLNVVNK.A
-4.86 0 29 0.015 1 U R.DVLDERET
-16.27 0 44 0.002 1 U R.NVVLDEFGSPK.V
-2.03 0 43 0.0026 1 U R.NVVLDEFGSPK.V
-4.13 0 73 2.2e-006 1 U K.TVGGLTEELGK.K
0.33 0 67 1.1e-005 1 U R.ATLEPARMENAGALIR.E
0.40 0 61 6.4e-006 1 U R.APLLITAEDVTGRALATLVVNK.L
                                                                                      897.5648
939.5641
1203.6136
                       629.3548 1256.6950
                                                                                      1256.6976
    3358
                    645.8096 1289.6046 1289.6099
877.4672 1752.9198 1752.9192
    6379
    9665
                         750.7703 2249.2891 2249.2882
                    1125.6528 2249.2911 2249.2882
 AT2617630.1 Mass: 47060 Score: 268 Matches: 10(9) Sequences: 9(9) emPAI: 1.26

| Symbols: | Pyridoxal phosphate (PLP)-dependent transferases superfamily protein | chr2:7666637-7667905 FORMARD LENGTH-422

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

12 334.7084 707.4023 707.4040 -2.37 0 (22) 0.1 1 K.LVAZPMG.D
           46
                                                                                                                                                                                                                    U K.FGVIYAGAQK.N
                    527.2899 1052.5652 1052.5655 -0.29
                                                                                                                                                                            0.0019 1
    1482
                                                   1064.5365
                                                                                    1064.5390
                                                                                                                     -2.34
                                                                                                                                                                                                                                         K.SELEAEFIK.E
                                                                                                                                                                            0.0005 1 U K.AQSDLYNWR.G
    2290
                     576.7696 1151.5247
                                                                                   1151.5360 -9.73 0
                                                                                                                                                           48

        2290
        576.7686
        1151.5247
        1151.5247
        1151.5360
        -9.73
        0
        48
        0.0005
        1
        U
        K.AGSDLTMER

        3271
        639.389
        1277.6689
        3-0.88
        0
        42
        0.0034
        1
        U
        K.AGSDLTMER

        3550
        654.7765
        1307.5384
        1307.5421
        -2.77
        0
        75
        3.7e-007
        1
        C
        R.GSOMSVMEMSHR.G

        3550
        662.8964
        1323.7782
        1323.7874
        -7.01
        0
        69
        1.4e-006
        1
        K.NVUPSQVTIVITR.K

        4955
        761.3922
        1320.7692
        1520.76934
        -8.99
        1
        64
        2.3e-005
        1
        U
        R.YRBALLYNANDER.G

        6988
        919.0323
        1836.0501
        1836.0509
        -0.40
        0
        29
        0.017
        1
        U
        R.VINFAAGPAALPENVLLX.A

AT5G27120.1 Mass: 58947 Score: 261 Matches: 11(9) Sequences: 7(6) emPAI: 0.54

| Symbols: | NOP56-like pre RNA processing ribonucleoprotein | chr5:9541287-9543684 FORNARD LENGTH-533

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
1411 701.3201 1400.6256 1400.6307 -3.63 0 65 7.3-606 1 U K.TRAEPPETAERPAK.K

4620 486.5563 1456.6470 1456.6504 -2.32 1 42 0.0017 1 U R.KHEERETEMPAK.K
                                                                                    1528.7256
1528.7256
1576.6740
1576.6740
                                                                                                                    -2.84 1 52

-2.81 1 (48)

-2.50 1 63

-2.14 1 (36)
                     765.3679 1528.7213
                                                                                                                                                                     0.00024
                                                                                                                                                                          0.00024
0.00071
7.2e-006
0.0039
                   5413
     5723
AT1064880.1 Mass; 60370 Score: 261 Matches: 20(14) Sequences: 15(10) emPAI: 1.03
| Symbols: | Ribosomal protein S5 family protein | chr1:24105713-24108780 FORWARD LENGTH-51
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
106 381.7288 761.431 761.4336 -0.64 0 17 0.66 1 U K.FYLOGKL
791 466.2547 930.4948 930.4957 -0.88 0 35 0.029 1 U R.VIGELMUR.L
                                              1941.5145 941.5142 -3.89 0 43 0.0011 1 U K.XIMAYTPK.D.834 1 941.5145 941.5145 0 .83 0 43 0.0011 1 U K.XIMAYTPK.D.834 1 946.4914 946.4906 0.83 0 (20) 0.68 1 U R.VIGHLMRR.L 1 974.6150 974.6154 -1.45 0 37 0.0062 1 U K.TILLAGPK.N.982 1 1066.4991 -3.15 0 40 0.0031 1 U K.SETLDEAR.N 1 1145.5705 1145.5717 -1.03 0 23 0.26 1 U K.TILLAGPK.N 982 1 1186.6422 1186.6445 -1.88 1 35 0.018 1 U R.LIAGVEKEK.Q 1 1209.7064 1209.7061 -1.41 1 17 0.28 1 U R.LIAGVEKEK.Q 1 1300.6306 1300.6371 -5.02 1 38 0.0061 1 U K.CPKLDGELMRR.K 1 1364.6286 1364.6295 -0.69 0 37 0.0084 1 U K.CPKLDGELMRR.E 1456.7335 1456.7382 -3.24 2 18 0.67 1 U K.CPKLDGELMRR.E 1473.6362 1473.6344 -5.59 1 23 0.09 1 U R.DNYQGGGEREER.L
                    471.7645 941.5145
     833 471.7645 941.5145

843 472.7604 943.5061

856 474.2530 946.4914

979 488.3148 974.6150

1489 534.2521 1066.4897

2234 382.8641 1145.5705
    2492
                     396.5547
                     404.2427
    3417
                     651.3226 1300.6306 1300.6371 -5.02
455.8835 1364.6286 1364.6295 -0.69
                    486.5851 1456.7335 1456.7382
492.2193 1473.6362 1473.6444
```

```
        5122
        771.4114
        1540.8082
        1540.8097
        -0.94
        1
        45
        0.0014
        1
        U
        K.ALMAVETPRDVQEK.F

        5123
        514.6107
        1540.8092
        1540.8097
        0.32
        1
        (31)
        0.036
        1
        U
        K.ALMAVETPRDVQEK.F

        6523
        588.9596
        1763.8591
        763.8591
        -1.21
        0
        (43)
        0.0041
        1
        U
        R.HERHTIAHAIQTSYK.K

        6524
        441.9716
        1763.8593
        1763.8591
        -1.03
        0
        43
        0.0037
        1
        U
        R.HERHTIAHAIQTSYK.K

 $530.3127 1058.6108 1058.6124 -1.51 0 20 0.36

$76.8608 1151.7071 1151.7087 0.40 0 45 0.00016

849.8826 1697.7506 1697.7380 7.39 0 63 1.3e-005

856.68781 1711.7417 1711.7480 -3.72 0 81 2.1e-007

890.8995 1779.7844 1779.8025 -10.19 0 15 0.87

1075.5689 2149.1231 2149.1242 -0.47 0 79 6.2e-007

832.4016 3325.5771 3325.5384 11.6 0 24 0.27
      2296
                                                                                                                                                                                                                                                                                                                                               K.VPLILGIWGGK.G
                                                                                                                                                                                                                                                                                            1 U K.VPLILGINGGK.G
1 U R.GLAYDISDDQQDITR.G
1 U K.NCCLFINDLDAGAGR.N
1 U R.EOPPVEQPENTYEK.L
1 U R.VPLITCHNESTIVAPLIR.D
1 U K.GNVDSVFQAPMGTGTHHAVLSSYEVSQGIR.Q 16081
      6231

        Proteins matching the same set of peptides:

        AT2G39730.2
        Mass: 49354
        Socre: 255
        Matches: 10(6)
        Sequences: 9(6)

        | Symbols: RCA | rubisco activase | chr2:16571046-16573345
        REVERSE LENGTH=446

        AT2G39730.3
        Mass: 48754
        Soore: 255
        Matches: 10(6)
        Sequences: 9(6)

        | Symbols: RCA | rubisco activase | chr2:16571174-16573345
        REVERSE LENGTH=441

                                                                Mass: 22615 Score: 252 Matches: 15(11) Sequences: 7(6) emPAI: 2.68
| Symbols | SRZ-22, SRZ22, RSZ22, RSZ
          Symbols: SRZ-22, SRZ22, RSZP22, RSZ22, At-RSZ22 | serine/arginine-rich 22 | chr4:15306983-15308064 FORWARD LENGTH=200
   Proteins matching the same set of peptides:

<u>A74031880.2</u> Mass: 22615 Score: 257 Matches: 15(11) Sequences: 7(6)

[ Symbols: SRZ-22, SRZ-22, SRZP22, RSZP22, RSZ22, A-RSZ22 | serime/arginine-rich 22 | chr4:15306983-15308064 FORWARD LENGTH=200
 AT5602490.1 Mass: 71741 Score: 238 Matches: 10(7) Sequences: 8(6) emPAI: 0.52 |
| Symbols: | Heat shock protein 70 (Hep 70) family protein | chr5:550296-552565 REVERSE LENGTH-653 |
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
| 231 481.2606 960.5067 960.5127 -6.30 1 29 0.1 2 UR. LEKEDIEK.M.

        921
        481.2606
        960.507
        960.5127
        6.30
        1
        29
        0.1
        286
        0.1
        29
        0.1
        29
        0.1
        29
        0.1
        286
        0.1
        29
        0.1
        286
        0.1
        287
        287
        -1.44
        0
        177
        1
        1
        227
        202
        -1.44
        0
        177
        1
        1
        2
        2
        2
        2
        2
        1
        2
        0
        3
        4
        0
        0.2
        2

        3887
        679.8048
        1357.5951
        1357.6084
        -9.84
        0
        62
        1.2e-005
        0
        1
        2.e-005
        0
        0
        1
        2.e-005
        0
        0
        0
        0
        0
        0
        0
        0
        0
        0
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        0
        0
        0
        0
        0
        0
        0
        0
        0
        0
        0
        0
        0
        <td
                                                                                                                                                                                                                                                                                                                                      R.VEIIANDOG
                                                                                                                                                                                                                                                                                                                        R.MVNHFVQEFK.R
K.NALENYAYNMR.N
      3887
     | 394.285 | 786.4897 | 786.4807 | -1.90 | 0 | 30 | 0.059 | 1 | U | M.YPETIELT |
| 456.2511 | 7870.4877 | 7870.4923 | -5.27 | 0 | 37 | 0.0059 | 1 | U | R.VLAEGINRI. |
| 451.2198 | 1350.6376 | 1350.6449 | -5.40 | 0 | (38) | 0.0085 | 1 | U | R.SDIVIEPTERRE.S |
| 676.3278 | 1350.6410 | 1350.6449 | -2.93 | 0 | 55 | 0.00016 | 1 | U | R.SDIVIEPTERRE.S |
| 676.3278 | 1350.6410 | 1350.6449 | -2.93 | 0 | 55 | 0.00016 | 1 | U | R.SDIVIEPTERRE.S |
| 683.3765 | 1604.7384 | 1604.7399 | -0.95 | 0 | 66 | 16-005 | 1 | U | R.DIVIEPTERRE.S |
| 633.3765 | 2529.2580 | 2529.2574 | 0.26 | 0 | (48) | 0.0011 | 1 | U | R.IVLINGISDIVOVETVLSCEPK.I |
| 844.0949 | 2529.2629 | 2529.2574 | 2.36 | 0 | 0.00064 | 1 | U | R.IVLINGISDIVOVETVLSCEPK.I |
| 844.0949 | 2649.2395 | 2649.237 | 5.96 | 0 | 0 | 0 | 8.59 | 8.56-005 | 1 | U | K.EAMEVPSGTMOILISVLVINCERG.
       3826
       3827
       3935
      5663
  10853
| Mage: 30417 | Score: 228 | Matches: 6(5) | Sequences: 5(4) | empAr: 0.74 | | | | | | | |
| Symbols: ALY4 | ALMAYS EARLY 4 | chr5:14981805-14983978 | REVERSE LENGTH-288 |
| Query Observed | Mr(expt) | Mr(elac) | ppe | Mise Score | Expect Rank Unique | Peptide |
| 714 | 455.2257 | 908.4368 | 908.4352 | -2.63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1304 | 518.2252 | 1034.5504 | 1034.5509 | -0.47 | 1 | 30 | 0 | 0.52 | 1 | U | R.REDARGALK.K |
| 1322 | 537.792 | 1037.4388 | 1033.5464 | -2.56 | 0 | 87 | 1.1e-07 | 1 | U | R.ADARGOREVOTE.L |
| 1522 | 537.792 | 1037.4388 | 1033.5464 | -2.56 | 0 | 49 | 0 | 0.0087 | 1 | U | R.SELPHOGILFEDUR.A |
| 1523 | 503.9057 | 1603.7968 | 1603.7995 | -1.62 | 0 | 49 | 0 | 0.0087 | 1 | U | R.SELPHOGILFEDUR.A |
| 1524 | 537.792 | 1037.4364 | 1822.9101 | 1822.9137 | 3.597 | 0 | 70) | 6.1e-006 | 1 | U | R.LINTINLOGOVINEDIR.E |
| 1524 | 537.24664 | 1822.9183 | 1822.9137 | 0.53 | 0 | 97 | 1.3e-008 | 1 | U | R.LINTINLOGOVINEDIR.E |
| 1525 | 537.6464 | 1822.9183 | 1822.9137 | 0.53 | 0 | 97 | 1.3e-008 | 1 | U | R.LINTINLOGOVINEDIR.E |
| 1526 | 537.6464 | 1822.9183 | 1822.9137 | 0.53 | 0 | 97 | 1.3e-008 | 1 | U | R.LINTINLOGOVINEDIR.E |
                                                                                                                                                                                         Matches: 6(5) Sequences: 5(4)
      | Symbols: ALY4 | ALWAYS EARLY 4 | chr5:14981805-14983978 REVERSE LENGTH=280
                                                          Mass: 94743 Score: 227 Matches: 3(3) Sequences: 2(2) emPAI: 0.09
 AT1056970.1 Mass: 94743 Score: 227 Matches: 3(3) Sequences: 2(2) emPAI: 0.09
| Symbols: LOS1 | Ribosomal protein S5/Elongation factor G/III/V family protein | chr1:20968245-20971077 REVERSE LENGTH-843 |
| Query Observed | Mr(expt) 
  AT3G44300.1
                                                                Mass: 37529
                                                                                                                                 Score: 227
                                                                                                                                                                                          Matches: 11(10) Sequences: 8(8) emPAI: 1.47

        427.7322
        853.4498
        853.4545
        -5.53
        0
        34
        0.0024

        432.7442
        863.4738
        863.4735
        -1.62
        0
        42
        0.0021

        473.7546
        985.4937
        9.4.993
        -0.70
        0
        (30
        0.006

        481.7515
        961.4884
        961.4902
        -1.87
        0
        45
        0.0096

        358.698
        1073.5876
        1073.5903
        -2.50
        1
        48
        0.0095

        573.78014
        1073.5882
        1073.5903
        -1.9
        1
        48
        0.0095

        595.2878
        1188.5610
        1480.6868
        -17.34
        0
        44
        0.0014

        741.3378
        1480.6611
        1480.6868
        -17.34
        0
        3
        0.017

                                                                                                                                                                                                                                                          0.0082 1
                                                                                                                                                                                                                                                                                                                                              K.FIVEAASK.G
       2499
                                                                                                                                                                                                                                                                                                                                              K.LGAAICWENR.M
                                                                                                                                                                                                                                                                                                                                              K.GIELYCAPTADGSK.E
```

```
        6991
        919,4788
        1836,9431
        1836,9410
        1.11
        0
        32
        0.035
        1
        U
        K.GSELVVFPEAFIGGYPR.G

        8993
        1082,5199
        2163,0252
        2163,0307
        -2.51
        0
        71
        4.9e-006
        1
        Image: R.CIWGGDDSTIPYYDTPIG

                    AT3603530.1 Mass: 61141 Score: 221 Matches: 7(5) Sequences: 6(5) emPAI: 0.42 | Symbols: NPC4 | non-specific phospholipase C4 | chr3:842686-844970 REVERSE LENGTH-538

        AT5G47210.1
        Mass: 37977
        Score: 206
        Matches: 7(6)
        Sequences: 6(5)
        emPAI: 0.96

        | Symbols: | Hyaluronan / mRNA binding family | chr5:19169222-19171012
        REVERSE LENGTH-357

        Query Observed
        Mr(expt)
        Mr(expt)
        Mr(expt)
        Expect Rank Unique
        Peptide

        1855
        545.7797
        1107.5484
        1107.5484
        -0.02
        0 (31)
        0.038
        1
        W. K.NTDERIFIK.

        1859
        555.2789
        1108.5432
        1108.5288
        13.0
        0
        48
        0.00063
        1
        U
        K.MTDERIFIK.

                                                                                                                                                                                    594.2600 1186.5053 1186.5063 -0.83
                    4117 465.929 1394.7660 1394.7670 -0.77 0 35 0.0096 1 U K.FPIKPAPPSQAVR.E
4943 506.9425 1517.8057 1517.8089 -2.15 0 55 0.0002 1 K.GLSINEFLIKPADOK.R
6047 834.8356 1667.6324 1676.7524 0.12 0 100 1.3e-009 1 U R.NODATORNENGOGTR.R
6373 844.9606 1751.8601 1751.8663 -3.56 1 26 0.15 1 U R.ROGVANGESGUVERPPR.N
                | Nation | N
                   Proteins matching the same set of peptides:
ATIG175750.2 Mass: 11323 Score: 197 Matches: 6(6) Sequences: 3(3)
[ Symbols: 6(8.8A) | GAST1 protein homolog 1 | chri:28441813-28442284 ENVERSE LENGTH-97
                 ATIG35720.1 Mags: 36296 Score: 195 Matches: 8(6) Sequences: 7(6) emPAI: 1.02 |
| Symbols: ANNAT1, OXY5, ATOXY5 | annexin 1 | chrl:13225304-13226939 FORMARD LENGTH-317 |
| Query Observed Mr(expt) Mr(calc) ppm Hiss Score Expect Rank Unique Peptide |
| 2244 575.895 | 119.6644 | 119.6758 - 9.87 0 6 6 3.8-006 1 U % LLDAVSUT

        Query
        Observed
        Mr(expt)
        Mr(expt)
        pm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        2284
        575.395
        1149.664
        1149.675
        -9.87
        0
        6
        3.5-00
        1
        U
        K.LLVSLITSKY.Y

        2557
        601.3323
        1200.6501
        1200.6462
        3.26
        1
        49
        0.00068
        1
        U
        R.DALIANEATER.W

        3761
        673.8143
        1345.6141
        1345.6150
        -0.66
        0
        16
        0.9
        1
        U
        R.YQDDMQEELIK.R

        4680
        734.3601
        1466.7025
        1466.6889
        11.4
        1
        44
        0.002
        1
        U
        R.ALLWTLEFORR.D

        4114
        843.4040
        1684.7934
        1684.7904
        1.79
        0
        53
        0.0002
        1
        U
        K.VDDSVPAPSDDABGILR.T

        9150
        105.5881
        2209.1566
        2209.1565
        -0.42
        0
        (30)
        0.054
        1
        U
        R.STIQCLTRPELYFVDVLR.S

        9151
        737.3928
        2209.1566
        <
                43.

        Proteins matching the same set of peptides:

        ATIG55490.2
        Mass: 64169
        Score: 186
        Matches: 5(4)
        Sequences: 4(4)

        | Symbols: CPN608, LENI | chaperonin 60 beta | chr1:20715717-20718673 REVERSE LENGTH-600
        ARX613470.1
        Mass: 63702
        Score: 186
        Matches: 5(4)
        Sequences: 4(4)

        | Symbols: | TCP-1/cpn60 chaperonin family protein | chr3:4389685-4392624 FORWARD LENGTH-596

                  ATIG26550.1 Mass: 15019 Score: 185 Matches: 6(4) Sequences: 4(4) emPAI: 2.04

| Symbols: | FKEF-like peptidyl-prolyl cis-trans isomerase family protein | chr1:9171800-9172716 FORWARD LENGTH=142
                   Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
2105 378.2004 1131.5793 1131.5825 -2.85 1 37 0.012 1 U K.KGGDLGWFPR.G
                    <u>AT3G13570.1</u> Mass: 30265 Score: 174 Matches: 7(7) Sequences: 5(5) emPAI: 1.31 Symbols: SCL30A, At-SCL30A | SC35-like splicing factor 30A | chr3:4429564-4431602 REVERSE LENGTH=262
                  Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

1013 493.7126 985.4106 985.4141 -3.55 0 44 0.00049 1 R.DYYTGDPR.G

        AT2633410.1
        Mass: 41303
        Score: 173
        Matches: 4(4)
        Sequences: 3(3)
        emPAI: 0.36

        | Symbols: | RNA-binding (RRM/RBD/RNF motifs) family protein | chr2:14156085-14157435
        FORWARD LENGTH-404

        Query Observed Kr(expt)
        Mr(expt)
        Nr, MFDSGANVR.T
        S634
        799,4030
        1596,7915
        1596,7937
        -1.37
        0
        42
        0.003
        1
        U
        R.NFDSGANVR.T
        S626
        859,9575
        1717,9039
        -2.00
        0
        82
        3.9e-007
        1
        U
        K.IFVOGLPPALTSDEFR.A 5262

                 ATCG00490.1
                                                                 Mass: 53435
                                                                                                                  Score: 173
                                                                                                                                                           Matches: 8(6) Sequences: 8(6) emPAI: 0.61
                AT3G15730.1 Mass: 92246 Score: 165 Matches: 9(7) Sequences: 8(6) emPAI: 0.32
```

```
| Symbols: PLDALPHAI, PLD | phospholipase D alpha 1 | chr3:5330835-5333474 FORMARD LENOTH=810
Query Observed Mr(expt) Mr(cale) pps Miss Score Expect Rank Unique Peptide
111 507.741 1013.4737 1013.4778 -4.05 0 23 0.11 U R.AQGLEEDFR.N
21224 429.5598 1285.6574 1285.6779 -15.89 0 44 0.0019 1 R.SIQDAYHAIR.R
                     643.8447 1285.6748 1285.6779
                                                                                                               -2.39
                                                                                                                                                (33) 0.025
                                                                                                                                                                                                                          R.SIQDAYIHAIR.R
                                                                                                             -2.39 U (33)

-1.60 0 40

-3.41 0 41

-2.32 0 40

0.16 0 39

-1.55 0 34

5.40 0 19
                                                                                                                                                    (33) 0.025 1 R.SIQONTHIATR.R
40 0.0033 1 U R.RPKPGGDVTIGELLK.K
41 0.0014 1 U R.RPKPGGDVTIGELLK.K
40 0.0043 1 U R.LEGPIAMOVYNPRGQ.N
39 0.008 1 U R.LEGPIAMOVYNPRGQ.N
40 0.022 1 U K.YMDFYSSSLEEDLFGHLLR.Y
19 0.87 1 U R.TLDTVHHDDFHQPNFTGAAITK.G
                     784.8549 1567.6952 1567.6977 -1.60

    5315
    784.8549
    1567.6952
    1567.6972

    5429
    527.0366
    1578.9039
    1578.9093

    7582
    645.6342
    1933.8808
    1933.8853

    7682
    984.4698
    1966.9220
    1966.9247

    10634
    616.7937
    2463.1457
    2463.1612

    10641
    617.3009
    2465.1745
    2465.1612

ATSGS6740.1 Mass: 52876 Score: 157 Matches: 5(4) Sequences: 4(3) emPAI: 0.38

[Number | Symbols: HAG2, HAC7, HAG02, HAC07 | histone acetyltransferase of the GHAT family 2 | chr5:22953009-2295577 REVERSE LENGTH-467

[Number | Observed | Mr(expt) | Mr(ealc) | ppm | Miss Score | Expect Rank Unique | Peptide |
[Number | Symbols: HAG2, HAC7, HAG02, HAC07 | histone acetyltransferase of the GHAT family 2 | chr5:22953009-2295577 REVERSE LENGTH-467

[Number | Observed | Mr(expt) | Mr(ealc) | ppm | Miss Score | Expect Rank Unique | Peptide |
[Number | Symbols: HAG2, HAC7, HAG02, HAC07 | Hac08, HAG07 | HAG08, HAG07 | HAG08, HAG0
  AT5G58470.1 Mass: 42746 Score: 154 Matches: 5(5) Sequences: 4(4) empAI: 0.49 [ Symbols: TAF15b | TBP-associated factor 15B | chr5:23638566-23640854 REVERSE LENGTH=4
 Proteins matching the same set of peptides:

ATSG58470.2 Mass: 42746 Score: 154 Matches: 5(5) Sequences: 4(4)

| Symbols: TAF15b | TBP-associated factor 15B | chr5:23638566-23640854 REVERSE LENGTH-422
| ATIGI4320.1 | Mass: 25357 | Score: 152 | Matches: 2(2) | Sequences: 2(2) | empAr: 0.40 | | | |
| Symbols: SAC52, RPL10, RPL10\(\hbar\) | Ribosomal protein Life/Li0e family protein | chri:4888270-4889408 FORWARD LENGTH-220 |
| Query Observed | Mr(expt) | Mr(cale) | ppm | Miss Score | Expect Rank Unique | Peptide |
| 2317 | 577-8659 | 153.7133 | 153.7183 | -0.89 | 0 74 | 2.68-07 | 1 U | R.VAIGQULSVR.C |
| 3261 | 638.3128 | 1274.6111 | 1274.6102 | 0.67 | 0 102 | 3.18-009 | 1 U | R.ENVSSEALEAAR.I
  AT1G14320.1
  Proteins matching the same set of peptides:
AT10226910.1 Mass: 25349 Score: 152 Matches: 2(2) Sequences: 2(2)
| Symbols: RPL108 | Ribosomal protein Ll6p/Ll0e family protein | chr1:9321709-9322813 FORWARD LENGTH-221
   ATIG66580.1 Mass: 25312 Score: 152 Matches: 2(2) Sequences: 2(2)
| Symbols: SAG24, RPL10C | senescence associated gene 24 | chr1:24839208-24840439 FORWARD LENGTH-221
  AT2G33210.1 Mass: 62339 Score: 150 Matches: 4(4) Sequences: 4(4) emPAT: 0.31 | Symbols: HSP60-2 | heat shock protein 60-2 | chr2:14075093-14078568 REVERSE LEMGTH-58

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect
        Rank Unique
        Peptide

        391
        413.7550
        825.4955
        825.4950
        -0.56
        0
        29
        0.012
        1
        K.AGIIDDEK.V

        2544
        598.8697
        1195.7249
        1195.7288
        3.25
        0
        38
        0.0013
        1
        K.IGWQIIQNALK.T

        2603
        603.7946
        1205.5975
        -2.47
        0
        73
        2.7e-006
        1
        U
        K.IGGASSTEVSEK.K

        4900
        754.8863
        1507.7581
        1507.7592
        -0.71
        0
        82
        3.5e-007
        1
        K.TLIFNELEVVEGNS.

                                                                                                                                                                                                                           K.TLFNELEVVEGMK.I
   Proteins matching the same set of peptides:
A70333210.2 Mass: 61781 Socre: 150 Matches: 4(4) Sequences: 4(4)
| Symbols: NSP60-2 | heat shock protein 60-2 | chr2:14078093-14078568 REVERSE LENGTH=580
AT2G24590.1
    ATEG24590.1 Mass: 22073 Score: 141 Matches: 8(6) Sequences: 6(4) emPAI: 1.14
| Symbols: RSZ22a, At-RSZ22a | RNA recognition motif and CCHC-type zinc finger domains containing protein | chr2:10449837-10450860 FORWARD LENGTH=196

        Query Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        30
        359.2054
        716.3962
        716.3970
        -1.05
        0
        29
        0.085
        1
        R.SVWVAR.R

    30
    39.9.264
    716.3962
    716.3970
    -1.05
    0
    29
    0.085
    1
    R.SWWAR.R

    814
    469.2155
    936.4189
    -2.53
    0
    44
    0.0011
    1
    R.SWWAR.R

    1201
    516.7758
    1031.5371
    1031.5400
    -2.82
    0
    31
    0.054
    1
    R.YYYGHLDPR.V

    4596
    91.5262
    1471.5569
    1471.5569
    -2.77
    0
    58
    3.4e-006
    1
    U
    K.CYEGGEGHFAR.E

    4894
    502.7584
    1504.7133
    1504.7137
    -1.64
    1
    29
    0.07
    1
    U
    R.ABDEVFYANGOKEK.D

    6051
    557.2662
    1668.7767
    1668.7896
    -7.75
    0
    33
    0.019
    1
    U
    R.PPGYAFLDFEDER.D

 AT4G35785.1 Mass: 28213 Score: 140 Matches: 5(4) Sequences: 4(4) emPAI: 0.82 | Symbols: | RNA-binding (RRM/RBD/RNP motifs) family protein | chr4:16953211-16955127 REVERSE LENGTH=238
 Proteins matching the same set of peptides:
A74035785.2 Mass: 28359 Score: 140 Matches: 5(4) Sequences: 4(4)
[ Symbols: | RMA-binding (RBM/RBD/RNP motifs) family protein | chr4:16983211-16955127 REVERSE LENGTH-239
Proteins matching the same set of peptides:

ATIG66260.2 Mass: 31299 Score: 140 Matches: 5(4) Sequences: 5(4)

| Symbols: | RNA-binding (RRW/RRD/RNP motifs) family protein | chr1:24695895-24697883 REVERSE LENGTH=295
```

```
        1412
        351.8680
        1052.5822
        1052.5866
        -4.17
        0
        34
        0.01
        1
        U
        KVDAPVEKPAK.F

        3278
        640.8445
        1279.6744
        1279.6772
        -2.19
        0
        65
        1.2e-005
        1
        U
        R.VNQAPVIGTSTK.I

        4800
        741.4546
        1480.8946
        1480.8977
        -2.08
        0
        78
        8.9e-008
        1
        U
        K.ASITPGTVLIILAGR.F

    ATIG49240.1 Mass: 42064 Score: 136 Matches: 3(3) Sequences: 3(3) empAI: 0.35

| Symbols: ACT8 | actin 8 | chr1:18216539-18217947 FORNARD LENGTH-377

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

4209 471.8955 | 1412.6684 - 0.51 0 70 3.99-006 I U K.AFYDEAGPGIVER.K

4222 505.9199 | 1514.7379 | 1514.7419 - 2.60 0 36 0.012 1 K.IWHITFYNELR.I

6618 888.4551 | 1774.8956 | 1774.8737 | 12.3 0 65 1.99-005 1 K.IWHITFYNELR.I
 AT1G49240.1
   Proteins matching the same set of peptides:
ATMOLTRED.2 Mass: 42078 Socre: 136 Matches: 3(3) Sequences: 3(3)
| Symbols: ATTZ, DERI, ISB2, ENL2 | actin 2 | chr3:6475535-6476832 FORWARD LENGTH=377
| Art2020450.1 | Mass: 15497 | Score: 135 | Matches: 4(4) | Sequences: 3(3) | emb71: 1.93 | | | | | |
| Symbols: | Ribosomal protein L14 | chr2:8813923-8815071 FORWARD LENGTH-134 |
| Query | Observed | Mr(expt) | Mr(calo) | ppm | Miss Score | Expect Rank Unique | Peptide |
| 1894 | 588.7718 | 1115.5293 | 1115.5281 | 0.84 | 0 43 | 0.0015 | 1 | U | R.AUVARPOMER.I |
| 2102 | 566.7681 | 1131.5216 | 1131.5230 | -1.26 | 0 | (28) | 0.048 | 1 | U | R.AUVARPOMER.I |
| 2970 | 686.3944 | 1370.7741 | 1370.7769 | -0.02 | 0 | 0.93 | 2e-008 | 1 | U | R.ESIDIVIDIR.V |
| 5168 | 566.0037 | 1694.9893 | 1694.9931 | -2.20 | 1 | 39 | 0.0015 | 1 | U | R.LSLIDIVIDINEVER.K
   Proteins matching the same set of peptides:

<u>ATGG27090.1</u> Mass: 15496 Score: 135 Matches: 4(4) Sequences: 3(3)

| Symbols: | Ribosomal protein Li4 | Chri+11594104-13595167 REVERSE LEMGTH-134
| Nambols: TUB2 | Tubulin beta chain 2 | chr5:25:81560-25:183501 FORWARD LENGTH-450 | | | | | | | | |
| Symbols: TUB2 | Tubulin beta chain 2 | chr5:25:81560-25:183501 FORWARD LENGTH-450 |
| Ouery Observed Kr(expt) Kr(calc) | ppm Kiss Score | Expect Rank Unique | Peptide |
| 1479 | 533.2562 | 1064.4781 | 1064.6201 | -2.17 | 0 16 | 0.16 | 1 | K.IMBUCADAPE.H |
| 1533 | 359.8478 | 1076.5216 | 1076.5250 | -3.19 | 1 | 22 | 0.34 | 1 | K.IMBUCADAPE.H |
| 1536 | 750.3497 | 1138.6849 | 1138.6862 | -1.18 | 0 | 56 | 2.9e-005 | 1 | K.IMBUCADER.F |
| 1536 | 732.8374 | 1445.6402 | 1445.6243 | 10.9 | 0 | 52 | 0.0014 | 1 | U | R.IMPUTNESGUR.F |
| 1536 | 732.8374 | 1445.6402 | 1445.6243 | 10.9 | 0 | 70 | 6.4e-006 | 1 | U | R.AVIMDLEPGTMOSER.S
 | Name | 
AT7G37270.1 Mass: 23090 Score: 129 Matches: 3(3) Sequences: 2(2) empA1: 0.44 | Symbols: ATRPS5B, RPS5B | ribosomal protein 5B | chr2:15647883-15649042 REVERSE LENGTH-207

        Outery
        Observed
        Mr (calc)
        ppm
        Miss Sorre
        Expect Bank Unique
        Peptide
        Peptide

        2528
        398.5434
        1192.6084
        1192.6102
        -1.49
        0
        45
        0.0016
        1
        U
        X.HARTPURTAGR.Y

        5854
        816.4195
        1630.0244
        1630.8236
        0.52
        0
        (57)
        0.00013
        1
        U
        X.HARCLADELINAAK.G

        5855
        844.6154
        1630.8244
        630.8236
        0.52
        0
        (57)
        0.00013
        1
        U
        X.HARCLADELINAAK.G

 Proteins matching the same set of peptides:
A72637270.2 Mass: 23095 Score: 129 Matches: 3(3) Sequences: 2(2)
| Symbols: ATRESSA, RSSS | ribosomal protein 58 | chr2:15647883-15649042 REVERSE LENGTH-207
| Symbols: ATRESSA, MMLI, RFSSA | ribosomal protein 58 | chr2:15647883-15649042 REVERSE LENGTH-207
| A72631980.2 Mass: 23021 Score: 129 Matches: 3(3) Sequences: 2(2)
| Symbols: ATRESSA, AMLI, RFSSA | ribosomal protein 5A | chr3:3778175-3779354 REVERSE LENGTH-207
                                                                                                                                            Score: 124
AT4G21620.1 Mass: 13307
                                                                                                                                                                                                                             Matches: 2(2) Sequences: 2(2) emPAI: 0.87
Proteins matching the same set of peptides:

AT4021620.2 Mass: 10497 Score: 124 Matches: 2(2) Sequences: 2(2)

| Symbols: | glycine-rich protein | chr4:11491519-11491914 FORWARD LENGTH=98
   | AT5042820.1 | Mass: 33611 | Score: 123 | Matches: 6(4) | Sequences: 5(4) | Sequenc
 Proteins matching the same set of peptides:

AT5642820.2 Mass: 33611 Score: 123 Matches: 6(4) Sequences: 5(4)

| Symbols: ATU2AF35B, U2AF35B | Zinc finger C-x8-C-x5-C-x3-H type family protein | chr5:17170445-17171296 REVERSE LENGTH=283
   ATIG20620.1 Mass: 57059 Score: 123 Matches: 5(4) Sequences: 5(4) empAI: 0.35 |
Symbols: CAT3, SEN2, ATCAT3 | catalase 3 | chr1:7143142-7146193 FORNARD LENOTH-92 |
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
282 399.7444 797.4743 797.4759 -2.05 0 25 0.037 |
2134 568.8431 1135.6716 1135.6714 0.22 0 57 1.9e-005 1 U R.APGVQTPVIVE.F |
4976 762.4302 1522.8459 1522.8507 -3.16 0 47 0.00049 1 U R.APGVQTPVIVE.F |
2586 816.983 1531.9021 1531.9035 -0.89 0 27 0.062 1 U R.APGVQTPVIVE.C |
2586 816.9838 1531.9021 1531.9035 -0.89 0 27 0.062 1 U R.EGNFDLVGNNTPVFFIR.D |
2592 969.9905 1937.9665 1937.9636 1.52 0 35 0.021 1 U R.EGNFDLVGNNTPVFFIR.D
 AT1G20620.1
 Proteins matching the same set of peptides:

XT1020620.5 Mass: 5631 Secore: 123 Matches: 5(4) Sequences: 5(4)

Symbols: CAT3, SEN2, ATCAT3 | catalase 3 | chr1:7143142-7146193 FORMARD LENOTH=485
 AT1664370.1 Mass: 1968 Score: 122 Matches: 6(6) Sequences: 5(5) empAI: 1.91

| Symbols: | unknown protein: Has 773 Blast hits to 375 proteins in 118 species: Archae - 0; Bacteria - 97; Metazoa - 421; Fungi - 108; Plants - 31; Viruses - 0; Other Eukaryotes - 116 (source: NCBI ELink). | chr1:23888967-238i
| Symbols: | unknown protein: Has 773 Blast hits to 375 proteins in 118 species: Archae - 0; Bacteria | Query Observed Mr(expt) Mr(calo) | ppm Miss Score | Kppect Rank Unique | Peptide | Peptide | Respondence | R
    AT5G09810.1 Mass: 41937 Score: 121 Matches: 3(3) Sequence: | Symbols: ACT7 | actin 7 | chr5:3052809-3054220 FORWARD LENGTH=377
                                                                                                                                                                                                                              Matches: 3(3) Sequences: 3(3) emPAI: 0.36

        Query
        Observed
        Mr(expt)
        Mr(calc)
        pm
        Miss
        Score
        Expect Rah
        Unique
        Peptide

        4722
        492.5628
        1474.6665
        1474.6688
        -1.59
        0
        56
        6.7e-005
        1
        U
        K.syrppe

        6518
        888.4551
        1774.8956
        1774.8737
        12.3
        0
        65
        1.9e-005
        1
        K.MYELPE

                                                                                                                                                                                                                                                                                                                                                                                        K.IWHHIFICHEL...
K.NYELPDGQVITIGAER.F
AT3G44320.1 Mass: 38340 Score: 121 Matches: 4(3) Sequences: 4(3) emPAI: 0.39 Symbols: NIT3, AtNIT3 | nitrilase 3 | chr3:15993419-15995493 FORWARD LENGTH=346
```

```
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        432.7442
        863.4738
        863.4752
        -1.62
        0
        42
        0.0021
        1
        K.FIVEADASK.G.

        595.2878
        1188.5610
        1188.5710
        -8.37
        0
        44
        0.0014
        1
        U
        K.GADATOMENGR.M.

        644.6458
        919.0.9156
        130.09286
        -6.72
        1
        2.6
        0.15
        1
        R.FCIMOGOGGSTIP

        1082.5199
        2163.0325
        2163.0307
        -2.51
        0
        71
        4.9e-006
        1
        R.CIWOGGGSTIP

        2499
                                                                                                                                                                                                                                                                                                                                                                                                                                           R.CIWGOGDGSTIPVYDTPIGK.I
 AT3G57560.1
                                                                                 Mass: 36800
                                                                                                                                                                   Score: 114
                                                                                                                                                                                                                                              Matches: 3(2) Sequences: 3(2) emPAI: 0.26
          Symbols: NAGK | N-acetyl-1-glutamate kinase | chr3:21311164-21312207 REVERSE LENGTH=347
 | Symbols | Ann. | A-acctyl-1-julcantex | Inter-2131120 | Column | A-acctyl-1-julcantex | Inter-2131120 | Column | A-acctyl-1-julcantex | Inter-2131120 | Column | A-acctyl-1-julcantex | Inter-2131120 | A-acctyl-1-julcantex | A-acctyl-1-julcantex | Inter-2131120 | A-acctyl-1-julcantex | A-acctyl-1-julcantex | A-acctyl-1-julcantex | Inter-2131120 | A-acctyl-1-julcantex | A-acctyl-1-julcantex | A-acctyl-1-julcantex | A-acctyl-1-julcantex | Inter-2131120 | A-acctyl-1-julcantex | A-acctyl-1-julcantex | A-acctyl-1-julcantex | Inter-2131120 | Inter-2131120 | A-acctyl-1-julcantex | Inter-2131120 | Inter-2131
| Nation | N
   Proteins matching the same set of peptides:

AT1629920.1 Mass: 2826 Score: 110 Matches: 5(3) Sequences: 5(3)

Symbols: CAB2, AB165, LHCB1.1 | chlorophyll A/B-binding protein 2 | chr1:10475089-10475892 REVERSE LENGTH=267

AT16299910.1 Mass: 28280 Score: 110 Matches: 5(3) Sequences: 5(3)

Symbols: CAB1, AB140, CAB140, LHCB1.3 | chlorophyll A/B binding protein 1 | chr1:10478071-10478874 FORWARD LENGTH=267
AT4G36690.1 Mass: 63683 Score: 107 Matches: 3(1) Sequences: 3(1) emPAI: 0.07

| Symbols: ATU2AF65A | U2 snRNP auxilliary factor, large subunit, splicing factor | chr4:17294139-17297609 REVERSE LENGTH-573

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

717 1132.5580 2263.1014 2263.1042 -1.23 0 18 1 1 U R.YMLQPGAVATTVVCLTQVVTEDELR.D

12088 910.4780 2728.4123 2728.4140 -0.63 0 93 3e-008 1 U R.YMLQPGAVATTVVCLTQVVTEDELR.D

13026 1082.7564 4326.9963 4327.0004 -0.96 1 28 0.06 1 U R.YMLQPGAVATTVVCLTQVVTEDELR.D
   Proteins matching the same set of peptides:
ATG036690.2 Mass: 6081s Sores: 107 Matches: 3(1) Sequences: 3(1)

Symbols: ATUZA655A | U2 smRMP auxilliary factor, large subunit, splicing factor | chr4:17294591-17297609 REVERSE LENGTH-542

ATG036690.3 Mass: 63701 Score: 107 Matches: 3(1) Sequences: 3(1)

Symbols: ATUZA655A | U2 smRMP auxilliary factor, large subunit, splicing factor | chr4:17294422-17297609 REVERSE LENGTH-565

ATG036690.4 Mass: 60799 Score: 107 Matches: 3(1) Sequences: 3(1)

Symbols: ATUZA656A | U2 smRMP auxilliary factor, large subunit, splicing factor | chr4:17294422-17297609 REVERSE LENGTH-565

ATG036690.2 Mass: 60799 Score: 107 Matches: 3(1) Sequences: 3(1)
   AT1G20010.1 Mass: 50880 Score: 105 Matches: 4(2) Sequences: 4(2) emPAI: 0.18 | symbols: TUBS | tubulin beta-5 chain | chr1:6938033-6940481 REVERSE LENGTH=449

        Query
        Observed
        Mr (expt)
        Mr (calc)
        ppm
        Miss
        Score
        Expect
        Exp etc
        Rmk
        Unique
        Peptide

        1479
        533.2162
        1064.4181
        1064.4201
        -2.17
        0
        16
        0.16
        1
        K.NMCADDR.H

        1533
        359.8478
        1076.5216
        1076.5250
        -3.19
        1
        22
        0.34
        1
        K.IRREYPDR.M

        2156
        570.3497
        1138.6849
        1138.6842
        -1.18
        0
        56
        2.9=-005
        1
        K.LAWNLIPFR.L

        5950
        824.4065
        1646.7984
        1646.8008
        -1.42
        0
        70
        6.4e-006
        1
        U
        R.AVIMDLEPGIMDSIR.S

      Proteins matching the same set of peptides:
AT1G75780.1 Mass: 50755 Score: 105 Matches: 4(2) Sequences: 4(2)
      | Symbols: TUB1 | tubulin beta-1 chain | chr1:28451378-28453602 REVERSE LENGTH=447
 AT3G49430.1 Mass: 33807 Score: 105 Matches: 6(5) Sequences: 5(5) empAI: 0.87

| Symbols: SRp34a, SR34a, At-SR34a | SER/ARG-rich protein 34A | chr3:18332668-18334829 FORM
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
421 415.502 828.4858 828.4957 -11.88 0 31 0.032 1 U R.INDITER.N.Y

671 448.2100 894.4054 894.4083 -3.22 0 39 0.003 1 K.INDITER.N.Y

1183 512.2570 1022.4995 1022.5033 -3.69 1 39 0.0056 1 R.INDITER.N.Y

1363 512.25724 1068.4292 1068.4295 -1.19 0 35 0.0021 1 U R.DGYNDGCK.L

13643 441.5410 1321.6010 1321.6190 -13.61 0 45 0.0011 1 U R.EMBIEDIFYK.Y
                                                                                                                                                                                                                                                                                                                                                             chr3:18332668-18334829 FORWARD LENGTH=300
                                                                                                                                                                                                                                                                                                                                                                                                                                 R.KLDDTEFR.N 1182
 Proteins matching the same set of peptides:
AT3649430.2 Mass: 33727 Score: 105 Matches: 6(5) Sequences: 5(5)

| Symbols: SRp34a, SR34a, At-SR34a | SER/ARG-rich protein 34A | chr3:18332668-18334617 FORMARD LENGTH-297

| Symbols: SRp34a, SR34a, At-SR34a | SER/ARG-rich protein 34A | chr3:18332668-18334829 FORMARD LENGTH-300
 | Nucleic acid-binding, OB-fold-like protein | Chris-13858152-13858589 REVERSE LENGTH=145 |
| Symbols: | Nucleic acid-binding, OB-fold-like protein | Chris-13858152-13858589 REVERSE LENGTH=145 |
| Ouery Observed Mr(expt) Mr(calc) ppm Miss Score |
| 2272 | 575.2805 | 1148.5464 | 1148.5462 | 0.17 0 56 |
| 2539 | 588.7518 | 1195.4891 | 1195.5036 | -12.10 0 55 | 3.3e-005 | U R.COVMCIDOWLR. |
| 4248 | 711.8586 | 1421.7027 | 1421.7038 | -0.76 | 1 42 | 0.0043 | 1 | R.DYODDRADVILK.Y
   | AT5G02530.1 | Mass: 30761 | Score: 103 | Matches: 3(3) | Sequences: 3(3) | empAI: 0.51 | Symbols: | RNA-binding (RRM/RBD/RNP motifs) family protein | chr5:564332-565776 REVERSE LENGTH=292
 | Ownery Observed Mr(expt) Mr(call) | ppm Miss Sorre Expectank Unique Peptide | 1401 | 525.7628 | 1049.5110 | 1049.5142 | -3.04 | 0 | 53 | 0.00023 | 1 | U R.YNNYQLOK.L | 2460 | 590.8184 | 1179.6222 | 1179.6248 | -2.22 | 1 | 41 | 0.003 | 1 | U R.YNNYQLOK.L | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 377 | 
     Proteins matching the same set of peptides:

AT5602530.2 Mass: 30548 Score: 103 Matches: 3(3) Sequences: 3(3)

| Symbols: | RNA-binding (RRM/RBD/RNF motifs) family protein | chr5:564332-565776 REVERSE LENGTH-290
                                                                                 Mass: 38882 Score: 103 Matches: 4(4) Sequences: 4(4) emPAI: 0.55
 | Arthority | Arth
 ATG25570.1 Mass: 35108 Score: 101 Matches: 3(3) Sequences: 2(2) empAr: 0.27

| Symbols: | BEST Arabidopsis thailans protein match is: coper ion binding (TAIR:ATG32610.1); Has 43784 Blast hits to 26928 proteins in 1799 species: Archae - 86; Bacteria - 6347; Metazoa - 15971; Fungi - 5398; Plants - 1931

Query Observed Mr(expt) Mr(expt) Mr(aclo pass Miss Score | Sepect Rank Unique | Peptide |
6022 831.3638 1660.7130 1660.7130 1600.7130 - 2.77 0 39 0.0024 1 U K.EINGLEESGEAGGEK.K
6679 5959.9927 1784.9564 1784.9564 1784.9564 1784.9564 1784.9564 1784.9564 1784.9564 1784.9565 0 .23 0 60 5.4e-05 1 U K.EINGLEESGEAGGEK.K
6680 893.4857 1784.9569 1784.9569 1784.9560 0.51 0 0.51 0 0.0036 1 U K.ELABLEALLADFGVAPK.E
      Proteins matching the same set of peptides:
AT2G25670.2 Mass: 35108 Score: 101 Matches: 3(3) Sequences: 2(2)
```

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| Numbels | Numb
  Proteins matching the same set of peptides:

AT5007090.1 Mass: 29969 Score: 101 Matches: 5(4) Sequences: 4(3)

| Symbols: | Ribbsomal protein S4 (RP54A) family protein | chr5:2202410-2203805 FORWARD LENGTH-262

AT5007090.2 Mass: 27804 Score: 101 Matches: 5(4) Sequences: 4(3)

| Symbols: | Ribbsomal protein S4 (RP54A) family protein | chr5:2202783-2203805 FORWARD LENGTH-244
     AT5658420.1 Mass: 29911 Score: 101 Matches: 5(4) Sequences: 4(3)

| Symbols: | Ribosomal protein S4 (RFS4A) family protein | chr5:23619599-23620896 FORWARD LENGTH=262
| Nation | N
  Mass: 185775 Score: 99 Matches: 2(2) Sequences: 2(2) empAI: 0.05
  AT1G65440.1
 Proteins matching the same set of peptides:

ATIG65440.2 Mass: 186590 Score: 99 Matches: 2(2) Sequences: 2(2)

Symbols: GTB1 | global transcription factor group B1 | chr1:24306908-24314327 REVERSE LENGTH=1642

ATIG65440.3 Mass: 167204 Score: 99 Matches: 2(2) Sequences: 2(2)

Symbols: GTB1 | global transcription factor group B1 | chr1:24306988-24314302 REVERSE LENGTH=1454
     AT1654270.1 Mass: 47075 Score: 98 Matches: 4(3) Sequences: 4(3) emPAI: 0.31 | Symbols: EIF4A-2 | eif4a-2 | chr1:20260495-20262018 FORWARD LENGTH=412
| Symbols: SIF4A-2 | e1f4a-2 | chr1:20260495-20262018 FORWARD LENGTH:=412 | chr2:20260495-20262018 FORWARD LENGTH:=412 | chr2:20260495-20262018 FORWARD LENGTH:=412 | chr2:20260495-2026018 | chr2:20260495 | 
    Proteins matching the same set of peptides:

AT1054270.2 Mass: 46508 Soorce; 98 Matches: 4(3) Sequences: 4(3)
| Symbols: 15474.2 | clri4.2 | clri20260495-20262018 FORWARD LENGTH: 407
| AT1072730.1 Mass: 47083 Soorce: 98 Matches: 4(3) Sequences: 4(3)
| Symbols: | DEAD(N)H.-box RNA helicase family protein | chri:27378040-27379593 REVERSE LENGTH: 414
| AT3031392.01 Mass: 45096 Soorce: 98 Matches: 4(3) Sequences: 4(3)
| Symbols: E1F4AL, RH4, TIF4AL | eukaryotic translation initiation factor 4AL | chr3:4592635-4594128 REVERSE LENGTH: 412
                                                                     Mass: 47376
                                                                                                                                       Score: 98
                                                                                                                                                                                                       Matches: 4(3) Sequences: 4(3)
            Symbols: EIF4A1, RH4, TIF4A1 | eukaryotic translation initiation factor 4A1 | chr3:4592586-4594128 REVERSE LENGTH=415
     | Symbols: Lif4A1, RM, | Lif4A1 | eukaryotic translation initiation factor 4A1 | clif3-4592488-4594109 REVERSE LENGTH-402 AT361382-0. | Mass: 4601393 Score: 98 Matches: 4(3) Sequences: 4(3) | Symbols: EIF4A1, RH4, TIF4A1 | eukaryotic translation initiation factor 4A1 | chr3:4592635-4594094 REVERSE LENGTH-402 AT3613820.4 Mass: 46393 Score: 98 Matches: 4(3) Sequences: 4(3) | Symbols: EIF4A1 | eukaryotic translation initiation factor 4A1 | chr3:4592635-4594128 REVERSE LENGTH-407
  AT5G39570.1 Mass: 43557 Score: 98 Matches: 5(3) Sequences: 4(3) emPAI: 0.34 | Symbols: | FUNCTIONS IN: molecular_function unknown: INVOLVED IN: biological_process
                                                                                                                                                                                                                  unknown; INVOLVED IN: biological process unknown; LOCATED IN: cytosol, nucleus; EXPRESSED IN: 25 plant structures; EXPRESSED DURING: 14 growth stages; BEST Arabidopsis thaliana pro

    4206
    707.3257
    1412.6369
    1412.6433
    -4.50
    0
    (15)
    0.99
    1
    U
    R.RPEGSYGSGYGGR.T

    4207
    471.8873
    1412.6400
    1412.6433
    -2.33
    0
    38
    0.0052
    1
    U
    R.RPEGSYGSGYGGR.T

    6352
    582.2716
    1743.7930
    1743.7951
    -1.22
    0
    19
    0.47
    1
    U
    R.SDDQVESYIKPSYGR.S

 | AT2637190.1 | Mass: 18045 | Score: 94 | Matches: 2(2) | Sequences: 2(2) | empAI: 0.59 |
| Symbols: | Ribosomal protein L11 family protein | chr2:15619559-15620059 REVERSE LENGTH-166 |
| Query Observed Mr(expt) Mr(cale) ppm Miss Score Expect Rank Unique Peptide |
| Symbols: | Store | | | | | |
| Symbols: | Store | Store | Store | Store | Store | Store |
| Store | Store | Store | Store | Store |
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| Store | Store | Store | Store | Store | Store |
| Store |
| Store | Sto
    Proteins matching the same set of peptides:

AT3053430.1 Mass: 18073 Score: 94 Matches: 2(2) Sequences: 2(2)

| Symbols: | Ribosomal protein Lil family protein | chr3:19809895-19810395 REVERSE LENGTH=166

ATS060670.1 Mass: 17946 Score: 94 Matches: 2(2) Sequences: 2(2)

ATS060670.1 Mass: 17946 Score: 94 Matches: 2(2) Sequences: 2(2)

ATS060670.1 Mass: 17946 Score: 94 Matches: 2(2) Sequences: 2(2)
     | Symbols: | Ribosomal protein L11 family protein | chr5:24381066-24381566 REVERSE LENGTH=166
  AT4G21280.1 Mass: 23781 Score: 93 Matches: 4(3) Sequences: 4(3) emPAI: 0.70
 AT4021280.1 Mass: 23781 Sorce: 93 Matches: 4(3) Sequences: 4(3) emPAI: 0.70 [Symbols: PSSQ, PSBQ, PSBQ-1 | photosystem II subunit QA | chris:11334446-11335597 FORWARD LENGTH=223 [Query Observed Mr(expt) Mr(calc) ppm Miss Sorre Expect Rank Unique Peptide [4000 689.8757 1377.7364 397.7504 -9.84 0 23 0.22 1 U R.YDLATIISKRFK.D [4870 749.8716 1497.7286 1497.7351 -4.34 0 43 0.0025 1 U K.FPTIINLDYARK.K [6055 835.9336 1669.8527 1669.8563 -2.10 0 49 0.00071 1 U K.YTRATYSALNEVLAK.L [7842 995.4802 1988.9459 1988.9552 -4.68 0 38 0.085 1 U K.YGPPPAPSGGLPGTDNSDQAR.D
 AT5G38420.1 Mass: 20622 Score: 93 Matches: 4(4) Sequences: 4(4) emPAI: 1.26
| Symbols: | Ribulose bisphosphate carboxylase (small chain) family protein | chr5:15381203-15381978 REVERSE LENGTH=181
 Proteins matching the same set of peptides:
AT5038410.1

Mass: 2056 Score: 93 Matches: 4(4) Sequences: 4(4)

Symbols: | Ribulose bisphosphate carboxylase (small chain) family protein | chr5:15377501-15378306 REVERSE LENGTH-181

AT5038410.2

Mass: 19668 Score: 93 Matches: 4(4) Sequences: 4(4)

Symbols: | Ribulose bisphosphate carboxylase (small chain) family protein | chr5:15377501-15378306 REVERSE LENGTH-174

AT5038410.3

Mass: 21112 Score: 93 Matches: 4(4) Sequences: 4(4)

Symbols: | Ribulose bisphosphate carboxylase (small chain) family protein | chr5:15377501-15378306 REVERSE LENGTH-186

| Symbols: | Ribulose bisphosphate carboxylase (small chain) family protein | chr5:15377501-15378306 REVERSE LENGTH-186
 <u>AT4G24680.1</u> Mass: 155449 Score: 92 Matches: 1(1) Sequences: 1(1) emPAI: 0.03 | Symbols: MOS1 | modifier of snc1 | chr4:12733425-12739737 FORWARD LENGTH=1427

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        4389
        717.3514
        1432.6882
        1432.6906
        -1.69
        0
        92
        3.6e-008
        1
        U
        K.TTSADTQAQLQNR.S

 Proteins matching the same set of peptides:

ATIG23690.2 Meas: 25832 Score: 91 Matches: 3(3) Sequences: 2(2)

[ Symbols: | alpha/beta-hydrolases superfamily protein | chr3:8473833-8475655 FORMARD LENGTH-236
     AT5658290.1 Mass: 45894 Score: 91 Matches: 1(1) Sequences: 1(1) emPAT: 0.10
| Symbols: RPT3 | regulatory particle triple-A ATPase 3 | chr5:23569155-23571116 FORWARD LENGTH=408
```

```
uery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
8018 1015.0344 2028.0542 2028.0527 0.71 0 91 4.1e-008 1 U K.ENAPAIIFIDEVDAIATAR.F
                  Proteins matching the same set of peptides:

AT3G08580.2 Mass: 41563 Score: 91 Matches: 3(3) Sequences: 3(3)
                    | Symbols: AAC1 | ADP/ATP carrier 1 | chr3:2605706-2607030 REVERSE LENGTH=381
                                                           Mass: 28013 Score: 90
                                                                                                                                                 Matches: 2(2) Sequences: 2(2) emPAI: 0.35
                    | Name | 
                   Proteins matching the same set of peptides:
AT403619.1 Mass: 28159 score: 90 Matches: 2(2) Sequences: 2(2)
[ Symbols: | Ribsomal protein 12 family | chr4:17097613-17098656 FORWARD LENGTH=258
                  ATCG00480.1 Mass: 53957 Score: 87 Matches: 3(2) Sequences: 3(2) emPAI: 0.17

| Symbols: ATPS, PB | ATP synthase subunit beta | chrcf:5260-54156 REVERSE LENGTH-498

Query Observed Mr(cspt) Mr(call) ppm Miss Score Expect Rank Unique Peptide

977 488.2795 974.5445 974.5549 -10.74 0 40 40 0.0042 1 U K.IGLFOGAGVUK.T

4222 708.3386 1414.7026 1414.7025 -1.84 0 71 3.7e-006 1 U R.INPITSNEWSIR.E

4595 736.4305 1470.8464 1470.8479 -1.05 0 15 0.71 1 U K.TVLIMELINNIAK.A
                 100. AT4010340.1 Mass: 30195 Score: 85 Matches: 2(2) Sequences: 2(2) emPAI; 0.32

| Symbols: LHCB5 | light harvesting complex of photosystem II 5 | chr4:6408200-6409496 FORWARD LENGTH-280

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptida.
3076 416.5459 1246.6267 1246.6458 -15.37 0 36 0.16 1 U K.YQAPELIHAR.W

8780 709.0382 2124.0928 2124.0964 -1.67 0 68 8e-006 1 U K.HLSDPFORNLLTVIAGTAER.A
| 101. ATIG45000.1 | Mass: 44898 | Score: 85 | Matches: 2(2) | Sequences: 1(1) | empAI: 0.21 | Symbols: | AAA-type ATPase family protein | chr1:17009220-17011607 FORWARD LENGTH=399 | Query Observed | Mr(expt) | Mr(calc) | ppm | Miss Score | Expect Rank Unique | Peptide | 6771 | 900.9825 | 1799.5904 | 1799.4941 | 0.72 | 0 | 62 | 3.1e-005 | 1 | U | R. ESIELPHMNPELFLR.V | 6778 | 901.4815 | 1800.9485 | 1800.9331 | 8.52 | 0 | (43) | 0.0026 | 1 | U | R. ESIELPHMNPELFLR.V
                   Proteins matching the same set of peptides:
ATIG45800.2 Mass: 37720 Socre: 85 Matches: 2(2) Sequences: 1(1)
[ Symbols: | AAA-type ATPase family protein | chris17009220-17011607 FORMARD LENGTH-335
                    Proteins matching the same set of peptides:

AT504202.0.1 Mass: 73801 Soore: 84 Matches: 2(2) Sequences: 2(2)

Symbols: BIP, BIP2 | Heat shock protein 70 (Hsp 70) family protein | chr5:16807697-16810480 REVERSE LENGTH-668

AT5042020.2 Mass: 67644 Soore: 84 Matches: 2(2) Sequences: 2(2)

| Symbols: BIP | Heat shock protein 70 (Hsp 70) family protein | chr5:16807697-16810480 REVERSE LENGTH-613
| Numbols: SCL30, At-SCL30 | Score: 82 | Matches: 6(3) | Sequences: 4(2) | empAi: 0.33 | | | | | | |
| Symbols: SCL30, At-SCL30 | SC35-like | splicing factor 30 | chr3:20561024-20563502 | FORMARD LENGTH=262 |
| Query | Observed | Mr(expt) | Mr(exlc) | ppm | Miss Score | Expect Rank Unique | Peptide |
| 105 | 381.7106 | 761.4066 | 61.4072 | -0.70 | 0.23 | 0.29 | 1 | 0 | R. DYYTSQDPR.G |
| 1012 | 493.2208 | 984.4270 | 984.4301 | -3.18 | 0 | 21 | 0.14 | 1 | U | R. DYYTSQDPR.G |
| 1712 | 549.7206 | 1097.4267 | 1097.4261 | 0.56 | 0 | 46 | 0.0016 | 1 | U | R. DEMDENTSR.R |
| 5301 | 521.5642 | 1561.6764 | 1561.6757 | -0.82 | 1 | 43 | 0.00071 | 1 | U | R. GGPPRGEEDENTSR.R |
| Mass: 63627 | Mass: 63627 | Score: 81 | Matches: 2(1) | Sequences: 2(1) | empAI: 0.07 |
| Symbols: | TCP-1/cpn60 | chaperonin family | protein | chr5: 22874058-22876966 | FORMARD LENGTH=597 |
| Query | Observed | Mr(expt) | Mr(exlo: ) | ppm | Miss Score | Expect Rank Unique | Peptide |
| 2879 | 615.3439 | 1228.6733 | 1228.6734 | 14.75 | 0 20 | 0.54 | 1 U | R.DIISILEDAIK.G |
| 3279 | 640.8756 | 1279.7367 | 1279.7612 | -19.18 | 0 81 | 1.2e-007 | 1 | K.VVAAGANPVLITE.G
                   Proteins matching the same set of peptides:
                   AT5G56500.2 | Mass: 63627 | Score: 81 | Matches: 2(1) | Sequences: 2(1) | Sequences: 2(1) | Sequences: 2(1) | TCP-1/cpn60 chaperonin family protein | chr5:22874058-22876966 FORWARD LENGTH-597
                                                             Mass: 16798 Score: 80 Matches: 3(3) Sequences: 3(3) emPAI: 1.11
                  108. AT3G07030.1 Mass: 42476 Score: 79 Matches: 4(3) Sequences: 4(3) empAI: 0.35
| Symbols: | Alba DNA/RNA-binding protein | chr3:2223001-2225254 REVERSE LENGTH-405
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 3317 61.285.5366 1285.5366 1285.5365 5.45 1 27 0.024 1 U R.TOGGENDGYOGGR.D |
| 4989 765.3976 1528.7970 1528.7773 2.25 0 38 0.0095 1 U R.NOGGENDGYOGGR.D |
| 5344 7879.3329 1572.6112 1572.6120 4.94 1 44 0.00032 1 U R.DOGGENDGYOGGR.N |
| 1886 888.0801 2661.2184 2661.2055 4.84 0 27 0.095 1 U K.DSPGYQAPAQSDQSKPQYQPQQGR.Q
```

109, A73G48930.1 Mass: 18174 Score: 79 Matches: 1(1) Sequences: 1(1) empAI: 0.26
| Symbols: EMB1080 | Nucleic acid-binding, OB-fold-like protein | chr3:18141017-18142189 REVERSE LENGTH-160
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 2133 568.8012 1135.5877 1133.5873 0.36 0 79 7.4e-007 1 U K.VIPAGSSSFGK.K

```
        1039
        496.2354
        990.4563
        990.4698
        -13.66
        0
        25
        0.12
        1
        U
        R.YYELFER.D

        4547
        723.8647
        1445.7149
        1445.7150
        -0.05
        0
        45
        0.0019
        1
        U
        K.YTINESPIEPGR.Y

        5354
        787.8482
        1573.6819
        1573.6856
        -2.37
        0
        46
        0.00046
        1
        U
        R.GGSEEPNVEEDSVAR.M

                        AT5G13490.1
                                T5G13490.1 Mass: 41834 Score: 76 Matches: 2(2) Sequences: 2(2) emPAI: 0.23
Symbols: AAC2 | ADP/ATP carrier 2 | chr5:4336034-4337379 FORWARD LENGTH=385
                         Proteins matching the same set of peptides:

AT5G13490.2 Mass: 41834 Score: 76 Matches: 2(2) Sequences: 2(2)

| Symbols: AAC2 | ADF/ATF carrier 2 | chr5:4336034-4337379 FORWARD LENGTH=
                        113. A73G19650.1 Mass: 35261 Score: 75 Matches: 1(1) Sequences: 1(1) emPAI: 0.13 | Symbols: | cyclin-related | chr3:6823543-6825174 FORMARD LENGTH=302 | Query Observed Mr(expt) Mr(calo) ppm Miss Score Expect Rank Unique Peptide 2438 589.7656 1177.5166 1177.5211 -3.85 0 75 8e-007 1 U R.ESDOTQGALS
| 14. AT1623860.1 | Mass: 21695 | Score: 75 | Matches: 7(3) | Sequences: 6(3) | emPAI: 0.79 |
| Symbols: SRZ-21, SRZ21, RSZ21, RSZ21, At-RSZ21 | RS-containing zinc finger protein 21 | chr1:8428091-8429164 REVERSE LENGTH-187 |
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
| 72 372.7108 743.4071 743.4079 7-0.55 | 0 28 0.088 1 U R.NWWAR.R |
| 713 455.2133 908.4120 908.4127 -0.81 0 31 0.02 1 U R.ELEDEFK.A |
| 1291 516.7758 1031.5371 1031.5400 -2.82 0 31 0.02 1 U R.ELEDEFK.A |
| 4105 697.8378 1393.6610 1393.6725 -8.26 1 15 1.5 7.0 U R.VYERELEDEFK.A |
| 4856 500.2105 1497.6101 1497.6129 -1.91 0 45 0.003 1 U R.VYERELEDEFK.A |
| 4866 505.9016 2997.4713 2999.4726 -0.32 2 24 0.29 1 U R.PSPCALELDEFR.E |
| 13066 596.9016 2997.4713 2999.4726 -0.32 2 24 0.99 1 U R.PSPCALELDEFRALDAIGALDEK.N |
| 4967 745.8756 2979.4733 2979.4726 -0.24 2 (19) 0.86 1 U R.PSPCALELDERALDAIGALDEK.N |
                         Proteins matching the same set of peptides:

AT1621866.2 Mass: 21695 Socce: 75 Matches: 7(3) Sequences: 6(3)

Symbols: SRZ-21, SRZ21, RZ21, At-RZ221 | RS-containing sinc finger protein 21 | chr1:8428091-8429164 REVERSE LENGTH-187

AT1621860.3 Mass: 19030 Socce: 75 Matches: 7(3) Sequences: 6(3)

Symbols: SRZ-21, SRZ-21, RZ21, At-RZ21 | RS-containing sinc finger protein 21 | chr1:8428091-8429164 REVERSE LENGTH-187

AT1621860.4 Mass: 21149 Socce: 75 Matches: 7(3) Sequences: 6(3)
                           | Symbols: RSZP21, RSZ21, At-RSZ21 | RS-containing zinc finger protein 21 | chr1:8428091-8429164 REVERSE LENGTH=183
  115. AT4G32610.1 Mass: 34758 Score: 73 Matches: 1(1) Sequences: 1(1) empAI: 0.13 | Symbols: | copper ion binding | chr4:15728376-15729897 REVERSE LENGTH=315
                         Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 6695 895.4827 1788.9509 1788.9509 0.01 0 73 2.9e-006 1 U K.ELAELE
  116. AT5G26742.1 Mass: 81293 Score: 72 Matches: 2(2) Sequences: 2(2) emPAI: 0.11
| Symbols: emb1138 | DEAD box RNA helicase (RH3) | chr5:9285540-9288871 REVERSE LENGTH=

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        3700
        668.8895
        1335.7645
        1335.7650
        -0.33
        0
        58
        3e-005
        1
        U
        R.TIGSDLITVYAK.G

        4991
        765.4127
        1528.8108
        1528.8137
        -1.91
        0
        40
        0.0056
        1
        U
        R.TQGAVFDLPEEIAK.E

                          Proteins matching the same set of peptides:

ATS026742.2 Mass: 81449 Score: 72 Matches: 2(2) Sequences: 2(2)

| Symbols: embl138 | DEAD box RNA helicase (RH3) | chr5:9285540-9288871 REVERSE LENGTH-748

ATS026742.1 Mass: 71192 Score: 72 Matches: 2(2) Sequences: 2(2)

| Symbols: embl138 | DEAD box RNA helicase (RH3) | chr5:9285540-9288618 REVERSE LENGTH-655
                        AT3025920.1 Mass: 29860 Score: 70 Matches: 2(2) Sequences: 2(2) empAi: 0.33

| Symbols: RFLI5 | ribosomal protein L15 | chr3:9491268-9492558 REVERSE LENGTH-277

Query Observed Kr(expt) Kr(calc) ppm Miss Score Expect Rank Unique Peptide
332 407.2325 812.4504 812.4504 -0.04 0 28 0.028 1 U K.GLINPSGR.E
2551 599.7930 1197.5714 1197.5778 -5.38 0 66 8.5e-006 1 U R.GFEGGGTALYR.R
  118. ATIG16610.1 Mass: 45322 Score: 70 Matches: 1(1) Sequences: 1(1) emPAI: 0.10
| Symbols: SR45, RNRS1 | arginine/serine-rich 45 | chrl:5675925-5678686 EXURESE LENGTH=414
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4172 705.3303 1408.6461 1408.6556 -13.99 0 70 3.6e-006 1 U K.AQLYHDDAQIDGK.V
                         Proteins matching the same set of peptides:

ATIG16610.2 Mass: 44622 Score: 70 Matches: 1(1) Sequences: 1(1)

| Symbols: SR45, RNPSI | arginine/serine-rich 45 | chr1:5675925-5678686 REVERSE LENGTH-407

ATIG16610.3 Mass: 46570 Score: 70 Matches: 1(1) Sequences: 1(1)

| Symbols: SR45 | arginine/serine-rich 45 | chr1:5675925-5678686 REVERSE LENGTH-425
  119. <u>AT3G13860.1</u> Mass: 60771 Score: 70 Matches: 1(1) Sequences: 1(1) empAi: 0.07 | Symbols: MSP60-3A | heat shock protein 60-3A | chr3:4561704-4565133 REVERSE LEMOTH-572
                         Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 
5135 773.3609 1544.7072 1544.7067 0.39 0 70 2.9e-006 1 U K.ALDNLQTENEDQR.R
                           ATIG56110.1 Mass: 58865 Score: 70 Matches: 1(1) Sequences: 1(1) emPAI: 0.08
| Symbols: NOP56 | homolog of nucleolar protein NOP56 | chr1:20984544-20986893 REVERSE LENGTH-522

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect Rank Unique
        Peptide

        16781
        1200.9427
        3599.8064
        3599.7930
        3.73
        0
        70
        5.7e-006
        1
        U
        R.VVQLTAFHPFESALDALNQVNAVSEGVMTDELR.S

                           | Name | 
                           Proteins matching the same set of peptides:
ATIG55310.2 Mass: 25570 Score: 70 Matches: 3(3) Sequences: 3(3)
| Symbols: SR33, ATSCL33, SCL33, At-SCL33 | SC35-like splicing factor 33 | chr1:20630676-20632567 FORWARD LENGTH-220
                        ATCG00120.1 Mass: 55351 Score: 70 Matches: 3(2) Sequences: 3(2) emPAI: 0.17
                      | Arcord | A
                        <u>ATIG67090.1</u> Mass: 20488 Score: 70 Matches: 3(3) Sequences: 3(3) empAI: 0.85

| Symbols: RBCSIA | ribulose bisphosphate carboxylase small chain 1A | chr1:25048465-25049249 REVERSE LERGTH-180

    Dols: REGSIA | YIDulose Disphosphate carboxylase small chain IA | chri: 25048465-28

    Mess Score Expect Rank Unique Peptide

    454.2473
    906.4800
    906.4811
    -1.16
    0
    34
    0.018
    1
    U
    K.EVDVLIR.N

    468.2497
    934.4888
    934.4892
    -2.57
    0
    40
    0.0046
    1
    R.IIGEDNIR.O

    774.9054
    1547.7962
    1547.8018
    -3.57
    0
    45
    0.0019
    1
    K.LELEGCIDIS

  124. AT2038540.1 Mass: 12317 Score: 70 Matches: 1(1) Sequences: 1(1) emPAI: 0.40

| Symbols: Lpi, Lpi, ATLpi | lipid transfer protein | | chr2:16130418-16130893 FORMARD LENGTH-118
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 251 458.2520 914.4893 914.4934 -4.39 0 70 4.2e-006 1 U R.AUGSGLNAGR.A
                                                                                 Mass: 67253
                                                                                                                                           Score: 70
                                                                                                                                                                                                Matches: 1(1) Sequences: 1(1) emPAI: 0.07
                           [Symbols: | Thiamine pyrophosphate dependent pyruwate decarboxylase family protein | chr4:15952519-15954676 REVERSE LENGTH=607
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
2310 619.31357 1236.618 1236.6211 -3.47 0 70 6e-006 1 U R.VEANNERPPNPQ.-
```

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Proteins matching the same set of peptides:
ATSG4366.1 Mass 56802 Score: 70 Matches: 1(1) Sequences: 1(1)
[ Symbols: POC2 | pyruvate decarboxylase-2 | chr5:22310858-22312681 REVERSE LENGTH-607
126. AT3G04840.1 Mass: 30060 Score: 69 Matches: 2(2) Sequences: 2(2) emPAI: 0.32
                 | Symbols: | Ribosomal protein S3Ae | chr3:1329751-1331418 FORWARD LENGTH=262
                 | Upumbus | Alborouse | Protein Side | Chr3:1329751-1331418 FORMARD LENGTH=262 | | | | | | | |
| Query Observed | Mr(capt) | Mr(calc) | ppm | Miss Score Expect Rank Unique | Peptide |
| 108 | 382.2019 | 762.3892 | 762.3912 | -2.65 | 0 | 46 | 0.001 | 1 | U | K.AVDPFSK.K |
| 5749 | 810.4484 | 1618.8822 | 1618.8831 | -0.59 | 0 | 43 | 0.0023 | 1 | U | K.ATQGIYPLQNVFIR.K |
                 Proteins matching the same set of peptides:
AT4G34670.1 Mass: 29956 Score: 69 Matches: 2(2) Sequences: 2(2)
| Symbols: | Ribosomal protein S3Ae | chr4:16548724-16550222 FORNARD LENGTH=262
              128. AT5659950.1 Mass: 25740 Score: 67 Matches: 2(2) Sequences: 2(2) empAI: 0.39

| Symbols: | RNA-binding (RRM/RBD/RNF motifs) family protein | chr5:24140235-24141504 FORNARD LENGTH=244

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

3361 430.8995 1298.6768 12836.699 -16.38 1 52 0.00043 1 U K.EEPAUGELKR.Y

5876 545.8972 1634.6698 1634.6784 -5.22 0 36 0.0023 1 U K.APESTWGHDMFSDR.S

        Proteins matching the same set of peptides:

        AT5059950.4
        Mass: 23565
        Score: 67
        Matches: 2(2)
        Sequences: 2(2)

        I Symbols:
        I NRA-binding (REMM/RBD/RNP motifs) family protein | chr5:24140235-24141410 FORWARD LENGTH-211

        AT5059950.5
        Mass: 25827
        Score: 67
        Matches: 2(2)
        Sequences: 2(2)

        I Symbols:
        RNA-binding (RRM/RBD/RNP motifs) family protein | chr5:24140235-24141504 FORWARD LENGTH-245

               Art431700.1 Mass: 28578 Score: 66 Matches: 2(2) Sequences: 2(2) empAi: 0.35
| Symbols: RPS6, RPS6A | ribosomal protein S6 | chr4:15346306-15347714 REVERSE LENGTH=250
Query Observed Kr(expt) Kr(calc) ppm Miss Score Expect Rank Unique Peptide
1314 520.8252 1039.6395 1039.6390 -3.38 0 45 0.0026 1 U R.LVTPLTLGR.K
2655 668.8188 1335.6230 1335.6241 -0.84 0 45 0.0016 1 U K.FNVANPTTGCQK.K

        Proteins matching the same set of peptides:

        AT5610360.1
        Mass: 28373
        Score: 66
        Matches: 2(2)
        Sequences: 2(2)

        | Symbols: EMB3010
        Rps6al
        Ribosomal
        protein
        Sée | chr5:3258734-3260142
        REVERSE LENGTH-249

        AT5610360.2
        Mass: 22311
        Score: 66
        Matches: 2(2)
        Sequences: 2(2)

        | Symbols: EMB3010
        | Ribosomal
        protein
        Sée | chr5:3258734-3260142
        REVERSE LENGTH-197

              AT4G38550.1 Mass: 69753 Score: 65 Matches: 2(2) Sequences: 2(2) emPAI: 0.13

| Symbols: | Arabidopsis phospholipsas-like protein (FEARLI 4) family | chr4::8025886-18028546 FORWARD LENGTH=612

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

2886 616.1007 1233.66506 1233.6105 -2.95 0 34 0.021 1 U K.STPGSPAHPPGAR.S

3648 442.2121 1323.6145 1323.6208 -4.76 0 55 0.00012 1 U R.SPSPSPFHTPDR.R
131. AT5053440.1 Mass: 133393 Score: 64 Matches: 2(1) Sequences: 2(1) emPAI: 0.03
| Symbols: | unknown protein; FUNCTIONS IN: molecular_function unknown; INVOLVED IN: biological_process unknown; LOCATED IN: cytosol; EXPRESSED IN: 25 plant structures; EXPRESSED DURING: 15 growth stages; Has 1807 Blast hits to Query Observed Mr(expt) Mr(calc) pm Miss Score Expect Rank Unique Peptide
2323 578.7812 1155.5477 1155.5520 -3.68 0 26 0.083 1 U R.SIEVERGUR.N
3248 637.7816 1273.5486 1273.5535 -3.83 0 61 1.4e-005 1 U K.VENNDDLINDAR.N
132. ATIG26110.1 Mass: 64331 Score: 64 Matches: 1(1) Sequences: 1(1) emPAI: 0.07 | Symbols: DCP5 | decapping 5 | chr1:9024616-9027556 REVERSE LENGTH=611
                  Duery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4374 715.3500 1428.6854 1428.6885 -2.17 1 64 1.7e-005 1 U R.KLDTETFGEFSR.F
                 Proteins matching the same set of peptides: ATIG26110.2 Mass: 63621 Score: 64 Matches: 1(1) Sequences: 1(1)
                     Symbols: DCP5 | decapping 5 | chr1:9024616-9027556 REVERSE LENGTH=60
               ATIG58380.1 Mass: 30950 Score: 63 Matches: 1(1) Sequences: 1(1) empAI; 0.15
| Symbols: XW6 | Ribosomal protein S5 family protein | chri:21689115-21690085 FORMRD LENGTH-284
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
5946 827.9231 1653.8316 1653.8363 -2.79 0 63 2.8e-005 1 U K.YLGPAGIDDVFTSSR.G
                 Proteins matching the same set of peptides:

ATIG5864.1 Mass: 30980 Score: 63 Matches: 1(1) Sequences: 1(1)

| Symbols: | Ribsomal protein | Stamily protein | chri:21770021-21771217 REVERSE LENGTH=284

ATIG58983.1 Mass: 30980 Score: 63 Matches: 1(1) Sequences: 1(1)
                 AT1G58983.1 Mass: 30980 Score: 63 Matches: 1(1) Sequences: 1(1)
| Symbols: | Ribosomal protein S5 family protein | chr1:21806279-21807475 REVERSE LENGTH=284
                  AT1G59359.1
                                                      Mass: 30980
                                                                                             Score: 63
                                                                                                                                 Matches: 1(1) Sequences: 1(1)
                134. AT3G11830.1 Mass: 60195 Score: 62 Matches: 1(1) Sequences: 1(1) emPAI: 0.07 |
| Symbols: | TCP-1/cpn60 chaperonin family protein | chr3:3732734-3736156 FORMARD LENGTH-557
                Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
9929 772,7424 2315.2053 2315.2042 0.46 0 62 3.3e-005 1 U K.INAINAATEAACLILSVDETVK.N
                 Proteins matching the same set of peptides:
AT3G11830.2 Mass: 59935 Score: 62 Matches: 1(1) Sequences: 1(1)
                 AT3G11830.2 Mass: 59935 Score: 62 Matches: 1(1) Sequences: 1(1) |
| Symbols: | TCP-1/cpn60 chaperonin family protein | chr3:3732734-3736156 FORWARD LENGTH-555
               AT5G64200.1 Mass: 35149 Score: 62 Matches: 2(2) Sequences: 2(2) emPAI: 0.27

| Symbols: ATSG35, SG35, At-SG35 | ortholog of human splicing factor SG35 | chr5:25681849-25683553 REVERSE LENGTH-303

Query Observed Mr(expt) Mr(expt) pm Miss Score Expect Rank Unique Peptide

805 468.2630 934.5115 934.5124 -0.93 0 36 0.00016 1 U R.RITVQTAK.Y

3851 677.8464 1353.6783 1353.6816 -2.44 0 55 0.00016 1 U R.RITVQTAK.Y
                 Proteins matching the same set of peptides:

AT5054200.2 Mass: 35149 Score: 62 Matches: 2(2) Sequences: 2(2)

[Symbols: AT505, SCIS, At-SCIS] ortholog of human splicing factor SCIS | chr5:25681849-25683553 REVERSE LENGTH=303
                                                      Mass: 59909 Score: 62 Matches: 2(2) Sequences: 2(2) emPAI: 0.15
               | Symbols: STRSI | DEA(D/H)-box RNA helicase family protein | chr1:11479921-11482707 FORWARD LENGTH-537
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
291 400.2671 798.5195 798.5215 -2.29 0 33 0.0086 1 U R.LIALLEK.Y.
2161 570.8389 1139.6633 1139.6662 -2.58 0 52 0.00011 1 U K.GLAGELVNVLR.E
137. ATCG00800.1 Mass: 25344 Score: 61 Matches: 2(2) Sequences: 2(2) emPAI: 0.
| Symbols: | structural constituent of ribosome | chrc:82826-83482 REVERSE LENGTH-218
                                                                                                                                 Matches: 2(2) Sequences: 2(2) emPAI: 0.40
                AT564040.1 Mass: 18702 Score: 61 Matches: 3(1) Sequences: 2(1) empAI: 0.25

| Symbols: PSAN | photosystem | reaction center subunit | FSLN, chloroplast, putative | PSLN, putati
                 Proteins matching the same set of peptides:
AT5G64040.2 Mass: 19563 Score: 61 Matches: 3(1)
                                                                                                                                                                          Sequences: 2(1)
                 | Symbols: PSAN | photosystem I reaction center submit PSI-N, chloroplast, putative / PSI-N, putative (PSAN) | chrs:25628690-25629409 REVERSE LENGTH:181
                                                                                              Score: 61
                                                      Mass: 91629
                                                                                                                                 Matches: 3(2) Sequences: 3(2) emPAI: 0.10
```

| Symbols: | C2 calcium/lipid-binding plant phosphoribosyltransferase family protein | chr5:2127200-2129584 REVERSE LENGTH=794

```
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        499.8039
        997.5932
        997.5932
        1.20
        0
        15
        0.46
        1
        U
        K.VQVONQILK.T

        566.8323
        1131.6500
        1311.6539
        -3.48
        0
        32
        0.019
        1
        U
        K.IISPLSVEK.I.

        406.8750
        1217.6033
        1217.6074
        -3.42
        1
        52
        0.00037
        1
        U
        K.VTPAKDEVMOR

                         ATCG00160.1 Mass: 27172 Score: 61 Matches: 3(2) Sequences: 3(2) emPAI: 0.36 | Symbols: RPS2 | ribosomal protein S2 | chrc:15013-15723 REVERSE LENGTH=236

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        704
        453.2698
        904.5380
        904.5382
        -14.59
        0
        41
        0.002
        1
        U
        K.QFLIVUTK.N

        1045
        497.2842
        992.5538
        992.5542
        -0.43
        0
        22
        0.14
        1
        R.LETYLOGIK.Y

        5187
        850.9019
        1699.7892
        1699.7876
        0.94
        0
        41
        0.0033
        1
        U
        R.LEGACDLVFDAASR.G

141. ATIG31330.1 Mass: 24329 Score: 60 Matches: 2(2) Sequences: 2(2) empAI; 0.41

| Symbols: PSAF | photosystem I subunit F | chr1:11215011-11215939 REVERSE LENGTH-221

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

1550 540.7943 1079.7541 1079.7562 -11.28 0 40 0.0036 1 U R.SYLIAISGEK.K

2836 613.3583 1224.7021 1224.7078 -4.60 0 44 0.00072 1 U K.EIIIDVPLASR.I
                    | Name | 
 143. ATCG00820.1 Mass: 10570 Score: 59 Matches: 1(1) Sequences: 1(1) emPAI: 0.48
| Symbols: RPS19 | ribosomal protein S19 | chrc:84005-84283 REVERSE LENGTH=92
                         Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
3277 640.8304 1279.6463 1279.6561 -7.62 0 59 6.2e-005 1 U K.LGEFSPTINFR.G
 144. AT3G02220.1 Mass: 26113 Score: 59 Matches: 1(1) Sequences: 1(1) empa; 0.18
| Symbols: | unknown protein; CONTAINS InterPro DOMAIN/s: Protein of unknown function DUF2039 (InterPro:IPR019351); Has 215 Blast hits to 215 proteins in 94 species: Archae - 2; Bacteria - 2; Metazoa - 125; Fungi - 4; Plants -

        uery
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        973
        487.7473
        973.4800
        973.4829
        -2.93
        0
        59
        5.1e-005
        1
        U
        K.INETEVGGR.F

                    | Number | N
                     AT3G12390.1 Mass: 21969 Score: 59 Matches: 2(2) Sequences: 2(2) emPAI: 0.47

| Symbols: | Nascent polypeptide-associated complex (NAC), alpha subunit family protein | chr3:3942344-3943595 FORMARD LENGTH-203
                     | Openvois | Assembly | Mr(calc) | ppm Hiss Score Expect Rank Unique | Peptide | 11.2 | 2144 | 386.8928 | 1157.6955 | 1157.6991 | -2.35 | 0 52 | 0.0028 | 1 U | K.LOMKPITOVER.V | 4955 | 760.4462 | 1518.8779 | 5138.8810 | -2.03 | 0 28 | 0.027 | 1 U | K.LOMKPITOVER.V | K.LOMKPITOVER.V | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2
                       Proteins matching the same set of peptides:

AT5G13850.1 Mass: 22044 Score: 59 Matches: 2(2) Sequences: 2(2)
                         | Symbols: NACA3 | nascent polypeptide-associated complex subunit alpha-like protein 3 | chr5:4471361-4472676 FORWARD LENGTH=204
147. AT3G44690.1 Mass: 138560 Score: 59 Matches: 2(1) Sequences; 2(1) empAI; 0.03
| Symbols: | unknown protein: Has 30201 Blast hits to 17322 proteins in 780 species: Archae - 12; Bacteria - 1396; Metazoa - 17338; Fungi - 3422; Plants - 5037; Viruses - 0; Other Eukaryotes - 2996 (source: NCBI BLink). | chr3
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
1907 559,2432 1116,4718 1116,4724 - 0.52 0 20 0.089 1 U K.YTMSOIDER.M
3213 635.3065 1268.5985 1268.5997 -0.94 0 59 5.1e-005 1 U K.SDILVOMEDAR.G
                    | March | Mass: 11437 | Score: 59 | Matches: 1(1) | Sequences: 1(1) | empAi: 0.44 | |
| Symbols: | 608 acidic ribosomal protein family | chr2:11816929-11817670 FORWARD LENOTH-115 |
| Cutry Observed | Mr(expl) | Mr(expl) | ppm | Miss Score | Expect Rank Unique | Peptide |
| 1217 | 514.7895 | 1027.5644 | 1027.5662 | -1.70 | 0 | 59 | 4.3e-005 | 1 | U | K.DLAELIANGR.E
                      | XT2G27710.4 | Mass: 10237 | Score: 59 | Matches: 1(1) | Sequences: 1(1) | Symbols: | 60S acidic ribosomal protein family | chr2:11816929-11817670 | FORWARD LENGTH=98
                         | Symbols: | 60S acidic ribosomal protein family | chr2:11818292-1181/870 FORMAND LEMONIF98
A72627720.1 Mass: 11845 Score: 59 Matches: 1(1) Sequences: 1(1)
| Symbols: | 60S acidic ribosomal protein family | chr2:11818696-11819370 FORMAND LEMOTH-115
A72627720.2 Mass: 13137 Score: 59 Matches: 1(1) Sequences: 1(1)
| Symbols: | 60S acidic ribosomal protein family | chr2:11818696-11819370 FORMAND LEMOTH-130
                         AT2G27720.3
                                                                            Mass: 12757
                                                                                                                               Score: 59
                                                                                                                                                                                     Matches: 1(1) Sequences: 1(1)
                          | Symbols: | 60S acidic ribosomal protein family | chr2:11818696-11819370 FORWARD LENGTH=127
                     AT1G09070.1 Mass: 34282 Score: 59 Matches: 2(1) Sequences: 2(1) emPAI: 0.13
                         | AT3624100.1 | Mass: 7248 | Score: 59 | Matches: 2(2) | Sequences: 1(1) | empAi: 0.75 | | | | | |
| Symbols: | Uncharacterised protein family | SERF | chr3:8703373-8704045 | FORMARD LENGTH=69 |
| Query | Observed | Mr(expt) | Mr(calc) | ppm | Miss Score | Expect Rank Unique | Peptide |
| 2125 | 636.6093 | 1271.6040 | 1271.6106 | -5.18 | 1 | 51 | 0.0025 | 1 | U | K.MKDOGLTPEQR.R |
| 3236 | 424.8767 | 1271.6083 | 1271.6106 | -1.79 | 1 | (30) | 0.033 | 1 | U | K.MKDOGLTPEQR.R |
151. AT2G31610.1 Mass: 27673 Score: 58 Matches: 4(1) Sequences: 4(1) empAI: 0.17

| Symbols: | Ribosomal protein S1 family protein | chr2:13450384-13451669 FORNARD LENGTH-250

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

257 459.2662 916.5179 916.5229 -5.53 0 20 0.5 1 U R.ELITSLVQK.R

810 468.7422 935.4698 935.4712 -1.49 0 20 0.47 1 U K.EYIDANWE.H

2791 406.2182 1215.6329 215.6591 -19.97 1 18 1 2 U R.ATDANWE.H

3349 644.8270 1287.6395 1287.6605 -16.30 0 58 7.7e-005 1 U R.GLCAIAQAESUR.Y
                       Proteins matching the same set of peptides:
ATS035910.1 Mass; 27612 score: 58 Matches: 4(1) Sequences: 4(1)
Symbols: | Ribosomal protein 37 family protein | chr5:13710355-13712192 REVERSE LENGTH-248
                     AT3G25056.1 Mass: 23834 Score: 58 Matches: 3(2) Sequences: 3(2) emPAI: 0.42
| Symbols: ATPRX Q | Thioredoxin superfamily protein | chr3:9524807-9526123 FORMARD LENGTH=216
                     Proteins matching the same set of peptides:
AT3G26060.2 Mass: 23962 Score: 58 Matches: 3(2) Sequences: 3(2)
                             Symbols: ATPRX Q | Thioredoxin superfamily protein | chr3:9524807-9526123 FORWARD LENGTH=217
                     ATIG29150.1 Mass: 47005 Score: 57 Matches: 2(2) Sequences: 1(1) emPAI: 0.09

Symbols: ATS9, RPM6 | non-ATPass subunit 9 | chri:10181240-10182499 FORMARD LENGTH-41
                      AT5G57370.1 Mass: 26026 Score: 56 Matches: 1(1) Sequences: 1(1) empAI: 0.18
| Symbols: | unknown protein: CONTAINS InterPro DOMAIN/s: Protein of unknown function DUP1777 (InterPro:IPR013957); Has 30201 Blast hits to 17322 proteins in 780 species: Archae - 12; Bacteria - 1396; Metazoa - 17338; Fungi - 
Query Observed Mr(expt) Mr(calc) ppm Miss Score Staget Rank Unique |
2855 613.8455 1225.6764 1225.6779 -1.24 0 56 5.6e-05 1 U K.GKFVAGADVSGIR.A
```

```
        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        3920
        682.8065
        1363.5984
        1363.6004
        -1.49
        0
        56
        5.9e-005
        1
        U
        R.NAAGDYEPGEVSR.D

        Proteins matching the same set of peptides:

        <u>AT4628990.2</u>
        Mass: 45584
        Score: 56
        Matches: 1(1)
        Sequences: 1(1)

        Symbols:
        RNA-binding protein-related | chr4:14291205-14293018
        FORWARD 1

                     R.SIQDAYIHAIR.R
                    Proteins matching the same set of peptides:

AT1602840.2 Mass: 32052 Score: 56 Matches: 4(3) Sequences: 3(3)

| Symbols: SR1, ATSRP34, SRP34, SRP34, SR34, At-SR34 | RNA-binding (RRM/RBD/RNP motifs) family protein | chr1:626918-628995 FORMARD LENGTH-285

AT1602840.3 Mass: 33823 Score: 56 Matches: 4(3) Sequences: 3(3)

| Symbols: SR1, ATSRP34, SRP34, SRP34, SR34, At-SR34 | RNA-binding (RRM/RBD/RNP motifs) family protein | chr1:626918-629583 FORMARD LENGTH-303
                     | AT2G36160.1 | Mass: 16304 | Score: 55 | Matches: 1(1) | Sequences: 1(1) | empAI: 0.29 |
| Symbols: | Ribosomal protein S11 family protein | chr2:15169925-15171159 | FORWARD LENGTH=150
                         Duery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

1417 527.7850 1053.5554 1053.5567 -1.25 0 55 9.9e-005 1 U K.TPGPGAQSALR.A
                       Proteins matching the same set of peptides:

AT3G11510.1 Mass: 16320 Score: 55 Matches: 1(1) Sequences: 1(1)

| Symbols: | Ribosomal protein S11 family protein | chr3:3623757-3624866 REVERSE LENGTH=150
                           \text{NT3G52580.1} Mass: 16285 Score: 55 Matches: 1(1) Sequences: 1(1)
Symbols: | Ribosomal protein S11 family protein | chr3:19503324-19504701 FORWARD LENGTH=150
                     ATIGI2900.1 Score: 55 Matches: 3(2) Sequences: 1(1) empAI: 0.10

| Symbols: GAPA-2 | glyceraldehyds 3-phosphate dehydrogenase A subunit 2 | chr1:4392634-4394283 REVERSE LENGTH=399

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

467 417.238 832.4388 832.4355 -3.08 0 (27) 0.1 2 U K.VAINGFGR.I.

471 417.7267 833.4388 833.4395 -0.88 0 50 0.00065 2 U K.VAINGFGR.I.

472 417.7267 833.4388 832.4355 -0.88 0 50 0.00065 2 U K.VAINGFGR.I.
                       Proteins matching the same set of peptides:
ATIG1390.3 Socres 55 Matches: 3(2) Sequences: 1(1)

[ Symbols: GAPA-2 ] glyceraldehydd 3-phosphate dehydrogenase A subunit 2 | chr1:4392634-4393850 REVERSE LENGTH-350
                          ATIG12900.4 Score: 55 Matches: 3(2) Sequences: 1(1) Symbols: GAPA-2 | glyceraldehyde 3-phosphate dehydrogenase
                                                                                                                                                                                                                                     enase A subunit 2 | chr1:4392634-4393850 REVERSE LENGTH=350
                         | Symbols: GAFA-| Syverasterings 3-phosphate temprofesses A subunit | christofff 1 | Symbols: GAFB | glyceraldehyde-3-phosphate dehydrogenase B subunit | christofff 1 | Carbon 1 | Symbols: GAFB | glyceraldehyde-3-phosphate dehydrogenase B subunit | christofff 1 | Carbon 1 | Symbols: GAFB | GAFA-1 | glyceraldehyde 3-phosphate dehydrogenase A subunit | christoff 1 | Carbon 1 | Symbols: GAFB | GAFA-1 | glyceraldehyde 3-phosphate dehydrogenase A subunit | christoff 1 | Carbon 1 | Car
                     ATIG71080.1 Mass: 34868 Score: 55 Matches: 1(1) Sequences: 1(1) emPAI: 0.13
| Symbols: | RNA polymerase II transcription elongation factor | chr1:26809987-26811645 REVERSE LENGTH-326
                       Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 3834 676.8719 1351.7292 1351.7347 -4.07 0 55 0.00012 1 U R.SLLPDVFVEVER.I
 161. ATCG00020.1 Mass: 39025 Score: 54 Matches: 1(1) Sequences: 1(1) empAI: 0.11
| Symbols: PSBA | photosystem II reaction center protein λ | chrC:383-1444 REVERSE LENGTH=353
                          puery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

3591 657.8605 1313.7065 1313.7092 -2.02 0 54 0.00018 1 U R.VINTWADLINR.A

    162.
    ATCG00770.1
    Mass: 15527
    Score: 54
    Matches: 1(1)
    Sequences: 1(1)
    emPAI: 0.31

    | Symbols: RPS8 | ribosomal protein S8 | chrc:80068-80472
    RFVERSE LENGTH-134

    Query Observed
    Mr(expt)
    Mr(calc)
    ppm
    Miss Score
    Expect Rank Unique
    Peptide

    3172
    631.3430
    1260.6714
    1260.6925
    -16.78
    0
    54
    0.00026
    1
    U
    R.IGSTNITE

                    | Nation | N
 164. ATIG07840.1 Mass: 36168 Score: 53 Matches: 1(1) Sequences: 1(1) |
| Symbols: | Sas10/Utp3/C1D family | chr1:2424603-2426425 FORWARD LENGTH=312
                                                                                                                                                                                       Matches: 1(1) Sequences: 1(1) emPAI: 0.12
                       Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 2579 402.2138 1203.6195 1203.6248 -4.37 1 53 0.00034 1 U K.FLDKDC
                        Proteins matching the same set of peptides: AT1G07840.2 Mass: 36168 Score: 53 Matches: 1(1) Sequences: 1(1)
                         | Symbols: | Sas10/Utp3/C1D family | chr1:2424603-2426425 FORWARD LENGTH=312
                    AT2G38530.1 Mass: 12500 Score: 53 Matches: 1(1) Sequences: 1(1) emPAI: 0.39 | Symbols: LTP2, LP2, cdf3 | lipid transfer protein 2 | chr2:16128481-16128948 DOMARD LENGT Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 2011 611.7949 1221.5752 1221.5772 -1.65 0 53 0.00027 1 U K.ISASTMCNTUR.-
                     | Mass: 72716 | Score: 52 | Matches: 2(1) | Sequences: 2(1) | empAI: 0.06 | | | | | |
| Symbols: ECT2 | evolutionarily conserved | C-terminal region 2 | chr3:4385274-4388220 REVERSE LENGTH-667 |
| Query | Observed | Mr(expt) | Mr(exlc) | ppm | Miss Score | Expect Rank Unique | Peptide |
| Sidia | 660.258 | 318.7577 | 318.8788 | -1.47 | 0.52 | 0.0013 | 1 | U | R.SALGYGSGYDGR.T |
| Total | Sidia | S
                        Proteins matching the same set of peptides:
A73031360.2 Mass: 72438 Score: 52 Matches: 2(1) Sequences: 2(1)
[Symbols: ECT2] evolutionarily conserved C-terminal region 2 | chr3:4385274-4388220 REVERSE LENGTH=664
                          AT3G13460.3
                           \text{V13G13460.3} Mass: 54999 Score: 52 Matches: 2(1) Sequences: 2(1)

Symbols: ECT2 | evolutionarily conserved C-terminal region 2 | chr3:4385934-4388220 REVERSE LENGTH=508
                            T3G13460.4 Mass: 72614 Score: 52 Matches: 2(1) Sequences: 2(1)
Symbols: ECT2 | evolutionarily conserved C-terminal region 2 | chr3:4385274-4388220 REVERSE LENGTH=666
                     AT3660770.1 Mass: 17142 Score: 52 Matches: 1(1) Sequences: 1(1) emPAI: 0.28

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        4093
        696.8196
        1391.6246
        1391.6239
        0.53
        0
        52
        0.00018
        1
        U
        K.TTPQDVDESICK.F

168. AT3G09630.1 Mass: 44788 Score: 52 Matches: 3(2) Sequences: 2(1) emPAI: 0.10 | Symbols: | Ribosomal protein L4/L1 family | chr3:2953813-2955444 FORWARD LENGTH=406 | Query Observed Mr(expt) Mr(cale) ppm Miss Score Expect Rank Unique Peptical 1303 517.7678 1033.5226 -1.58 0 21 0.5 2 U R.MSLIAEAGR.V 2575 401.5710 1201.6913 1201.6918 -0.40 1 43 0.0015 1 U K.TVIKEEALAIK.A 2576 601.8531 1201.6916 1201.6918 -0.12 1 (35) 0.01 1 U K.TVIKEEALAIK.A
 169. AT2G39390.1 Score: 52 Matches: 1(1) Sequences: 1(1) emPAI: 0.36

| Symbols: | Ribosomal L29 family protein | chr2:16450803-16451762 REVERSE LENGTH=123
                     | Output Observed Mr(expt) Mr(calc) | ppm Miss Score Expect Rank Unique | Pentile | 258 | 393.2431 | 784.4716 | 784.4807 | -11.55 | 0 52 | 0.00011 | 1 U K.AELALLR.V
                         Proteins matching the same set of peptides:
AT3609500.1 Score: 52 Matches: 1(1) Sequences: 1(1)
| Symbols: | Ribosomal L29 family protein | chr3:2917047-2917895 FORWARD LENGTH=123
AT5602610.1 Mass: 14322 Score: 52 Matches: 1(1) Sequences: 1(1)
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| Symbols: | Ribosomal L29 family protein | chr5:587611-588547 FORMARD LENGTH=123
A75602610.2 Mass: 17068 Score: 52 Matches: 1(1) Sequences: 1(1)
| Symbols: | Ribosomal L29 family protein | chr5:587611-588547 FORMARD LENGTH=146
               AT4G00100.1 Mass: 17132 Score: 51 Matches: 1(1) Sequences: 1(1) emPAI: 0.28

| Symbols: ATRPS13A, RPS13, PFL2, RPS13A | ribosomal protein S13A | chr4:37172-38123 FORMARD LENGTH-151

    Query Observed Mr(expt)
    Mr(calc)
    ppm Miss Score Expect Rank Unique
    Peptide

    4027
    691.8077
    1381.6008
    1381.6031
    -1.68
    0
    51
    0.00017
    1
    U
    K.TTSQDVDESICK.F

171. ATIG70200.1 Mass: 60587 Score: 51 Matches: 1(1) Sequences: 1(1) emPAI: 0.07

| Symbols: | RNA-binding (REM/RED/RNP motifs) family protein | chr1:26432514-26434351 REVERSE LENGTH=538
| Query Observed Mr(expt) Mr(calo) ppm Miss Score Expect Rank Unique Peptide
| 424 415.7337 623.4528 839.4545 - 2.01 0 51 0.00047 1 U K.IETPGSSK.R
            AT3G63400.1 Mass: 63674 Score: 51 Matches: 1(1) Sequences: 1(1) empAI: 0.07

| Symbols: | Cyclophilin-like peptidyl-prolyl cis-trans isomerase family protein | chr3:23412449-23415435 FORWARD LENGTH=570

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

3363 646-3184 1290.6223 1290.6228 -1.17 0 51 0.00044 1 U K.IIDCGSTSQIR.A
              Proteins matching the same set of peptides:

AT3663400.2 Mass: 42395 Score: 51 Matches: 1(1) Sequences: 1(1)

| Symbols: | Cyclophilin-like peptidyl-prolyl cis-trans isomerase family protein | chr3:23412449-23415435 FORMARD LENGTH=387
              AT3663400.3 Mass: 63674 Score: 51 Matches: 1(1) Sequences: 1(1)
| Symbols: | Cyclophilin-like peptidyl-prolyl cis-trans isomerase family protein | chr3:23412449-23415435 FORNARD LENGTH=570
            A72631890.1 Mass: 76259 Score: 50 Matches: 1(1) Sequences: 1(1) emPAI: 0.06
| Symbols: ATRAP, RAP | RAP | chr2:13557100-13559715 REVERSE LENGTH=671
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 10856 844.1168 2529.3286 2529.3247 1.55 0 50 0.00042 1 U K.AITEAQTAI
                                                                                                                                                                               U K.AIIEAQTAEEVLEVTAETIMAVAK.G
174. AT3G22310.1 Mass: 63798 Score: 50 Matches: 2(2) Sequences: 2(2) emPAI: 0.14 | Symbols: PMH1, ATRH9 | putative mitochondrial RNA helicase 1 | chr3:7887382-7889806 FORWARD LENGTH=610

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        653
        449.2856
        896.5865
        896.5895
        -14.43
        0
        23
        0.04
        1
        U
        R.ASIGELYK.E

        2495
        594.3550
        186.6895
        1186.6892
        -0.63
        0
        44
        0.00088
        1
        W. K.ILAPGIFIDK.I

175. A73661860.1 Mass: 31136 Score: 50 Matches: 2(1) Sequences: 2(1) emPAI: 0.15
| Symbols: ATREP31, RSP31, At-RS31, RS31 | RNA-binding (RRM/RBD/RNP motifs) family protein | chr3:22900311-22902159 REVERSE LENGTH=264
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
635 439.2129 876.4112 876.4130 -2.08 0 26 0.11 1 K.HFEFYGK.V
               1416 352.1812 1053.5217 1053.5243 -2.46 1 45 0.00093 1 U R.YKGPANYER.R
176. A73662530.1 Mass: 24659 Score: 50 Matches: 1(1) Sequences: 1(1) emPAI: 0.19
| Symbols: | ARM repeat superfamily protein | chr3:23132219-23133121 FORMADL LENGTH=221
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 2103 566.7755 1131.5365 1131.5408 -3.79 0 50 0.0004 1 U R.GAIDSSAPAESK.A
177. ATIGO4820.1 Mass: 50194 Score: 50 Matches: 1(1) Sequences: 1(1) emPAI: 0.09

| Symbols: TUA4, TOR2 | tubulin alpha-4 chain | chr:1355421-1358266 REVERSE LENGTH:450

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

6191 851.4596 1700.9046 1700.8985 3.59 0 50 0.00059 1 U R.AVFVDLEPTVIDEVR.T
              Proteins matching the same set of peptides:
AT1050010.1 Mass: 50194 Score: 50 Matches: 1(1) Sequences: 1(1)
| Symbols: TUA2 | ubulin alpha-2 chain | chr1:18517737-18519729 FORWARD LENGTH-450
               | Symbols: TUA5 | tubulin alpha-5 | chr5:6687212-6688926 FORWARD LENGTH=450
            AT4G31480.1 Mass: 107161 Score: 50 Matches: 1(1) Sequences: 1(1) emPAI: 0.04 |
| Symbols: | Coatomer, beta submit | chr4:15264145-15267384 FORMARD LENGTH-948 |
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
| 1057 622.6273 1243.6400 1243.6521 -9.70 0 50 0.00056 1 U K.VAYNTIQN
              Proteins matching the same set of peptides:

AT4031480.2 Mass: 107161 Score: 50 Matches: 1(1) Sequences: 1(1)

| Symbols: | Coatomer, beta subunit | chr4:15264145-15267384 FORWARD LENGTH=948

AT4031490.1 Mass: 107094 Score: 50 Matches: 1(1) Sequences: 1(1)

| Symbols: | Coatomer, beta subunit | chr4:15269460-15272693 FORWARD LENGTH=948
179. AT566190.1 Mass: 73187 Score: 49 Matches: 1(1) Sequences: 1(1) empAI: 0.06 |
| Symbols: PRH75 | DEAD box RNA helicase (PRH75) | chr5:24980542-24983879 RRVERSE LENGTH=671 |
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
| 4520 730.3889 1458.7651 1458.7678 -3.20 0 49 0.00068 1 U K.VGVSELSGLLDGSR.A
180. AT3G14310.1
                                              Mass: 64729
                                                                                 Score: 49
                                                                                                                 Matches: 2(1) Sequences: 2(1) emPAI: 0.07
                            cols: ATPME3, PME3 | pectin methylesterase 3 | chr3:4772214-4775095 REVERSE LENGTH=592
             | Symbols: Alfrhb, rmb) | Pectin methylesterase | | cnrs:47/2214-47/5095 kbvkksk LbKOTH-592 |
Query Observed Mr(expt) Mr(calc) | ppm Miss Score Expect Rank Unique | Peptide |
16543 888.4262 3549.6575 3549.6621 -1.86 0 36 0.014 1 U K.TALHDCLETIDETLDELHETVEDLHLYPTK.K |
17097 736.5642 3677.7847 3677.7771 2.07 1 27 0.12 1 U K.TALHDCLETIDETLDELHETVEDLHLYPTKK.T
            AT4G14300.1 Mass: 42328 Score: 48 Matches: 1(1) Sequences: 1(1) empAI: 0.11
| Symbols: | RNA-binding (REM/RED/RED motifs) family protein | chr4:8231179-8232785 FORWARD LENGTH=411
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
8212 685.9924 2054.9553 2054.9556 -1.60 0 48 0.00088 1 U R.GGGFVSTDSEDAMDSVLMK.T
            AT3653500.1 Score: 48 Matches: 1(1) Sequences: 1(1) emPAI: 0.17
| Symbols: RS232, RS2322, At-RS22 | RAA-binding (REM/RBh/RRP motifs) family protein with retrovirus zinc finger-like domain | chr3:19834557-19835896 REVERSE LENGTH=243
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 110 | 388.2176 | 774.4236 | 774.4236 | -3.70 | 0 | 48 0.0011 | 1 | U R.ITVEADR.G
             Proteins matching the same set of peptides:
AT3653500.2 Score: 48 Matches: 1(1) Sequences: 1(1)

Symbols: RSZ32, RSZ32, At-RSZ2 | RNA-binding (RRM/RBD/RNP motifs) family protein with retrovirus zinc finger-like domain | chr3:19834557-19836507 REVERSE LENGTH=284
            Proteins matching the same set of peptides:
AT8034040.2 Mass: 50360 Score: 48
Matches: 2(2) Sequences: 2(2)
[Symbols: ] Apoptosis inhibitory protein 5 (API5) | chr2:14378571-14382246 REVERSE LENGTH-442
              AT3026420.1 Mass: 27135 Score: 48 Matches: 1(1) Sequences: 1(1) empAI; 0.17

| Symbols: ATRZ-1A | RNA-binding (RRW/RBD/RNP motifs) family protein with retrovirus zinc finger-like domain | chr3:9671953-9673055 FORMARD LENGTH-245

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        2362
        580.7835
        1159.5525
        1159.5550
        -2.18
        0
        48
        0.00061
        1
        U
        R.GFGFITFDEK.K

185. AT3G45030.1 Mass: 13984 Score: 48 Matches: 1(1) Sequences: 1(1) emPAI: 0.35

| Symbols: | Ribosomal protein S10p/S20e family protein | chr3:16471606-16472312 RFVERSE LENGTH-124
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
3617 659.6640 1317.7135 1317.7180 -3.46 0 48 0.00089 1 U R.VIDLFSSPDVVK.Q
              Proteins matching the same set of peptides:
A7364730.1 Mass: 13799 Score: 48 Matches: 1(1) Sequences: 1(1)
[ symbols: | Ribosomal protein | 510/520e family protein | chr3:17453671-17454437 REVERSE LENGTH=122
```

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AT5652300.1 Mass: 13984 Score: 48 Matches: 1(1) Sequences: 1(1)
| Symbols: | Ribosomal protein Sl0p/S20e family protein | chr5:25021388-2502235 REVERSE LENGTH-124
| Symbols: | Ribosomal protein Sl0p/S20e family protein | chr5:25021388-2502235 REVERSE LENGTH-124
| Symbols: | Ribosomal protein Sl0p/S20e family protein | chr5:25021388-25022235 REVERSE LENGTH-124
                | Nation | N
                                                              Mass: 15875 Score: 48 Matches: 2(2)
187. ATIG29320.1 Mass: 52809 Score: 47 Matches: 1(1) Sequences: 1(1) empAI: 0.08
| Symbols: | Transducin/MD40 repeat-like superfamily protein | chr1:10255355-10258238 FORWARD LENGTH=468
                     Durry Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
3359 430.8756 1289.6049 1289.6099 -3.86 1 47 0.00082 1 U K.VSEGEEKDELR.S
                 ATIG60650.1 Mass: 34605 Score: 47 Matches: 2(1) Sequences: 2(1) empAI: 0.13
| Symbols: | RNA-binding (REM/RED/RNP motifs) family protein with retrovirus zinc finger-like domain | chr1:22340089-22342148 FORWARD LENGTH-292
Query Observed Mr(expt) Mr(capt) ppm Miss Score Expect Rank Unique Peptide
2825 580.7835 1159.5555 1159.56562 -11.88 0 47 0.00076 2 U R.GEGFIFTEDR.R
                   Proteins matching the same set of peptides:
AT1680650.2 Mass: 34605 Score; 47 Matches: 2(1) Sequences: 2(1)
| Symbols: | RNA-binding (RRM/RBD/RNP motifs) family protein with retrovirus zinc finger-like domain | chr1:22340089-22342148 FORWARD LENGTH=292
                190. AT5627850.1 Mass: 21011 Score: 46 Matches: 1(1) Sequences: 1(1) emPAI: 0.22 | Symbols: | Ribosomal protein L18e/L15 superfamily protein | chr5:9873169-9874297 FORWARD LENGTH-187
                    Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

7649 491.0086 1960.0053 1960.0068 -0.73 0 46 0.0015 1 U K.HFGPAPGVPHSNTKPYVR.H
191. ATSG42710.1 Mass: 9310 Score: 46 Matches: 3(1) Sequences: 1(1) empAI: 0.05

| Symbols: | unknown protein: Has 1807 Blast hits to 1807 proteins in 277 species: Archae - 0; Bacteria - 0; Metazoa - 736; Fungi - 347; Plants - 385; Viruses - 0; Other Eukaryotes - 339 (source: NCBI BLink). | chr5:17125578-1'

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
8372 658.0233 0291.0472 2091.0531 - 2.81 1 33 0.37 1 U K.GAQKINQTINACSNGLSFR.K 8369

8381 698.6858 2093.0357 2093.0211 6.98 1 (23) 0.34 1 U K.GAQKINQTINACSNGLSFR.K
                    Proteins matching the same set of peptides:
ATS042710.2 Mass: 92614 Score: 46 Matches: 3(1) Sequences: 1(1)
[Symbols: ] unknown proteins INVOLYBE IN: biological_process unknown. | chr5:17125578-17128696 FORMARD LENGTH=803
                 | ATIG22780.1 | Mass: 17591 | Score: 46 | Matches: 1(1) | Sequences: 1(1) | empAi: 0.27 |
| Symbols: PFL, RPSISA, PFL1 | Ribosomal protein S13/S18 | family | chrl: 8067990-8069163 FORWARD LENGTH=152 |
| Query | Observed | Mr(expt) | Mr(calc) | pm | Miss Score | Expect Rank Unique | Peptide
                    1185 512.2974 1022.5802 1022.5834 -3.18 0 46 0.00055 1 U K.IMFALTSIK.G
                   Proteins matching the same set of peptides:

ATIG34030.1 Mass: 17591 Score: 46 Matches: 1(1) Sequences: 1(1)

| Symbols: | Ribosomal protein S13/S18 family | chr1:12370285-12371465 REVERSE LENGTH-152
                                 193. AT5039980.1 Mass: 78508 Score: 45 Matches: 7(0) Sequences: 1(0)
| Symbols: | Tetratricopeptide repeat (TRR)-like superfamily protein | chr5:16001036-16003072 REVERSE LENGTH=678
| Query Observed Mr (Reyt) Mr(calc) pps Miss Score Expect Rank Unique Peptide
| 1037 495.7533 989.4920 989.4778 14.4 1 30 0.059 1 U RADKLEDARR.V 1031 1032 1033 1034 1035 1036
194. A73015356.1 Mass: 29788 Score: 45 Matches: 1(1) Sequences: 1(1) emPAI: 0.15
| Symbols: | Legume lectin family protein | chr3:5174603-5175418 REVERSE LENGTH=271
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 2510 611.3288 1220.6429 1220.6554 -10.17 0 45 0.0016 1 U K.AGYWQTLVGK.R
195. AT2G39460.1 Mass: 17430 Score: 45 Matches: 1(1) Sequences: 1(1) emPAI: 0.27

| Symbols: ATRFL23A, RFL23A, FL23AA | ribosomal protein L23AA | chr2:16475049-16475904 FORWARD LENGTH=154

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

4391 717.6476 1433.6806 1433.7038 -16.16 0 45 0.0018 1 U R.LTPDYDALDVANK.I
                   Proteins matching the same set of peptides: 
AT2G39460.2 Mass: 17430 Score: 45 Matches: 1(1) Sequences: 1(1)
                  196. ATIG19870.1 Mass: 87115 Score: 44 Matches: 1(1) Sequences: 1(1) emPAI:

| Symbols: iqd32 | TQ-domain 32 | chr1:6895400-6898539 REVERSE LENGTH=794
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
2417 587.2612 1172.5079 1172.5098 -1.62 0 44 0.0005 1 U R.TSFGIT
                                                                                                                                                Matches: 1(1) Sequences: 1(1) emPAI: 0.05
                | Nation | N
198. AT5G15200.1 Mass: 23079 Score: 44 Matches: 3(2) Sequences: 3(2) emPAI: 0.44 | Symbols: | Ribosomal protein S4 | chr5:4935124-4936334 REVERSE LENGTH=198
                 199. AT3058660.1 Mass: 50224 Score: 44 Matches: 1(1) Sequences: 1(1) emPAI: 0.09
| Symbols: | Ribosomal protein Lib/Libe family | chr3:21701574-21702914 FORMARD LENGTH=446
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
5525 530.9382 1589.7929 1589.7970 -2.62 1 44 0.0024 1 U K.EVSEVALSEKPMKK.A
                 ATIG13950.1 Mass: 17521 Score: 44 Matches: 1(1) Sequences: 1(1) empAI: 0.27

| Symbols: EIF-5A, EIFSA-1, ATEFSA-1, EIFSA | eukaryotic elongation factor 5A-1 | chr1:4773631-4774668 FORWARD LENGTH-158

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

216: 555.0269 2216.0783 2216.0644 6.29 1 44 0.0028 1 U K.KLEDIYPSEHNCDVPHYNR.T
                  Proteins matching the same set of peptides:

ATIG26630.1 Mass: 17358 Score: 44 Matches: 1(1) Sequences: 1(1)

| Symbols: FBRI2, ATELF5A-2, ELF5A-2 | ELMAryotic translation initiation factor 5A-1 (eIF-5A 1) protein | chr1:9205968-9207098 FORWARD LEMGTH-159

ATIG26630.2 Mass: 1532 Score: 44 Matches: 1(1) Sequences: 1(1)

| Symbols: FBRI2, ATELF5A-2, ELF5A-2 | ELMAryotic translation initiation factor 5A-1 (eIF-5A 1) protein | chr1:9205968-9207013 FORWARD LEMGTH-138
                     AT1G69410.1
                                                              Mass: 17425
                                                                                                           Score: 44
                                                                                                                                                   Matches: 1(1) Sequences: 1(1)
                     Symbols: ATELF5A-3, ELF5A-3 | eukaryotic elongation factor 5A-3 | chr1:26089301-26090194 FORWARD LENGTH=158
                                                                                                   Matches: 1(1) Sequences: 1(1) emPAI: 0.42
201. AT5G15230.1 Score: 43
```

```
| Symbols: GASA4 | GAST1 protein homolog 4 | chr5:4945017-4946025 FORWARD LENGTH=106

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        39
        361.1969
        720.3793
        720.3806
        -1.84
        0
        43
        0.0017
        1
        U
        R.YGPGSLK.F

        Proteins matching the same set of peptides:
        ATSG15230.2
        Score: 43
        Matches: 1(1)
        Sequences: 1(1)

        | Symbols: GASA4 | GAST1 protein homolog 4 | chr5:4945286-4946025 FORMARD LENGTH=83

            AT2G38140.1 Mass: 12890 Score: 43 Matches: 1(1) Sequences: 1(1) emPAI: 0.38 | Symbols: PSRP4 | plastid-specific ribosomal protein 4 | chr2:15980948-15981459 FORWARD LENGTH=118
            Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

787 465.2817 928.5487 928.5494 -0.74 0 43 0.002 1 U R.VPVPPAPPR.K
203. AT5G26280.1 Mass: 39421 Score: 43 Matches: 1(1) Sequences: 1(1) emPAI: 0.11
| Symbols: | TRAF-like family protein | chr5:9208724-9210403 FORMARD LENGTH:550
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 1856 | 554.8094 | 1107.6043 | 1107.6176 | -11.95 0 43 0.0013 1 U K.YLTVTDGLN
              Proteins matching the same set of peptides:

AT5G26280.2 Mass: 36852 Score: 43
             ATGG2620.2 Mass: 36852 Score: 43 Matches: 1(1) Sequences: 1(1)
Symbols: | TRAF-like family protein | chr5:9208724-9210403 FORWARD LENGTH=327
204. AT3G23980.1 Mass: 78394 Score: 43 Matches: 1(1) Sequences: 1(
| Symbols: BLI, KOS1 | BLISTER | chr3:8662818-8667440 REVERSE LENGTH=714
                                                                                                          Matches: 1(1) Sequences: 1(1) emPAI: 0.06
              Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

1685 546.3078 1090.6010 1090.6056 -4.19 1 43 0.0019 1 U K.KVLQ7
            AT2003680.1 Mass: 11970 Score: 43 Matches: 1(1) Sequences: 1(1) emPAI: 0.41 |
| Symbols: SFPAI, SKU6 | spiral1 | chr2:1121398-1121850 FORWARD LENGTH:=119 |
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
729 467.7405 933.4664 933.4665 -0.43 0 43 0.0027 1 U K.TEVNNYAR.A
             Proteins matching the same set of peptides:

ATZ603680.2 Mass: 11970 Score: 43 Matches: 1(1) Sequences: 1(1

| Symbols: SPR1, SKU6 | spiral1 | chr2:1121398-1121850 FORWARD LENGTH=119
                                         Mass: 13064 Score: 43 Matches: 2(2) Sequences: 2(2) emPAI: 0.89
            | Symbols: PINIAT | peptidylprolyl cis/trans isomerase, NIMA-interacting 1 | chr2:7842346-7843537 FORWARD LENGTH=119 |
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique |
1854 | 409.2601 | 816.5057 | 816.5059 | -1.46 | 0 | 36 | 0.0027 | 1 | U | K.ILITITR.E |
1830 | 368.5405 | 1102.5997 | 1102.5892 | 1.32 | 1 | 33 | 0.031 | 1 | U | K.SIREDIVSGK.A
208. AT2G44200.1 Mass: 57750 Score: 43 Matches: 1(1) Sequences: 1(1) empAI; 0.08

| Symbols: | CBF1-interacting co-repressor CIR, N-terminal;Pre-mRNA splicing factor | chr2:18276302-18278240 FORMARD LENGTH-493
               uery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
7110 621,9660 1862.8762 1862.8758 0.19 1 43 0.0029 1 U R.KAEDLDSGKPNEYQNR.R
           AT1607320.1 Mass: 30540 Score: 42 Matches: 1(1) Sequences: 1(1) emPAI: 0.15
| Symbols: RPL4 | ribosomal protein L4 | chri:2249190-2250189 PORMARD LENGTH:-282
query Observed Mr(expl) Mr(calo) ppm Miss Score Expect Rank Unique Peptide
3988 688.8736 1375.7326 1375.7347 -1.50 0 42 0.0031 1 U R.TANLFDILMADK.L
            Proteins matching the same set of peptides:

AT1607320.2 Mass: 30396 Score: 42 Matches: 1(1) Sequences: 1(1)

| Symbols: RPL4 | ribosomal protein L4 | chr1:2249190-2250189 FORMARD LENGTH=280

AT1607320.3 Mass: 30124 Score: 42 Matches: 1(1) Sequences: 1(1)

| Symbols: RPL4 | ribosomal protein L4 | chr1:2249190-2250026 FORMARD LENGTH=278
              ATIG07320.4 Mass: 30124 Score: 42 Matches: 1(1) Sequences: 1(1)
| Symbols: RPL4 | ribosomal protein L4 | chr1:2249190-2250173 FORWARD LENGTH=278
          AT2023390.1 Mass: 54902 Score: 42 Matches: 1(1) Sequences: 1(1) empAI: 0.08

Symbols: | CONTAINS InterPro DOMAIN/s: Protein of unknown function DUT482 (InterPro:IPR007434), Acyl-Coa N-acyltransferase (InterPro:IPR016181); Has 2165 Blast hits to 2163 proteins in 543 species: Archae - 0; Bacteria - 104-
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

925 631.6448 1637.3217 1637.9311 -0.25 0 42 0.0036 1 U K.EQVFDAIYSAMTELASK.L
            AT2029560.1 Mass: 52080 Score: 42 Matches: 1(1) Sequences: 1(1) empAI: 0.09
| Symbols: ENOC | cytosolic enclase | chr2:12646635-12649694 FORNARD LENGTH=475
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
5189 850.9742 1699.9338 1699.9331 0.40 0 42 0.0022 1 U R.ANNULPVPATVLA
           | A72001250.1 | Mass: 28210 | Score: 42 | Matches: 3(2) | Sequences: 3(2) | empAI: 0.35 | | | | | |
| Symbols: | Ribosomal protein 1.30/L7 family protein | chr2:132943-134264 REVERSE LENGTH-242 |
| Cuery Observed Mr(expl) Mr(calc) | ppm Miss Score | Skpect Rank Unique | Peptide |
| 88 378.2589 | 754.5082 | 754.5065 | -4.34 | 0 | 36 | 0.00054 | 1 | U | K.ILGLELL. |
| 1485 | 533.3099 | 1064.0033 | 1064.6019 | 3.25 | 0 | 27 | 0.044 | 1 | U | R. CIPMOVELL. V |
| 1495 | 753.8898 | 1505.7650 | 1505.7667 | -1.12 | 0 | 20 | 0.63 | 1 | U | K. RANNFLMPPQLK.A
             Proteins matching the same set of peptides:
AT2G44120.1 Mass: 27979 Score: 42 Matches: 3(2) Sequences: 3(2)
             AT3G13580.2 Mass: 28473 Score: 42 Matches: 3(2) Sequences: 3(2)

| Symbols: | Ribosomal protein L30/L7 family protein | chr3:4433809-4435109 FORWARD LENGTH=244
                           AT565900.1 Mass: 72293 Score: 42 Matches: 1(1) Sequences: 1(1) emPAI: 0.06
| Symbole: | DEA(D/H)-box RNA helicase family protein | chr5:26558328-26361244 FORWARD LENGTH=633
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 1711 549.3127 1096.6109 1096.6241 -11.97 0 42 0.0014 1 U K.GYMLIVATPGR.L
214. A73027830.1 Mass: 20063 Score: 42 Matches: 1(1) Sequences: 1(1) emPAI: 0.23
| Symbols: RPL12-A, RPL12 | ribosomal protein Lu2-A | chr3:10318576-10319151 FORWARD LENGTH-191
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 151 408.7620 815.5095 815.5116 - 2.55 0 42 0.0013 1 U R.ALTSLALK.E
             Proteins matching the same set of peptides: <a href="https://xx3627850.1"><u>AT3G27850.1</u></a> Mass: 19671 Score: 42 Matches: 1(1) Sequences: 1(1)
              | Symbols: RPL12-C | ribosomal protein L12-C | chr3:10324905-10325468 FORWARD LENGTH=187
215. AT5G09510.1 Mass: 17061 Score: 42 Matches: 1(1) Sequences: 1(1) empAi: 0.28
| Symbols: | Ribosomal protein S19 family protein | chr5:2955698-2956554 REVERSE LENGTH=152

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect Rank
        Unique
        Peptide

        3275
        427.2254
        1278.6544
        1278.6568
        -1.89
        0
        42
        0.0036
        1
        U
        R.EAPAGEKPEPVR.T

             Proteins matching the same set of peptides:
AT5G09510.2 Mass: 13403 Score: 42 Matches: 1(1) Sequences: 1(1)
              | Symbols: | Ribosomal protein S19 family protein | chr5:2955698-2956353 REVERSE LENGTH=118
            AT5023080.1 Mass: 104985 score: 41 Matches: 1(1) Sequences: 1(1) empAl: 0.04
| Symbols: TGH | SWAP (Suppressor-of-White-AFricot)/surp domain-containing protein | chr5:7743226-7748889 REVERSE LENGTH-930
Query Observed Mr(expt) Mr(cale) ppm Miss Score Expect Rank Unique Peptide
3177 631.8531 1261.6916 1261.6918 -0.13 0 41 0.0037 1 U R.LIAGDFLESLGK.E
```

oteins matching the same set of peptides: <u>5G23080.2</u> Mass: 101551 Score: 41 Matches: 1(1) Sequences: 1(1)

```
217. AT2020140.1 Mass: 49487 Score: 41 Matches: 2(1) Sequences: 2(1) empAI: 0.09
| Symbols: | AAA-type ATPase family protein | chr2:8692736-8694837 FORWARD LENGTH-443
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 838 472.2758 942.5370 942.5386 -1.74 0 41 0.0035 1 U R.LPTYTESTK.C | 4694 368.6892 1470.7279 1470.7314 -2.40 1 27 0.084 1 U R.LPTYTESTK.C
                    Proteins matching the same set of peptides:
AT6029040.1 Mass: 49510 Sequences: 2(1)
Symbols: RPTIa | regulatory particle AAA-ATFame 2A | chr4:14312369-14314386 FORWARD LENGTH=443
                     ATIG22300.1 Mass: 29011 Score: 41 Matches: 1(1) Sequences: 1(1) empAr: 0.16
[Symbols: GRF10, 14-3-3EPSILON, GP14 EPSILON | general regulatory factor 10 | chri:7879146-7881103 REVERSE LENGTH=254
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
2501 595.3329 1188.6512 1188.6536 -2.02 0 41 0.0042 1 U K.DSTLIMGLER.D
                    Proteins matching the same set of peptides:

AT1022300.2 Mass: 28996 Score: 41 Matches: 1(1) Sequences: 1(1)

| Symbols: GRF10, GF14 EPSILON | general regulatory factor 10 | chr1:7879244-7881103 REVERSE LENGTH-254

AT1022300.3 Mass: 28721 Score: 41 Matches: 1(1) Sequences: 1(1)

| Symbols: GRF10, GF14 EFSILON | general regulatory factor 10 | chr1:7879601-7881103 REVERSE LENGTH-251
                    | Symbols: GRF10, GF14 EPSILON | general regulatory factor 10 | chr1:7878501-7881103 REVERSE LENGTH=251
| Symbols: GRF12, GF14 TOTA | general regulatory factor 12 | chr1:915673-9157845 REVERSE LENGTH=268
| AT1034760.1 | Mass: 29218 | Score: 41 | Matches: 1(1) Sequences: 1(1) |
| Symbols: GRF11, GF14 GMCKGNM, RHSS | general regulatory factor 11 | chr1:12744062-12745603 REVERSE LENGTH=255
| AT1034760.2 | Mass: 28877 Score: 41 | Matches: 1(1) Sequences: 1(1) |
| Symbols: GRF11, GF14 GMCKGNM, RHSS | general regulatory factor 11 | chr1:12743981-12745603 REVERSE LENGTH=255
| Symbols: GRF11, GF14 GMCKGNM, RHSS | general regulatory factor 11 | chr1:12743981-12745603 REVERSE LENGTH=252
| AT1033560.1 | Mass: 30289 | Score: 41 | Matches: 1(1) Sequences: 1(1) |
| Emphale: GRF11, GF14 GMCKGNM, RHSS | General regulatory factor 11 | chr1:12743981-12745603 REVERSE LENGTH=252
| AT1035160.1 | Mass: 30289 | Score: 41 | Matches: 1(1) Sequences: 1(1) |
| Emphale: GRF11, GF14 GMCKGNM, CRIST | GF14 MCKGNM, CRIST | GF14 MCKGN
                   | Symbols: GRF11, GF14 OMICRON, RHS5 | general regulatory factor 11 | chr1:12743981-12745603 REVERSE LENGTH-252
ATIG35160.1 Mass: 3029 Score: 41 Matches: 1(1) Sequences: 1(1)
| Symbols: GRF4, 14-3-3FHI, GF14 FHI | GF14 protein phi chain | chr1:12867264-12869514 FORWARD LENGTH-267
ATIG35160.2 Mass: 33507 Score: 41 Matches: 1(1) Sequences: 1(1)
| Symbols: GRF4, 14-3-3FH, GF14 FHI | GF14 protein phi chain | chr1:12867264-12869514 FORWARD LENGTH-295
ATIG78300.1 Mass: 29258 Score: 41 Matches: 1(1) Sequences: 1(1)
| Symbols: GRF4, 14-3-3OMEGA, GF14 OMEGA | general regulatory factor 2 | chr1:29461883-29463052 FORWARD LENGTH-259
ATG7643590.1 Mass: 29616 Score: 41 Matches: 1(1) Sequences: 1(1)
| Symbols: GRF9, GF14 MU | general regulatory factor 9 | chr2:17732118-17733775 REVERSE LENGTH-263
                       \text{T2642590.2} Mass: 29559 Score: 41 Matches: 1(1) Sequences: 1(1)
Symbols: GRF9, GF14 MU | general regulatory factor 9 | chr2:17732118-17733775 REVERSE LENGTH-262
\text{T2642590.3} Mass: 31063 Score: 41 Matches: 1(1) Sequences: 1(1)
                      AT2G42590.2
                     | Symbols: GRF9, GF14 MU | general regulatory factor 9 | chr2:17732164-17733775 REVERSE LENGTH=276
                    AT3002520.1 Mass: 29920 Score: 41 Matches: 1(1) Sequences: 1(1)
| Symbols: GRF7, GP14 NU | general regulatory factor 7 | chr3:526800-527915 REVERSE LENGTH=265
AT300900.1 Mass: 30027 Score: 41 Matches: 1(1) Sequences: 1(1)
| Symbols: GRF1, GP14 CHI | general regulatory factor 1 | chr4:5775387-5777157 FORNARD LENGTH=267
AT4009000.2 Mass: 36044 Score: 41 Matches: 1(1) Sequences: 1(1)
                    Symbols: GRF6 | G-DOX regulating factor 6 | Ghrs: 3284476-3286261 REVERSE LENGTH-273
                      AT5G10450.4
                   Mass: 12053 Score: 41 Matches: 2(1) Sequences: 2(1) emPAI: 0.41
                   Protesing matching the same set of peptides:

A74619410.2 Mass: 56709 Score: 40 Matches: 2(1) Sequences: 2(1)

A74619410.2 Pectinacetylesterase family protein | chr4:10581037-10584766 REVERSE LENGTH=517
                  AT$G0$210.1 Mass: 45115 Score: 40 Matches: 3(1) Sequences: 2(1) empAi: 0.10
| Symbols: | Surfeit locus protein 6 | che5:1548198-1549534 FORMARD LENGTH-386
| Ouery Observed Mr(exp) Mr(call) ppm Miss Score Expect Eank Unique Peptide
| 1335 522.8008 1043.5870 1043.5876 -0.57 0 22 0.35 1 U K.LLRGFEGER.K
| 2739 448.8965 1343.6677 1343.6793 -8.64 1 (16) 1.3 1 U R.SGNIADRIEGNK.K
| 3746 672.8454 1343.6762 1343.6793 -2.28 1 40 0.0052 1 U R.SGNIADRIEGNK.M
                    Proteins matching the same set of peptides:

<u>A75005210.2</u> Mass: 44225 Score: 40 Matches: 3(1) Sequences: 2(1)

| Symbols: | Surfeit locus protein 6 | chr5:1548398-1549534 FORWARD LENGTH=378
                  AT5003560.1 Mass: 27871 Score: 40 Matches: 3(1) Sequences: 1(1) emPAI: 0.16
| Symbols: | Tetratricopeptide repeat (TER)-like superfamily protein | chr5:900673-902719 REVERSE LENGTH=241
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
1183 512.2570 1022.4995 1022.4955 13.7 0 39 0.0056 1 U K.QIMDWYFR.Y 1180 1182
223. ATIG59610.1 Mass: 100452 Score: 40 Matches: 2(1) Sequences: 1(1) emPAI: 0.04

| Symbols: ADL3, CF1, DRP28, DL3 | dynamin-like 3 | chri:21893413-2190780 FORWARD LENG
Query Observed Mr(expt) Mr(call) ppm Miss Score Expect Rank Unique Peptide
6031 554.9554 1661.8445 1661.8220 13.5 2 40 0.007 1 U R.SEKKOGOANG
                                                                                                                                                                                                                                                U R.SSKKGQDAEQSLLNR.A 6030
224. ATSG10320.1 Mass: 46308 Score: 40 Matches: 3(3) Sequences: 1(1) emPAI; 0.10
| Symbols: | unknown protein: Has 54 Blast hits to 53 proteins in 19 species: Archae - 0; Bacteria - 4; Metazoa - 0; Fungi - 0; Plants - 50; Viruses - 0; Other Eukaryotes - 0 (source: NCBI BLink). | chr5:3244180-3246603 REVERSI

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        981
        488.3150
        974.6155
        974.6164
        -0.94
        0
        26
        0.0084
        1
        U
        R.VLNLLLYK.L 978 980

                    Proteins matching the same set of peptides:
AT5G10320.2 Mass: 46237 Score: 40 Matches: 3(3) Sequences: 1(1)
                     ANDIANZALIZA MARSE 1923 MARSE 38474 Score: 40 Matches: 3(3) Sequences: 1(1)

Sequences: Archae - 0; Bacteria - 4; Metazoa - 0; Fungi - 0; Flants - 50; Viruses - 0; Other Eukaryotes - 0 (source: NCBI BLink). | chr5:3244180-3246603 REVERSI AT5610320.3 Mass: 38474 Score: 40 Matches: 3(3) Sequences: 1(1)
                       Symbols: | unknown protein; Has 51 Blast hits to 50 proteins in 17 species: Archae - 0; Bacteria - 4; Metazoa - 0; Fungi - 0; Plants - 47; Viruses - 0; Other Eukaryotes - 0 (source: NCBI BLink). | chr5:3244605-3246605 REVERSI
                  AT4036500.1 Mass: 1386 Score: 40 Matches: 1(1) Sequences: 1(1)

    226.
    ATSG45775.1
    Mass: 19934
    Score: 39
    Matches: 1(1)
    Sequences: 1(1)
    emPAI: 0.23

    | Symbols: | Ribosomal 159 family protein
    | chr5:1856281-1856377
    REVERSE LENGTH:172

    Query Observed Mr(expt)
    Mr(calc)
    ppm
    Miss Score Expect Rank Unique
    Peptide

    1673
    545.2943
    1088.5740
    1088.5900
    -14.63
    0
    39
    0.0078
    1
    V
    X.AMGLLESGI

                     Proteins matching the same set of peptides: 
AT2G42740.1 Mass: 20989 Score: 39 Matches: 1(1) Sequences: 1(1)
```

```
| Symbols: RPL16A | ribosomal protein large subunit 16A | chr2:17791794-17792946 FORWARD LENGTH=182
AT3658700.1 Mass: 21019 Score: 39 Matches: 1(1) Sequences: 1(1)
| Symbols: | Ribosomal LSP family protein | chr3:21711661-21712816 FORWARD LENGTH=182
                   AT4G18730.1
                   AT4G18730.1 Mass: 21019 Score: 39 Matches: 1(1) Sequences: 1(1) | Symbols: RPL16B | ribosomal protein L16B | chr4:10302238-10303206 FORWARD LENGTH=182
                                                2 Mass: 21019 Score: 39 Matches: 1(1) Sequences: 1(1) | Ribosomal L5P family protein | chr5:18565281-18566496 REVERSE LENGTH=182
                AT5G60790.1 Score: 39 Matches: 1(1) Sequences: 1(1) emPAI: 0.07 | Symbols: ATGCN1, GCN1 | ABC transporter family protein | chr5:24453760-24455767 REVERSE LENGTH-595

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        712
        454.7446
        907.4746
        907.4763
        -1.82
        0
        39
        0.005
        1
        U
        R.LQSIYER.L

228. AT5604280.1 Mass: 33694 Score: 39 Matches: 2(1) Sequences: 2(1) emPAI: 0.13 | Symbols: | RNA-binding (RRM/RBD/RNP motifs) family protein with retrovirus zinc finger-like domain | chr5:1192461-1195413 FORWARD LENGTH=310

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Hiss Score
        Expect Rank Unique
        Peptide

        1022
        494.7374
        987.4620
        987.4621
        -1.56
        0
        39
        0.023
        1
        U
        R.DIAFRAGGER.Y

        1028
        368.5246
        102.53519
        102.53519
        -0.04
        0
        16
        1.5
        1
        U
        R.AGAPYERRERA

229. AT3G09680.1 Mass: 15931 Score: 38 Matches: 1(1) Sequences: 1(1) emPAI: 0.30
| Symbols: | Riboscomal protein S12/S23 family protein | chr3:2969197-2970291 REVERSE LENGTH=142
Query Observed Mr(expt) Mr(callo ppm Miss Score Expect Rank Unique Peptide
2119 567.3496 1192.6845 1192.6856 -0.92 0 38 0.0012 1 U K.VSGVSLLALFK.E
                 | AT5640490.1 | Mass: 42382 | Score: 37 | Matches: 2(1) | Sequences: 2(1) | empAI: 0.11 | | | | |
| Symbols: | RNA-binding (RRW/RBD/RNP motifs) family protein | chr5:16225483-16227423 FORWARD LENGTH-423 |
| Query Observed Mr(expt) | Mr(calc) | ppm | Miss Score Expect Rank Unique | Peptide |
| 466 | 416.7543 | 831.4989 | 831.4957 | 1.63 | 0.23 | 0.11 | 1 | U | K.IFVGGLAR.E |
| 1205 | 513.2611 | 1024.5077 | 1024.5077 | -0.01 | 0 | 37 | 0.007 | 1 | U | R.ETTSAEPLK.H
231. AT5G17920.1 Mass: 84646 Score: 37 Matches: 1(1) Sequences: 1(1) emPAI: 0.05
| Symbols: ATCHMS, ATMETS, ATMSI | Cobalamin-independent synthase family protein | chr5:5935771-5939195 FORMARD LENGTH=765

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        2241
        573.8419
        1145.6692
        1145.6696
        -0.36
        0
        37
        0.0039
        1
        U
        K.SFELLSLLPK.I

                  Proteins matching the same set of peptides:

AT5G17920.2 Mass: 84646 Score: 37 Matches: 1(1) Sequences: 1(1)
                   | Symbols: ATCIMS | Cobalamin-independent synthase family protein | chr5:5935771-5939195 FORWARD LENGTH=765
                      T3G54960.1 Mass: 64400 Score: 37 Matches: 1(1) Sequences: 1(1) empAr: 0.07
Symbols: ATPDILI-3, PDII, ATPDII, PDILI-3 | PDI-like 1-3 | chr3:20363514-20366822 REVERSE LENGTH-579
232. AT3G54960.1
                   Duery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4129 700.3196 1398.6246 1398.6263 -1.21 0 37 0.0058 1 U K.SDPLPENNDGDVK.V
                   Proteins matching the same set of peptides:

<u>AT3G54960.2</u> Mass: 57883 Score: 37 Matches: 1(1) Sequences: 1(1)
                   | Symbols: ATPDIL1-3, PDIL1-3 | PDI-like 1-3 | chr3:20363895-20366822 REVERSE LENGTH=518
                | National | Name | Name | Name | Name | National | Name | National | Name | Na
                AT3G06560.1 Score: 36 Matches: 1(1) Sequences: 1(1) emPAI: 0.08 Symbols: PAFS3 | poly(A) polymerase 3 | chr3:2044443-2047034 FORWARD LENGTH=507

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        346
        408.2594
        814.5042
        814.5164
        -14.90
        0
        36
        0.0071
        2
        U
        R.IQLTLVK.A

235. AT1G61520.1 Mass: 29163 Score: 36 Matches: 1(1) Sequences: 1(1) emPAI: 0.16
| Symbols: LHCA3 | photosystem I light harvesting complex gene 3 | chr1:22700152-22701149 FORWARD LENGTH=273
                   Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

5849 815.4545 1628.8945 1628.8960 -0.90 0 36 0.012 1 U R.FAMLGARGAIAPEILGK.A
                   Proteins matching the same set of peptides:
ATIG61520.2 Mass: 23845 Score: 36 Matches: 1(1) Sequences: 1(1)
                   ATIG61520.2 Mass: 23845 Score: 36 Matches: 1(1) Sequences: 1(1) Symbols: LHCA3 | photosystem I light harvesting complex gene 3 | chr::22700493-22701149 FORWARD LENGTH=218
ATIG61520.3 Mass: 29163 Score: 36 Matches: 1(1) Sequences: 1(1)

Symbols: LHCA3 | photosystem I light harvesting complex gene 3 | chr::22700152-22701149 FORWARD LENGTH=273
                ATIG60130.1 Mass: 67421 Score: 36 Matches: 2(1) Sequences: 2(1) empAr: 0.07

| Symbols: | Mannose-binding lectin superfamily protein | chri:22174179-22176321 FORMARD LENGTH=600
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
1319 521.7659 1041.5131 40.51 1 18 0.4 1 U K.PUTNENNK.F

7089 619.6492 1855.9257 1855.9356 -5.34 0 36 0.015 1 U K.QPVLYSVIQFETVMR.G
236. AT1G60130.1 | Symbols: | N
237. AT3G56990.1 Mass: 79960 Score: 35 Matches: 1(1) Sequences: 1(1) empAI: 0.05
| Symbols: EDAT | embryo sac development arrest 7 | chr3:21088358-21091976 REVERSE LENGTH-711
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
297 401.2442 800.4738 800.4756 -2.19 0 35 0.016 1 U R.GVQSIGLK.S
238. AT1030420.1 Mass: 169023 Score: 35 Matches: 1(1) Sequences: 1(1) emPAI: 0.03
| Symbols: ATREP12, MEP12, ABCCII | multidrug resistance-associated protein 12 | chri:10748816-10756316 FORMARD LENGTH=1495
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
432 416.2503 830.4861 830.4574 -15.54 1 35 0.016 1 U K.SLRLTNK.A
                | ATIG69510.1 | Mass: 15144 | Score: 34 | Matches: 1(1) | Sequences: 1(1) | empAr: 0.32 | | | |
| Symbols: | cMM-regulated | phosphoprotein | 19-related | protein | chr1:36128779-26127725 FORWARD LENGTH-137 |
| Query | Observed | Mr(expt) | Mr(calc) | ppm | Miss Score | Expect | Rank Unique | Peptide |
| 2517 | 596.834 | 1191.6323 | 1191.6360 | -3.11 | 0 | 34 | 0.021 | 1 | U | K.LOPTPOGOPR.A
                 Proteins matching the same set of peptides:

AT1069910.2 Mass: 1914 Score: 34 Matches: 1(1) Sequences: 1(1)

| Symbols: | cMMP-regulated phosphoprotein 19-related protein | chri:26126779-26127725 FORWARD LENGTH-137

AT1069910.3 Mass: 1914 Score: 34 Matches: 1(1) Sequences: 1(1)

| Symbols: | cMMP-regulated phosphoprotein 19-related protein | chri:26126779-26127725 FORWARD LENGTH-137
                AT5G43960.1 Mass: 50149 Score: 34 Matches: 1(1) Sequences: 1(1) empAi: 0.09

| Symbols: | Nuclear transport factor 2 (NTF2) family protein with RNA binding (RBM-RBD-RNP motifs) domain | chr5:17689154-17691653 REVERSE LENGTH-450 Query Observed Mr(expt) Mr(cale) pm Miss Score Expect Rank Unique Peptide

| Symbols: | Nuclear transport factor 2 (NTF2) family protein with RNA binding (RBM-RBD-RNP motifs) domain | chr5:17689154-17691653 REVERSE LENGTH-450 Query Observed Mr(expt) Mr(cale) pm Miss Score Expect Rank Unique Peptide
                  Proteins matching the same set of peptides:
                                                                                                                                               Matches: 1(1) Sequences: 1(1)
                   AT5G43960.2 Mass: 43515 Score: 34 Matches: 1(1) Sequences: 1(1)

| Symbols: | Nuclear transport factor 2 (NTF2) family protein with RNA binding (RRM-RBD-RNP motifs) domain | chr5:17689154-17691220 REVERSE LENGTH=391
                | AT3028850.1 | Score: 33 | Matches: 2(1) | Sequences: 1(1) | empAI: 0.09 |
| Symbols: | Glutaredoxin family protein | chr3:10848669-10849955 FORMAD LENGTH=428 |
| Cuery Observed Mr(expl) Mr(calo) | ppm | Miss Score Expect Bank Unique | Peptide |
| 308 | 402.7136 | 803.4127 | 803.4025 | 12.8 | 1 | 33 | 0.027 | 1 | U | R.KIMEDOK.L.307
242. AT3653740.1 Mags: 11673 Score: 33 Matches: 1(1) Sequences: 1(1) empAI: 0.43 | Symbols: | Ribosomal protein L36e family protein | chr3:19913921-19914813 REVERSE LEMGTH=103

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        1683
        546.2704
        1090.5262
        1090.5295
        -2.97
        0
        33
        0.024
        1
        U
        K.EVAGQAPYEK.R

                   Proteins matching the same set of peptides:

A71653740.2 Mass: 12668 Score: 33 Matches: 1(1) Sequences: 1(1) |

| Symbols: | Ribosomal protein L36e family protein | chr3:19913921-19914813 REVERSE LENGTH=112 |

A73653740.3 Mass: 12668 Score: 33 Matches: 1(1) Sequences: 1(1)
```

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| Symbols: | Ribosomal protein L36e family protein | chr3:19913921-19914813 REVERSE LENGTH=112 A73053740.4 Mass: 12668 Score: 33 Matches: 1(1) Sequences: 1(1) | Symbols: | Ribosomal protein L36e family protein | chr3:19913921-19914813 REVERSE LENGTH=112
                    AT5G02450.1 Mass: 12182 Score: 33 Matches: 1(1) Sequences: 1(1)
| Symbols: | Ribosomal protein L36e family protein | chr5:533501-534394 FORWARD LENGTH=108
                 AT4G18850.1 Mass: 15750 Score: 33 Matches: 2(0) Sequences: 2(0)
| Symbols: ATGRP2, GR-RBP2, GRP2 | glycine-rich RNA-binding protein 2 | chr4:8021314-8022065 FORMARD LENGTH=158
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
3734 431.8918 1292.6555 -3,95 0 21 0.43 1 U R.VIPAIMORPSAFR.A
6217 854.4346 1706.8546 1706.8628 -4.81 0 29 0.082 1 U K.LFIGGLSWOTDDASLR.D
                   Proteins matching the same set of peptides:

A74013850.2 Mass: 15464 Score: 33 Matches: 2(0) Sequences: 2(0)

| Symbols: A7767872 | glycine-rich RNA-binding protein 2 | chr4:8021314-8022065 FORWARD LENGTH=153

A74013850.3 Mass: 14739 Score: 33 Matches: 2(0) Sequences: 2(0)
                    | Symbols: ATGRP2 | glycine-rich RNA-binding protein 2 | chr4:8021314-8022065 FORWARD LENGTH=144
244. ATIGO4480.1 Mass: 15188 Score: 33 Matches: 1(1) Sequences: 1(1) emPAI: 0.32
| Symbols: | Ribosomal protein Liep/L23e family protein | chr::1216110-1217257 FORMARD LENGTH=140
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 691 450.7615 899.5084 899.5076 0.84 0 33 0.019 1 U K.GSAITOFIGK.E
                  Proteins matching the same set of peptides:
                   AT2033370.1 Mass: 15188 Score: 33 Matches: 1(1) Sequences: 1(1)
| Symbols: | Ribosomal protein L14p/L23e family protein | chr2:14143718-14144644 REVERSE LENGTH=140
| AT3004400.1 Mass: 15188 Score: 33 Matches: 1(1) Sequences: 1(1)
| Symbols: emb2171 | Ribosomal protein L14p/L23e family protein | chr3:1167339-1168308 FORWARD LENGTH=140
                    AT3G04400.2 Mass: 13568 Score: 33 Matches: 1(1) Sequences: 1(1)
| Symbols: emb2171 | Ribosomal protein L14p/L23e family protein | chr3:1167611-1168308 FORWARD LENGTH=125
                 AT3G54230.1 Mass: 113011 Score: 33 Matches: 1(1) Sequences: 1(1) emPAI: 0.04
| Symbola: SUA | suppressor of shi3-5 | chr3:20073872-20080142 FORWARD LENOTH:1007
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4978 763.8846 1525.7546 1525.7565 -1.27 0 33 0.032 1 U R.GRATIDFFVDAAR.T
                  Proteins matching the same set of peptides:

<u>AT3654230.2</u> Mass: 113098 Score: 33 Matches: 1(1) Sequences: 1(1)

| Symbols: SUA | suppressor of abi3-5 | chr3:20073872-20080142 FORWARD LENGTH=1008
                247. AT4G34570.1 Score: 32 Matches: 5(2) Sequences: 2(1) emPAI: 0.07
| Symbols: THY-2 | thymidylate synthase 2 | chr4:16511129-16514110 REVERSE LENGTH-565
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 551 430.7261 89.4376 895.440 - 7.41 0 31 0.041 2 U K.TWESIFEK.K.550 552 553 1024 494.7738 987.5389 987.5389 - 5.94 1 22 0.36 2 U K.TWESIFEK.K.7
248. AT2G47470.1 Mass: 39815 Score: 32 Matches: 1(1) Sequences: 1(1) emPAI: 0.11

| Symbols: ATPDIL2-1, UMES, MEE30, PDII1, ATPDII1 | thioredoxin family protein | chr2:19481503-19483683 FORWARD LENGTH-361

| Query Observed M.rekspt) Mr.(calc) ppm Miss Score Expect Rank Unique | Peptide
2801 406.8770 1217.6091 1217.6139 -3.94 1 32 0.039 1 U K.ELVAASEDEKK.A
                   Proteins matching the same set of peptides:

A72647470.3 Mass: 3597 Score: 32 Matches: 1(1) Sequences: 1(1) |

| Symbols: A776112-1, URFOIL2-1, URFOIl2-1,
                    | Symbols: ATPDIL2-1, UNE5, MEE30, PDI11, ATPDI11 | thioredoxin family protein | chr2:19481503-19483683 FORWARD LENGTH=335
                    AT1056240.1 Mass: 13077 Score: 32 Matches: 1(1) Sequences: 1(1) empAI: 0.37 |
| Symbols: CCH | copper chaperone | chr3:20853460-20864402 REVERSE LENGTH=121 |
| Concry Observed Mr(expt) Mr(calo) ppm Miss Score Expect Sank Unique Peptide |
| 2069 | 565.7858 | 1129.5571 | 1129.5615 - 3.88 | 0 | 32 | 0.023 | 1 | U | K.ARAERIKPSQV.-
251. ATIG11430.1 Mass: 26355 Score: 32 Matches: 1(1) Sequences: 1(1) emPAI: 0.17

| Symbols: | plastid developmental protein DAG, putative | chri:3847273-3848938 FORMARD LENGTH-232

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

11030 857.7606 2570.2600 2570.2608 -0.28 1 32 0.044 1 U R.OOMIDTIANTLATVLGSMEEA
252. ATIG16210.1 Mass: 26810 Score: 32 Matches: 1(1) Sequences: 1(1) emPAI: 0.17
| Symbols: | unknown protein; CONTAINS InterPro DOMAIN/s: Protein of unknown function DUF1014 (InterPro:IPR010422); Has 16107 Blast hits to 8386 proteins in 1107 species: Archae - 26; Bacteria - 3370; Metazoa - 4013; Fungi - 19

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect Rank
        Unique
        Peptide

        3590
        438.9077
        1313.7012
        1313.7051
        -2.98
        2
        32
        0.031
        1
        U
        R.RREEDQVALAK.K

253. AT3G26580.1 Score: 31 Matches: 4(2) Sequences: 1(1) emPAI: 0.12 | Symbols: | Tetratricopeptide repeat (TPR)-like superfamily protein | cl
                                                                                                                                                                                                                             | chr3:9758933-9760349 FORWARD LENGTH=350

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score Expect Rank Unique
        Peptide

        551
        430.7261
        859.4376
        859.4511
        -15.77
        1
        (31)
        0.045
        3
        U
        R.RQASELR.Y 550 552 553

254. ATIG43170.1 Score: 31 Matches: 1(1) Sequences: 1(1) emPAI: 0.10

Symbols: ARPI, emb2207, RFL3A, RPI | ribosomal protein 1 | chr1:16266992-16268631 FORWARD LENGTH=389
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

345 408.2470 814.4993 814.4800 -0.78 0 31 0.036 1 U R.LALEELK.L
                  Proteins matching the same set of peptides:

ATIG43170.2 Score: 31 Matches: 1(1) Sequences: 1(1)

| Symbols: ASPI, RFLAR, PRLAR, PRI | riboscond protein i | chr1:16266992-16268631 FORWARD LENGTH-389

ATIG43170.3 Score: 31 Matches: 1(1) Sequences: 1(1)

| Symbols: ASPI, RFLAR, PRLAR, PRLAR, PRI | riboscond protein i | chr1:16266992-16268631 FORWARD LENGTH-389

ATIG43170.4 Score: 31 Matches: 1(1) Sequences: 1(1)
                    AT1G43170.4 Score: 31 Matches: 1(1) Sequences: 1(1) | Symbols: ARP1, RPL3A, RP1 | ribosomal protein 1 | chr1:16267519-16268631 FORWARD LENGTH=306
                    ### AT1G43170.5 | Score: 31 | Matches: 1(1) | Sequences: 1(1) |
| Symbols: RP1 | ribosomal protein 1 | chr::16266992-16266631 FORWARD LENGTH-389 | |
| AT1G43170.6 | Score: 31 | Matches: 1(1) | Sequences: 1(1) |
| Symbols: RP1 | ribosomal protein 1 | chr::16266992-16266631 FORWARD LENGTH-389 |
                   | Symbols: RP1 | ribosomal protein 1 | chr:1:6266992-16268631 FORMARD LENGTH-389
AT10643170.7 Score: 31 Matches: 1(1) Sequences: 1(1)
| Symbols: RP1 | ribosomal protein 1 | chr:1:6266992-16268631 FORMARD LENGTH-389
AT10643170.8 Score: 31 Matches: 1(1) Sequences: 1(1)
| Symbols: RP1 | ribosomal protein 1 | chr:1:6266992-16268631 FORMARD LENGTH-389
AT10643170.9 Score: 31 Matches: 1(1) Sequences: 1(1)
                    | Symbols: RP1 | ribosomal protein 1 | chr1:16266992-16268631 FORWARD LENGTH=389
255. AT3008940.1 Mass: 25157 Score: 31 Matches: 1(1) Sequences: 1(1) emPAI: 0.18

| Symbols: LHCB4.2 | light harvesting complex photosystem II | chr3:2717717-2718400 FORNARD LENGTH-227

Query Observed Nr(expt) Nr(calc) ppm Miss Score Expect Rank Unique Peptide

6380 878.4351 1754.8556 1754.8528 -4.12 0 31 0.043 1 U K.STPFQPYSEVFGLQR.F
                    Proteins matching the same set of peptides:
AT3G08940.2 Mass: 31231 Score: 31 Matches: 1(1) Sequences: 1(1)
| Symbols: LHCB4.2 | light harvesting complex photosystem II | chr3:2717717-2718665 FORWARD LENGTH=287
                 AT5G01530.1 Mass: 31177 Score: 31 Matches: 1(1) Sequences: 1(1) empAI: 0.15

| Symbols: LHCB4.1 | light harvesting complex photosystem II | chr5:209084-210243 FORWARD LENGTH-290

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
6380 878.4351 1754.8556 1754.8626 -4.12 0 31 0.043 1 U K.STPFQPYSEVFGIGR.F
```

```
AT1G79850.1 Mass: 16329 Score: 31 Matches: 1(1) Sequences: 1(1) emPAI: 0.29
| Symbols: RPS17, CS17, RPS17 | ribosomal protein S17 | chrl:30041473-30041922 REVERSE LENGTH=149
| Query Observed Mr(expt) Mr(calp) ppm Miss Score Expect Rank Unique Peptide
| 1508 | 536.8285 | 071.6424 | 071.6441 -1.52 | 0 31 0.016 1 U K.SFVALPVIAR.A
258. AT4G32760.1 Mass: 73146 Score: 30 Matches: 1(1) Sequences: 1(1) emPAI: 0.06 |
| Symbols: | ENTH/VHS/GAT family protein | chr4:15799376-15803832 FORMARD LENGTH=675

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        4977
        763.4811
        1524.9477
        1524.9491
        -0.87
        0
        30
        0.0028
        1
        U
        K.AQLIALTLLETIVK.N

                Proteins matching the same set of peptides:

AT4G32760.2 Mass: 73275 Score: 30 Matches: 1(1) Sequences: 1(1)
                | Symbols: | ENTH/VHS/GAT family protein | chr4:15799376-15803832 FORWARD LENGTH=676

        AT5614650.1
        Mass: 47477
        Score: 30
        Matches: 1(1)
        Sequences: 1(1)
        empAI: 0.09

        | Symbols:
        | Pectin lyase-like superfamily protein | chrs:4724599-4726328
        FORMAD LENDTH-435

        Query Observed Mr(expt)
        Mr(expt)
        ppm Miss Score Expect Rank Unique
        Peptide

        344
        408.2329
        814.4513
        814.4661
        -18.13
        1
        30
        0.042
        1
        U
        K.GKGIIDGR.G

              AT4G10840.1 Mass: 66866 Score: 30 Matches: 1(1) Sequences: 1(1) empAI: 0.07

| Symbols: | Tetratricopeptide repeat (TFE)-like superfamily protein | chr4:655614-6659033 FORWARD LENGTH=609

query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

4902 756.9301 1511.8455 1511.8446 0.60 0 30 0.027 1 U B.:EDAIFILEQVIK.L
              AT3G17046.1 Mass: 73882 Score: 30 Matches: 1(0) Sequences: 1(0) |
| Symbols: HCF107 | high chlorophyll fluorescent 107 | chr3:5809378-5812605 REVERSE LENGTH-652 |
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
| 1448 530.7511 1059.5477 1059.5550 -7.84 1 30 0.063 1 U K.LDWMLDSKR.L
                Proteins matching the same set of peptides:
AT3017040.2 Mass: 70184 Score: 30 Matches: 1(0) Sequences: 1(0)
[ Symbols: Net707 | high chlorophyll fluorescent 107 | chr3:5809378-5812605 REVERSE LENOTH=618
              AT5G46020.1 Mass: 1896 Score: 30 Matches: 1(0) Sequences: 1(0)
| Symbols: | CONTAINS InterPro DOMAIN/s: Casein kinase substrate, phosphoprotein FP28 (InterPro:IPR019380); Has 30201 Blast hits to 17322 proteins in 780 species: Archae - 12; Bacteria - 1396; Metazoa - 17338; Fungi - 3422; Pla

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        6139
        564.2894
        1689.8463
        1689.8798
        -19.84
        0
        30
        0.066
        1
        U
        R.FSSAAI

263. AT2G42680.1 Mass: 15610 Score: 30 Matches: 1(1) Sequences: 1(1) empAI: 0.31

| Symbols: MBFIA, ATMEFIA | multiprotein bridging factor lA | chr2:17774972-17776116 FORWARD LENGTH=142

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

1870 556.3271 1110.6396 1110.6397 -0.05 0 30 0.022 1 U K.AIPMQZLEK.L
               Proteins matching the same set of peptides:

AT3058680.1 Mass: 15572 Score: 30 Matches: 1(1) Sequences: 1(1)

Symbols: MBFIB, ATMBFIB | multiprotein bridging factor 1B | chr3:21707367-21708625 FORMARD LENGTH=142
              | AT5645520.1 | Score: 30 | Matches: 1(1) | Sequences: 1(1) | emPAI: 0.03 | | | | |
| Symbols: | Leucine-rich | repeat (LER) | family protein | chr5:18449509-18453012 REVERSE LENGTH=1167 |
| Query | Observed | Mr(expl) | Mr(calo) | ppm | Miss Score | Expect | Rank Unique | Peptide |
| 291 | 400.2671 | 798.5196 | 798.5215 | -2.29 | 0 | 30 | 0.018 | 2 | U | K.LIAILQK.K
265. ATIGI5210.1 Mags: 163321 Score: 30 Matches: 1(1) Sequences: 1(1) empAI: 0.03 | Symbols: PDR7, ATPDR7 | pleiotropic drug resistance 7 | chr1:5231552-5236573 REVERSE LENGTH=1442

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        4379
        715.8041
        1429.5937
        1429.5966
        -1.99
        1
        30
        0.011
        2
        U
        R.WMNKMSGNSTTR.L

                                                      Mass: 21407
                                                                                          Score: 29
                                                                                                                                Matches: 2(0) Sequences: 2(0)
266. AT2G34480.1 Mass: 21407 Score: 29 Matches: 2(0) Sequences: 2(0)
| Symbols: | Ribosomal protein L18ae/LX family protein | chr2:14532916-14534161 REVERSE LENGTH=178
              | Output Observed Mr(expt) Nr(exl) | ppm Miss Score Expect Rank Unique Peptide | | 1023 | 494.7632 | 987.5119 | 987.5138 | -1.86 | 0 | 29 | 0.062 | 1 | U | K.LWATNEVR.A | | 1166 | 509.7887 | 1017.5629 | 1017.5631 | -5.12 | 0 | 27 | 0.11 | 1 | U | R.FPCIQIIK.T

        AT5637030.1
        Score: 29
        Matches: 1(1)
        Sequences: 1(1)
        emPAI: 0.06

        | Symbols: | P-loop containing nucleoside triphosphate hydrolases superfamily protein | chr5:14634614-14636939 REVERSE LENGTH-638

        Query Observed Mr(expt)
        Mr(calc)
        ppm Miss Score Expect Rank Unique
        Peptide

        391
        413.7550
        825.4955
        825.5112
        -19.04
        0
        29
        0.012
        1
        U
        KLIWGPLK.T

             AT3656860.1 Score: 29 Matches: 1(1) Sequences: 1(1) emPAI: 0.10
| Symbols: GNC, GATA21 | GATA type zinc finger transcription factor family protein | chr5:22989630-22991351 REVERSE LENGTH=398
| Query Observed Mr(expt) Mr(calo) pm Miss Score Expect Rank Unique Peptide
| 321 411.7550 825.4555 825.4960 -0.56 0 29 0.012 1 0 R.VQQLPLK.K
             AT5G20290.1 Mass: 25092 Score: 29 Matches: 1(1) Sequences: 1(1) emPAI: 0.18
| Symbols: | Ribosomal protein 88e family protein | chr5:6851695-6853012 RFVERSE LENGTH-222
Query Observed Mr(expt) Mr(calo) ppm Miss Score Expect Rank Unique Peptide
5294 781.3658 1560.7171 1560.7168 0.18 0 29 0.048 1 U R.SLOSHIEDQPASGR.L
              <u>ATIG70310.1</u> Mass: 37630 Score: 29 Matches: 1(0) Sequences: 1(0) | Symbols: SPDS2 | spermidine synthase 2 | chr1:26485497-26487352 REVERSE LENGTH=340

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        625
        437.7462
        873.4779
        873.4920
        -16.04
        2
        29
        0.097
        1
        U
        K.KVIDSKAN.

271. AT1G75280.1 Mass: 33773 Score: 28 Matches: 1(1) Sequences: 1(1) emPAI: 0.13

| Symbols: | NmrA-like negative transcriptional regulator family protein | chr1:28252030-28253355 FORWARD LENGTH=310

        uery
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        557
        432.7442
        863.4738
        863.4752
        -1.62
        0
        28
        0.052
        2
        U
        K.FLVEASAK.A

272. ATIG20230.1 Score: 28 Matches: 1(1) Sequences: 1(1) empAI: 0.05

| Symbols: | Pentatricopeptide repeat (PRE) superfamily protein | chri:7009570-7011852
Query Observed Mr(expt) Mr(calo) ppm Miss Score Expect Rank Unique Peptide
826 470.7870 939.5595 939.5641 -4.86 0 28 0.018 2 U K.QVLPLIEK.I
                                                                                                                                                                                          chr1:7009570-7011852 FORWARD LENGTH=760

        274.
        AT3610950.1
        Mass: 10667
        Score: 28
        Matches: 1(1)
        Sequences: 1(1)
        empAI: 0.47

        | Symbols: | Zinc-binding ribosomal protein family protein | chr3:3423893-3424566
        FORMARD LENGTH-92

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        1863
        555.7233
        1109.4320
        1109.4310
        0.85
        0
        28
        0.0091
        1
        U
        K.YFCEFCGK.Y

                Proteins matching the same set of peptides:
A73060245.1 Mass: 10462 Score: 28 Matches: 1(1) Sequences: 1(1)
Symbols: | Zinc-binding ribosomal protein family protein | chr3:2226803-22269750 FORWARD LENGTH=92
275. AT3060040.1 Score: 28 Matches: 1(1) Sequences: 1(1) emPAI: 0.05 | Symbols: | F-box family protein | chr3:22178937-22179728 REVERSE LENOTH=838

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect
        Rank
        Unique
        Peptide

        346
        408.2594
        814.5042
        814.5164
        -14.90
        0
        28
        0.051
        3
        U
        K.LETLIVK.D

                  \text{NT3025520.1} Mass: 34394 Score: 27 Matches: 1(1) Sequences: 1(1) emPAI: 0.13
Symbols: ATL5, FGY3, OLIS, RPLSA | ribosomal protein L5 | chr3:9269973-9271327 REVERSE LENGTH=301
uery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
958 485.3057 968.5968 968.6019 -5.19 0 27 0.018 1 U R.ALLDVGLIR.T
276. AT3G25520.1
```

Proteins matching the same set of peptides:

AT3G25520.2 Mass: 21532 Score: 27 Matches: 1(1) Sequences: 1(1)

```
| Symbols: ATL5 | ribosomal protein L5 | chr3:9269573-9270434 REVERSE LENGTH=190
AT5G39740.1 Mass: 34473 Score: 27 Matches: 1(1) Sequences: 1(1)
| Symbols: OL17, RPL5B | ribosomal protein L5 B | chr5:15903365-15905185 FORWARD LENGTH=301
                 AT5G39740.2 Mass: 34473 Score: 27 Matches: 1(1) Sequences: 1(1)

| Symbols: RPL5B | ribosomal protein L5 B | chr5:15903484-15905185 FORWARD LENGTH=301
              AT3G04230.1 Mass: 16747 Score: 27 Matches: 1(1) Sequences: 1(1) empAi: 0.28

| Symbols: | Ribosomal protein Sf domain 2-like superfamily protein | chr3:1113169-1113609 REVERSE LENGTH-146

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

2054 564.8549 1127.6953 1127.6954 -0.12 0 27 0.024 1 U K.IFEPVLLLGK.H
                Proteins matching the same set of peptides: 
AT5G18380.1 Mass: 16835 Score: 27 Matches: 1(1) Sequences: 1(1)
                ASSO1838.1 Mass: 16835 Source: 27 Matches: 1(1) Sequences: 1(1) |
| Symbols: | Ribosomal protein 5 domain 2-like superfamily protein | chr5:6090253-6090693 REVERSE LENGTH-146 |
| ATS018380.2 Mass: 16819 Source: 27 Matches: 1(1) Sequences: 1(1) |
| Symbols: | Ribosomal protein 5 domain 2-like superfamily protein | chr5:6090128-6090693 REVERSE LENGTH-144 |
| ATS018380.3 Mass: 16272 Source: 27 Matches: 1(1) Sequences: 1(1) |
| Symbols: | Ribosomal protein S domain 2-like superfamily protein | chr5:6090128-6090693 REVERSE LENGTH-139 |
278. AT4G30993.1 Score: 27 Matches: 1(0) Sequences: 1(0) [symbols: | Calcineurin-like metallo-phosphoesterase superfamily protein | chr4:15098201-15099422 FORMARD LENGTH=209

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank
        Unique
        Peptide

        761
        459.7710
        917.5274
        917.5368
        -10.18
        1
        27
        0.062
        1
        U
        R.LLRLMEK.V

                AT4G30993.2 Score: 27 Matches: 1(0) Sequences: 1(0)
| Symbols: | Calcineurin-like metallo-phosphoesterase superfamily protein | chr4:15098201-15099935 FORWARD LENGTH=285
279. AT120440.1 Mass: 29879 Score: 27 Matches: 1(1) Sequences: 1(1) empAi; 0.15
| Symbols: COR47, RD17, AtCOR47 | cold-regulated 47 | chr1:7084722-7085664 REVERSE LENGTH:-265
                   uery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
680 448.7472 895.4798 895.4804 -0.66 0 27 0.048 1 U R.GLFDFLGK.K

        Proteins matching the same set of peptides:

        AT1076180.1
        Mass: 20774
        Score: 27
        Matches: 1(1)
        Sequences: 1(1)

        | Symbols: ERD14 | Dehydrin family protein | chrl:28587013-28587657 REVERSE LENGTH=185
        AT1076180.2
        Mass: 20774
        Score: 27
        Matches: 1(1)
        Sequences: 1(1)

        | Symbols: ERD14 | Dehydrin family protein | chrl:28587013-28587657 REVERSE LENGTH=185
        AT1076180.2
        AT1076180.2

              AT4G08570.1 Mass: 17064 Score: 27 Matches: 1(0) Sequences: 1(0)
| Symbols: | Heavy metal transport/detoxification superfamily protein | chr4:5455123-5455975 REVERSE LENGTH=150
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
2080 565.8312 1129.6479 1129.6434 12.1 1 27 0.075 1 U K.SVDDVWKLQK.V
281. ATIG31360.1 Mass: 80117 Score: 26 Matches: 2(0) Sequences: 1(0)
| Symbols: RECQLZ, ATRECQZ, MED34 | RECQ helicase L2 | chr1:11237422-11237412 FORWARD LENGTH=705
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 10541 1215.0612 2428.1078 2428.1257 -7.37 0 26 0.11 1 U R.OSSWYFYEYSGLONLYDT
                Proteins matching the same set of peptides: 
AT1G31360.2 Mass: 66351 Score: 26 Matches: 2(0) Sequences: 1(0)
                 Symbols: RECQL2, MED34 | RECQ helicase L2 | chr1:11233174-11237412 FORWARD LENGTH=580
             Proteins matching the same set of peptides:
AT5055570.2 Mass: 64214 Score: 26 Matches: 2(0) Sequences: 2(0)
[Symbols: | RMA-binding (RRM/RRD/RNP motifs) family protein | chr5:22544669-22546801 REVERSE LENGTH=585
283. ATIG17880.1 Mass: 17935 Score: 26 Matches: 1(0) Sequences: 1(0) [Symbols: BTF3, ATERF3 | basic transcription factor 3 | chr1:6152572-6153425 REVERSE LENGTH=165

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        15077
        1004.5516
        3010.6329
        3010.6379
        -1.67
        1
        26
        0.061
        1
        U
        R.IGVNSIPAIEEVNIFKDDVVIQFINPK.V

284. ATIGI5270.1 Mass: 6974 Score: 26 Matches: 1(0) Sequences: 1(0)

| Symbols: | Translation machinery associated TMA7 | chr1:5250833-5252020 REVERSE LENGTH=64
               Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4414 719.8377 1437.6609 1437.6623 -1.01 0 26 0.092 1 U K.EYDETDLANIQK.K
285. ATIG20020.1 Mass: 41484 Score: 26 Matches: 1(0) Sequences: 1(0)
| Symbols: ATLFNR2, FNR2 | ferredoxin-NADF(+)-oxidoreductase 2 | chr1:6942851-6944868 FORNARD LENGTH=369
                 Duery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
3932 683.8481 1365.6817 1365.6776 3.01 0 26 0.14 1 U R.LVYINDQGETVK.G
               | Nation | N
                 2316 577.8405 1153.6663 1153.6707 -3.73 0 23 0.085 1 U R.GLIDLNITAPK.K
                 5751 810.9337 1619.8529 1619.8519 0.64 0 20 0.57 1 U K.ALAVIDYLISNGSER.A
              AT4623940.1 Score: 26 Matches: 1(1) Sequences: 1(1) emPAI: 0.04
| Symbols: | FtaH extracellular protease family | chr4:12437108-12441841 FORWARD LENGTH-946
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
727 457.2075 912.4005 912.4011 -0.68 0 26 0.036 1 U K.MSLEOFR.K
288. <u>A72G43550.1</u> Score: 25 Matches: 1(0) Sequences: 1(0) | Symbols: | Scorpion toxin-like knottin superfamily protein | chr2:18073263-18073651 FORMARD LENGTH=103 Query Observed Mr(expt) Mr(cale) ppm Miss Score Expect Rank Unique Peptide 825 470.7377 939.4680 939.4637 -3.00 0 25 0.081 1 U K.FFPTLCR.Q
289, ATIG72370.1 Mass: 32499 Score: 25 Matches: 1(1) Sequences: 1(1) emPAI: 0.14
| Symbols: P40, AP40, RP40, RP5AA | 40s ribosomal protein SA | chri:27243148-27244842 REVERSE LENGTH-298
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| S22 470.7900 939.5654 939.5753 -10.57 0 25 0.032 1 U R.LLLIDDPR.T
               | ATIG27400.1 | Mass: 20056 | Score: 25 | Matches: 2(0) | Sequences: 2(0) | |
| Symbols: | Ribosomal protein L22p/L17e family protein | chr1:9515230-9516725 FORWARD LENGTH-176 |
| Query Observed Kr(expt) | Mr(calc) | ppm | Miss Score Expect Rank Unique | Peptide |
| 433 | 416.7347 | 831.4549 | 831.45403 | -65.5 | 0 23 0.38 1 U K.QAIPPTR.F |
| 2116 | 567.3317 | 1132.6488 | 1132.6492 | -0.36 | 0 25 0.09 1 U K.SAQFVLDLLK.N
```

```
AT5G13280.1 Mass: 62658 Score: 25 Matches: 1(1) Sequences: 1(1) emPAI: 0.07

| Symbols: AK-LYSI, AKI, AK | aspartate kinase 1 | chr5:4249516-4252654 FORMARD LEMOTH-569

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

5211 853.5129 1705.0113 1704.9808 17.9 2 25 0.019 1 U K.TRUMTKSILTSIVLK.R
 293. AT1G60900.1 Mass: 66446 Score: 25 Matches: 1(0) Sequences: 1(0) |
| Symbols: | U2 snRNP auxilliary factor, large subunit, splicing factor | chr1:22424008-22427806 FORMARD LENGTH-589 |
| Query Observed Mr(capt) Mr(calc) | ppm Miss Score Expect Rank Unique Peptide |
| 4478 1121.5868 2241.1590 2241.1562 | 1.25 0 25 0.18 1 U R.SYERASNAMALDGIILEGYPYK.V
 294. ATIG08360.1 Mass: 24624 Score: 25 Matches: 1(1) Sequences: 1(1) emPAI: 0.19
| Symbols: | Ribosomal Protein Lip/Lilos family | chr: 12636231-2637694 FORMADD LENGTH-216
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
325 406.2550 810.4955 810.4963 -0.98 0 25 0.017 1 U R.LLGPGLNK.A
                              Proteins matching the same set of peptides:

AT2027530.1 Mass: 24580 Score: 25 Matches: 1(1) Sequences: 1(1)

| Symbols: FGY1 | Ribosomal protein Lip/L10e family | chr2:11763443-11764570 REVERSE LENGTH-216

AT2027530.2 Mass: 24580 Score: 25 Matches: 1(1) Sequences: 1(1)

| Symbols: FGY1 | Ribosomal protein Lip/L10e family | chr2:11763443-11764570 REVERSE LENGTH-216

AT5022440.1 Mass: 24744 Score: 25 Matches: 1(1) Sequences: 1(1)

| Symbols: | Ribosomal protein Lip/L10e family | chr5:7435308-47436486 REVERSE LENGTH-217

AT5022440.2 Mass: 24744 Score: 25 Matches: 1(1) Sequences: 1(1)
                                 AT5G22440.2 Mass: Z4744 Score: 49 Mattheb. 117 Sequence. - 1 Statement of Matthebase Attached Score: 49 Matthebase Attached Score: 40 Matthebase Attached Sc
                             ATIGO1490.1 Mass: 19882 Score: 24 Matches: 1(0) Sequences: 1(0)
| Symbols: | Heavy metal transport/detoxification superfamily protein | chr1:180401-182066 REVERSE LENGTH=177
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 2566 601.3311 1200.6076 1200.5986 7.55 2 24 0.16 1 U K.KEGRAPKREGK.K
                              Proteins matching the same set of peptides:

AT1601490.2 Mass: 19882 Score: 24 Matches: 1(0) Sequences: 1(0)

| Symbols: | Heavy metal transport/detoxification superfamily protein | chrl:180401-182066 REVERSE LENGTH=177
                             <u>AT4G24820.1</u> Mass: 44425 Score: 24 Matches: 1(0) Sequences: 1(0)
                                 | Symbols: | 265 protessome, regulatory subunit Rpn7;Froteasome component (PCI) domain | chr4:12790471-12792599 REVERSE LENGTH=387
| The component of the compo
                                       roteins matching the same set of peptides:
<u>740234890.2</u> Mass: 4425 Soore: 24 Matches: 1(0) Sequences: 1(0)
Symbols: | 269 proteasome, regulatory subunit Epn7:Proteasome component (PCI) domain | chr4:12790471-12792599 REVERSE LENGTH-387
                             ATIGI1860.1 Mass: 44759 Score: 24 Matches: 1(1) Sequences: 1(1) emPAI: 0.10
| Symbols: | Glycine cleavage T-protein family | chr1:4001801-4003245 FORWARD LENGTH=408
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
1692 657.3974 1969.1704 1969.1724 -1.03 0 24 0.019 1 U R.SLIALQGPLAAPVLQHLTK.E
                              AT5G54900.1 Mass: 42411 Score: 24 Matches: 1(0) Sequences: 1(0)
| Symbols: ATREP45A, REP45A | RRA-binding protein 45A | chr5:22295412-22298126 FORWARD LENGTH-387
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 4716 492.2726 1473.7961 1473.7980 -1.30 0 24 0.24 Rank Unique Peptide
 299. AT4604460.2 Mass: 55865 Score: 23 Matches: 17(0) Sequences: 1(0)
| Symbols: | Saposin-like aspartyl protease family protein | chr4:225233-2227746 FORMARD LENGTH-504
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 1968 560.3070 | 118.5995 | 118.6005 -0.93 | 0 23 | 0.22 | 1 U K.THUNSLLAGK.V 1945 1948 1954 1957 1975 1980 1987 1988 1992 1996 1997 1998 2001 2004 2006 2008
                             AT4G34620.1 Mass: 12748 Score: 23 Matches: 1(0) Sequences: 1(0) | 
| 301. ATI005190.1 | Score: 23 | Matches: 1(0) | Sequences: 1(0) | | |
| Symbols: emb2394 | Ribosomal protein L6 family | chri:1502515-1503738 REVERSE LENGTH-223 |
| Query Observed Mr(expt) | Mr(cale) | ppm | Miss Score | Expect Rank Unique | Peptide |
| 648 | 441.2210 | 880.4275 | 880.4290 | -1.78 | 0 | 23 | 0.15 | 1 | U | K.YSDELVE.R
 302. AT3055080.2 Score: 23 Matches: 1(1) Sequences: 1(1) emPAI: 0.11
| Symbols: | SNT domain-containing protein | chr3:20411476-20414595 RPVERSE LENOTH=353
Query Observed Mr(expt) Mr(cale) ppm Miss Score Expect Rank Unique Peptide
88 378.2589 754.5032 754.5065 -4.34 0 23 0.01 4 U M.LAAVLIR.E
 303. AT3029075.1 Mass: 34488 Score: 23 Matches: 1(0) Sequences: 1(0) |
| Symbols: | glycine-rich protein | chr3:11051645-11053629 REVERSE LENGTH-294 |
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Sank Unique |
| 10936 | 510.4293 | 2547.1102 | 2547.1150 | -1.87 | 1 | 23 | 0.13 | 1 | U R.IESDIVKPSYGGHEDDGDDGHKK.H
                             AT3C49990.1 Mass: 5611 Score: 23 Matches: 1(0) Sequences: 1(1)
| Symbols: | unknown protein: Has 1524 Blast hits to 1298 proteins in 225 species: Archae - 9; Bacteria - 84; Metazoa - 474; Fungi - 184; Flants - 98; Viruses - 17; Other Eukaryotes - 658 (source: NCBI BLink). | chr3:18532492-
| Query | Observed Mr(calo) pm Miss Score: Mr(calo) pm Miss Score: Expect Rank Unique | Ppt Miss Score: Expect Rank Unique | Ppt
 305. ATIGISIGO.1 Mass: 108663 Score: 22 Matches: 1(1) Sequences: 1(1) emPAI: 0.04
| Symbols: | Protein kinase superfamily protein | chr1:6249126-6253835 FORMARD LENGTH-992
Query Observed Mr(expt) Mr(expt) Dym Miss Score Expect Rank Unique Peptide
| 1129 | 505.8031 1009.5916 | 1009.6032 -11.48 0 22 0.05 1 U K.QLGKFIGR.A
306. AT4026590.1 Mass: 85405 Score: 22 Matches: 1(0) Sequences: 1(0)
| Symbols: ATOPTS, OPTS | oligopeptide transporter 5 | chr4:13414134-13416850 REVERSE LENGTH=753
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 637 439.2517 876.4888 876.4916 -3.23 1 22 0.19 1 U K.ATLITKDK.F
 307. A74G29270.1 Score: 22 Matches: 1(0) Sequences: 1(0) |
| Symbols: | HAD superfamily, subfamily IIIB acid phosphatase | chr4:14423797-14424848 REVERSE LENGTH-256
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 643 | 440.7231 | 879.4317 | 879.4338 | -2.33 | 0 | 22 | 0.27 | 1 | U K.YNEVVEK.G
 308. AT1G22080.1 Mass: 74708 Score: 21 Matches: 1(0) Sequences: 1(0) |
| Symbols: | TRAF-like family protein | chr3:7777818-7781718 REVERSE LENGTH-648 |
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Bank Unique Peptide |
2807 610.8541 1219.6937 1219.6747 15.6 2 21 0.16 1 U R.MITYPKGNRK.D
   309. AT3G62330.1 Mass: 56212 Score: 21 Matches: 1(0) Sequences: 1(0)
                                 | Symbols: | Zinc knuckle (CCHC-type) family protein | chr3:23063329-23065419 REVERSE LENGTH=479
Gury Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4867 508.2303 1521.6391 1521.6399 -1.15 1 21 0.22 1 U K.GMYPNHGDNYSSR.H
                                                                                    1 Mass: 54745 Score: 21 Matches: 1(0) Sequences: 1(0)
MYB101, ATMYB101, ATM1 | myb domain protein 101 | chr2:13782419-13784363 REVERSE LENGTH=490
```

```
uery Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

9077 1095.0183 2188.0221 2188.0391 -7.80 1 21 0.45 1 U K.KDIDAMSYSSLLMGDLEIR.S
                     Proteins matching the same set of peptides:

A<u>72031360.2</u> MSais: 53623 Score: 21 Matches: 1(0) Sequences: 1(0)

| Symbols: WMSais: 3623 Score: 21 Matches: 1(0) | Chr2:13782419-13784359 REVERSE LENGTH-478
                   AT5010940.1 Mass: 84804 Score; 21 Matches: 7(0) Sequences: 1(0)
| Symbols: | transducin family protein | /WD-40 repeat family protein | chr5:3448890-3454127 REVERSE LENGTH-757
| Cuery Observed Mr(capy) Mr(calo) pms Miss Score Expect Rank Unique Peptide
| 2754 | 605.8452 | 1209.6759 | 1209.6829 | -5.84 2 | 20 | 0.23 | 1 | U | R.SGAKRALADPFK.Q 2640 2690 2701 2724 2741 2746
                     Proteins matching the same set of peptides:
AT5010940.2 Mass: 84444 Soore: 21 Matches: 7(0) Sequences: 1(0)
| Symbols: | transducin family protein | WD-40 repeat family protein | chr5:3448890-3454127 REVERSE LENGTH-754
                    AT1607880.1 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
| Symbols: AFXI, MEE6, CSI, ATAEXI, ATAEXOI | ascorbate peroxidase | | chr1:2438005-2439435 FORWARD LENGTH=250
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide

5714 537.9736 1610.8991 1610.9032 -2.56 0 0 20 0.3 1 U K.ALLDDFVFRPLVEK.Y
                   AT1G07890.1
                   Proteins matching the same set of peptides:
AT1607890.2 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.3 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.4 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.5 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.6 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.7 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.7 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.8 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.8 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
Symbols: AFXI, MEE6, CSI, ATAFXI, ATAFX01 | ascorbate peroxidase 1 | chr1:2438005-2439435 FORWARD LENGTH-250
AT1607890.8 Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
                      Proteins matching the same set of peptides:

<u>ATIGO7890.2</u> Mass: 27829 Score: 20 Matches: 1(0) Sequences: 1(0)
 313. A72G47640.1 Mass: 12741 Score: 20 Matches: 1(0) Sequences: 1(0) |
| Symbols: | Small nuclear ribonucleoprotein family protein | chr2:19537393-19538431 FORWARD LENGTH-109
                    Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 
2887 616.3136 1230.6126 1230.6139 -1.01 0 20 0.56 1 U K.NNTQVLINCR.N
                     Proteins matching the same set of peptides:
A7204740.2 Mass: 12613 Score: 20 Matches: 1(0) Sequences: 1(0)
[ Smpolls: ] Small nuclear ribonucleoprotein family protein | chr2:19537393-19538431 FORWARD LENGTH=108
                     | Symbols: | Small nuclear ribonucleoprotein family protein | chr2:19537393-19538431 FORWARD LENGTH-108 AT2647640.4 | Mass: 12613 Score: 20 Matches: 1(0) Sequences: 1(0) | Saguences: 1(0) | Saguences: 1(0) | Saguences: 1(0) | Saguences: 1(0) | Symbols: | Small nuclear ribonucleoprotein family protein | chr2:19537393-19538431 FORWARD LENGTH-108 | Symbols: | Small nuclear ribonucleoprotein family protein | chr2:19537393-19538431 FORWARD LENGTH-109 AT3652840.1 | Mass: 12741 | Score: 20 | Matches: 1(0) | Saguences: 1(0) | Symbols: | Small nuclear ribonucleoprotein family protein | chr2:32338727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23238727-23236615 REVERSE LENGTH-109 | Small nuclear ribonucleoprotein family protein | chr3:23238727-232
                      AT3662840.2 Mass: 12613 Score: 20 Matches: 1(0) Sequences: 1(0) |
| Symbols: | Small nuclear ribonucleoprotein family protein | chr3:23235727-23236615 REVERSE LENGTH=108
 315. A74G27150.1 Mass: 19919 Score: 19 Matches: 1(0) Sequences: 1(0) [Symbols: SESA2, A7252 ] seed storage albumin 2 [ch4:13609396-13609908 FORMARD LENGTH=170 [Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 2415 391.5313 1171.5720 1171.5734 -1.19 0 19 0.35 1 U K.EFQGSQHLR.A
                     Proteins matching the same set of peptides:

Natches: 1(0) Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)
 316. ATSG67040.1 Mass: 18978 Score: 19 Matches: 1(0) Sequences: 1(0) |
| Symbols: | Protein of unknown function (DUF295) | chr5:26757896-26758475 REVERSE LENGTH-165 |
| Query Observed Mr(expt) | Mr(calc) | ppm Miss Score Expect Rank Unique | Peptide |
| 5461 | 794.3870 | 1586.7594 | 1586.7722 -8.09 | 1 | 19 0.6 | 1 | -_MGSIMILMSNNMILK.X
 317. ATIG21610.1 Mass: 76511 Score: 19 Matches: 1(0) Sequences: 1(0)
| Symbols: | wound-responsive family protein | chr:17574104-7578643 FORMARD LENGTH-684
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 9749 758.4200 2272.2381 2272.1950 19.0 1 19 0.43 1 U R.VIPAPQNLMIFERTIPDLANLPS.-
                     Proteins matching the same set of peptides:

week 20977 Score: 18 Matches: 1(0) Sequences: 1(0)
                     | Proteins matching the same set of peptides:
| A73651880.2 | Mass: 2073 | Soure: 18 | Matches: 1(0) | Sequences: 1(0) |
| Symbols: HMGB1, NFD1 | high mobility group B1 | chr3:19247241-19248491 REVERSE LENGTH-185 |
| A73651880.3 | Mass: 20253 | Score: 18 | Matches: 1(0) | Sequences: 1(0) |
| Symbols: HMGB1, NFD1 | high mobility group B1 | chr3:19247241-19248491 REVERSE LENGTH-178 |
| A73651880.4 | Mass: 18308 | Score: 18 | Matches: 1(0) | Sequences: 1(0) |
| Symbols: HMGB1 | high mobility group B1 | chr3:19247241-19248491 REVERSE LENGTH-161 |
319. AT2647000.1 Mass: 139397 Score: 18 Matches: 2(0) Sequences: 1(0) | Symbols: MDR4, PGP4, ABCB4, ATFGP4 | ATF binding cassette subfamily B4 | chr2:19310008-19314750 REVERSE LENGTH-1286 Query Observed Mr(expt) Mr(calc) ppm Hiss Score Expect Rank Unique Peptide 7765 931.4334 1908.723 13980.831 4.64 1 18 0.53 1 U R.TVASPCAEGEVEMENTSK.K 7788
 320. AT4G24280.1 Mass: 76575 Score: 17 Matches: 1(0) Sequences: 1(0) | Symbols: cpHsc70-1 | chloroplast heat shock protein 70-1 | chr4:12590094-12593437 FORWARD LENGTH=718
                    Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide 3553 436.5500 1306.6281 1306.6452 -13.06 1 17 0.98 1 U R.NLNGKGGTFMPR.S
 321. AT1G27100.1 Mass: 57877 Score: 17 Matches: 2(0) Sequences: 1(0)

| Symbols: | Actin cross-linking protein | chr1:9407557-9411074 REVERSE LENGTH=519

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        1206
        513.2791
        1024.5437
        1024.5553
        -11.34
        1
        17
        0.59
        1
        U
        K.TESAKAPPPK.T
        1209

 | AT2032220.1 | Mass: 15632 | Score: 17 | Matches: 1(0) | Sequences: 1(0) | | |
| Symbole: | Ribosomal L27e protein family | chr2:13678945-13679352 FORNARD LENOTH=135 |
| Query Observed | Mr(expt) | Mr(calc) | pm | Miss Score | Expect Rank Unique | Peptide |
| 576 | 435.2810 | 868.5495 | 868.5494 | -2.18 | 0 | 17 | 0.18 | 1 | U | K.AVILLOGR.Y
                     Proteins matching the same set of peptides:

A7302230.1 Mass: 15719 Socre: 17 Matches: 1(0) Sequences: 1(0) |

| Symbols: | Ribosomal 127e protein family | chr3:7844136-7844543 REVERSE LENGTH=135 A74015000.1 Mass: 15712 Score: 17 Matches: 1(0) Sequences: 1(0)
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325. AT5604690.1 Mass: 71032 Score: 16 Matches: 1(0) Sequences: 1(0) [Symbols: Ankyrin repeat family protein | chr5:1349781-1352525 REVERSE LENGTH=625 [Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide [12767] 948.1340 2841.3803 2841.3776 0.95 0 16 1.7 1 U K.LLEIPGNNOEIPVVVAVENTQNEMAR.Y
                    AT5055660.1 Mass: 87212 Score: 16 Matches: 1(0) Sequences: 1(0) |
| Symbols: | DEK domain-containing chromatin associated protein | chrs: 22539375-22543142 FORNARD LENGTH-778 |
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide |
| 1916 683.3142 2066.9306 2066.9229 -1.10 1 16 0.33 1 U K.NEARLAEREETINGEEVK.E
 327. ATIG72340.1 Mass: 42393 Score: 16 Matches: 1(0) Sequences: 1(0)
| Symbols: | NagB/RpiA/CoA transferase-like superfamily protein | chri:27236898-27238482 FORWARD LENGTH-382
Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
3111 627.3467 1252.6789 1252.6775 1.12 0 16 0.64 1 U K.QPDLARAVAAIR.A
                    329. AT1G65470.1 Mass: 94315 Score: 16 Matches: 1(0) Sequences: 1(0)
| Symbols: FASI, NFB2 | chromatin assembly factor-1 (FASCIATA1) (FASI) | chr1:24319906-24323879 REVERSE LENGTH-815
| Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
| 3992 689.3212 1376.6279 1376.6419 -10.17 2 16 0.96 1 U K.KQQDSEKEQK.R
                     Proteins matching the same set of peptides:

AT105470.2 Mass: 93349 Score: 16 Matches: 1(0) Sequences: 1(0)

| Symbols: FAS1 | chromatin assembly factor-1 (FASCIATAI) (FAS1) | chri:24319906-24323879 REVERSE LENGTH-807
                    331. AT2625625.1 Mass: 16550 Score: 16 Matches: 1(0) Sequences: 1(0)

| Symbols: | unknown protein; FUNCTIONS IN: molecular_function unknown; INVOLVED IN: biological_process unknown; LOCATED IN: chloroplast; EXPRESSED IN: 10 plant structures; EXPRESSED DURING: LP.06 six leaves visible, LP.04 four

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score Expect Rank Unique
        Peptide

        983
        488.7205
        975.4264
        975.4145
        12.2
        0
        16
        0.56
        1
        U
        R.TENETEPR.K

                     Proteins matching the same set of peptides:

ATX25525_2 Mass: 16420 Source: 16 Matches: 1(0) Sequences: 1(0)

[ Symbols: ] winknown protein: FUNCTIONS IN: solecular_function unknown: INVOLVED IN: biological_process unknown; LOCATED IN: chloroplast; EXPRESSED IN: 10 plant structures; EXPRESSED DURING: LP.06 six leaves visible, LP.04 four
 332. A72028240.1 Mass: 71037 Score: 16 Matches: 1(0) Sequences: 1(0) |
| Symbols: | ATP-dependent helicase family protein | chr2:12039649-12041970 FORMARD LENGTH=660
                     Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4972 762.3654 1522.7163 1522.7263 -6.58 1 16 1.4 1 U K.SQEVDAAYNAQAKK.N
 333. AT5G39500.1 Mass: 163675 Score: 16 Matches: 1(0) Sequences: 1(0)
| Symbols: GRLI, ERMOI | GNOM-like 1 | chr5:15615274-15819910 FORMARD LEMOTH-1443
| Query Observed M: (*capt) M: (calc) pm Miss Score Expect Rank Unique Peptide
| 11902 | 895.7527 | 2684.2362 | 2684.2309 | 1.99 | 2 | 16 | 1.4 | 1 | U R.WSQEAKNGIGETDANGKLGEDIGK.M
 334. A73G13782.1 Mass: 36623 Score: 15 Matches: 1(0) Sequences: 1(0) [Symbols: NRA04, NAF1/4, NRA4 | nucleosome assembly protein1/4 | chr3:4526660-4528398 FORMARD LENGTH=317 [Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide [35] 458.7541 915.4937 915.4948 9.80 0 15 1.6 1 U K.VBNIEMTK.T
                    AT5G22650.1 Mass: 32386 Score: 15 Matches: 1(0) Sequences: 1(0) | 
                      Proteins matching the same set of peptides:
AT5022550.2 M2ss; 32257 Score: 15 Matches: 1(0) Sequences: 1(0)
[ Symbols: M2ss; 32257 Score: 15 Matches: 1(0) Sequences: 1(0)
[ Symbols: M2ss; M2762, MD72, MD72, ATMD2m, MDA4, MD2 | histone deacetylase 2m | chr5:7534120-7536054 FORWARD LENGTH=305
                       AT5007240.1 Mass: 45293 Score: 15 Matches: 1(0) Sequences: 1(0) |
| Symbols: 10024 | 10-domain 24 | chr5:2272028-2274051 FORMARD LENGTH: 401

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score
        Expect Rank Unique
        Peptide

        5690
        804.3676
        1606.7207
        1606.7434
        -14.17
        2
        15
        1
        1
        U
        R.GVSDGLDRNQSDKSK.M

                       AT3G54620.1 Mass: 44361 Score: 15 Matches: 1(0) Sequences: 1(0)

| Symbols: ATBIFE75, EZC2H4, BZIF275 | basic leucíne zipper 25 | chri:20218085-20220341 REVERSE LENGTH-403

Duerry Observed Mr(caxpl.) Mr(callo) ppm Miss Score Expect Rank Unique Peptide

| Compart | State | State
 337. AT3G54620.1
338. AT1003950.1 Mass: 23012 Score: 15 Matches: 3(0) Sequences: 1(0)

| Symbols: VFS2.3 | vacuolar protein sorting-associated protein 2.3 | chr1:1011388-1013212 REVERSE LENGTH-210

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
4608 485.2722 1452.7947 1452.8048 6-5.4 2 (15) 0.92 1 U K.KPURREVLERSK.R

4610 727.4057 1452.7968 1452.8048 -5.49 2 19 0.35 1 U K.KPURREVLERSK.R 4609
                    ATIG51730.1 Mass: 28745 Score: 15 Matches: 1(0) Sequences: 1(0)

| Symbols: | Ubiquitin-conjugating enzyme family protein | chr1:19186812-19188638 REVERSE LENGTH-252

        Query
        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss
        Score
        Expect
        Rank
        Unique
        Peptide

        10250
        1194.0513
        2386.0880
        2386.1283
        -16.90
        0
        15
        1.5
        1
        U
        K.LEQEASENLGMAMIYTLVSSAK.D

                    ATIG13560.1 Mass: 43913 Score: 15 Matches: 1(0) Sequences: 1(0)

Symbols: AAPTI, ATAAPTI | aminoalcoholphosphotransferase 1 | chr1:4638834-4641691 REVERSE LENGTH=389

Query Observed Mr(expt) Mr(calc) ppm Miss Score Expect Rank Unique Peptide
                     10258 796.4081 2386.2026 2386.1847 7.50 0 15 2 1 U K.TNMCMSLLYLPFALANALTAR.L
                     Proteins matching the same set of peptides:

ATIG13560.2 Mass: 38792 Score: 15 Matches: 1(0) Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)

Sequences: 1(0)
                       | AT3025585.1 | Mass: 44067 | Score: 15 | Matches: 1(0) | Sequences: 1(0) | Sequence
                      Proteins matching the same set of peptides:

AZ2023280.2 Mass: 13847 Score: 15 Matches: 1(0) Sequences: 1(0)

| Symbols: | Protein of unknown function (DUF1068) | chr2:13823662-13829135 FORMARD LENGTH-121
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Mascot: http://www.matrixscience.com/