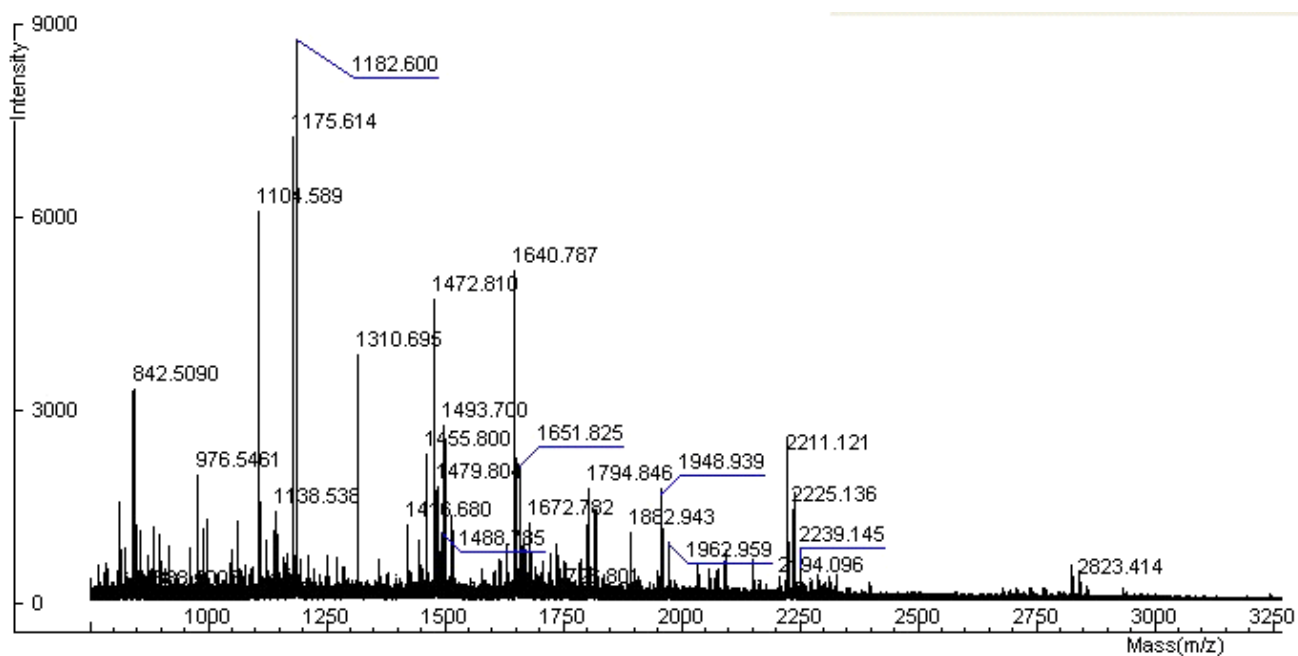


**Supplemental Figures 1a-k.** MALDI-O-TOF mass spectra of peptides resulted from in gel trypsin-digested protein spots excised from preparative pick gel. Mass spectra were acquired on a proTOF 2000<sup>TM</sup> MALDI O-TOF mass spectrometer (PerkinElmer) in the positive ion mode using TOFworks<sup>TM</sup>, an integrated workflow-based software platform. The peptide ion mass (M + H) were accurate to within 30 ppm after external calibration. The labeled peptide ions (M+H) were used to generate statistically-significant matches to the proteins as indicated in Supplemental Table 1.



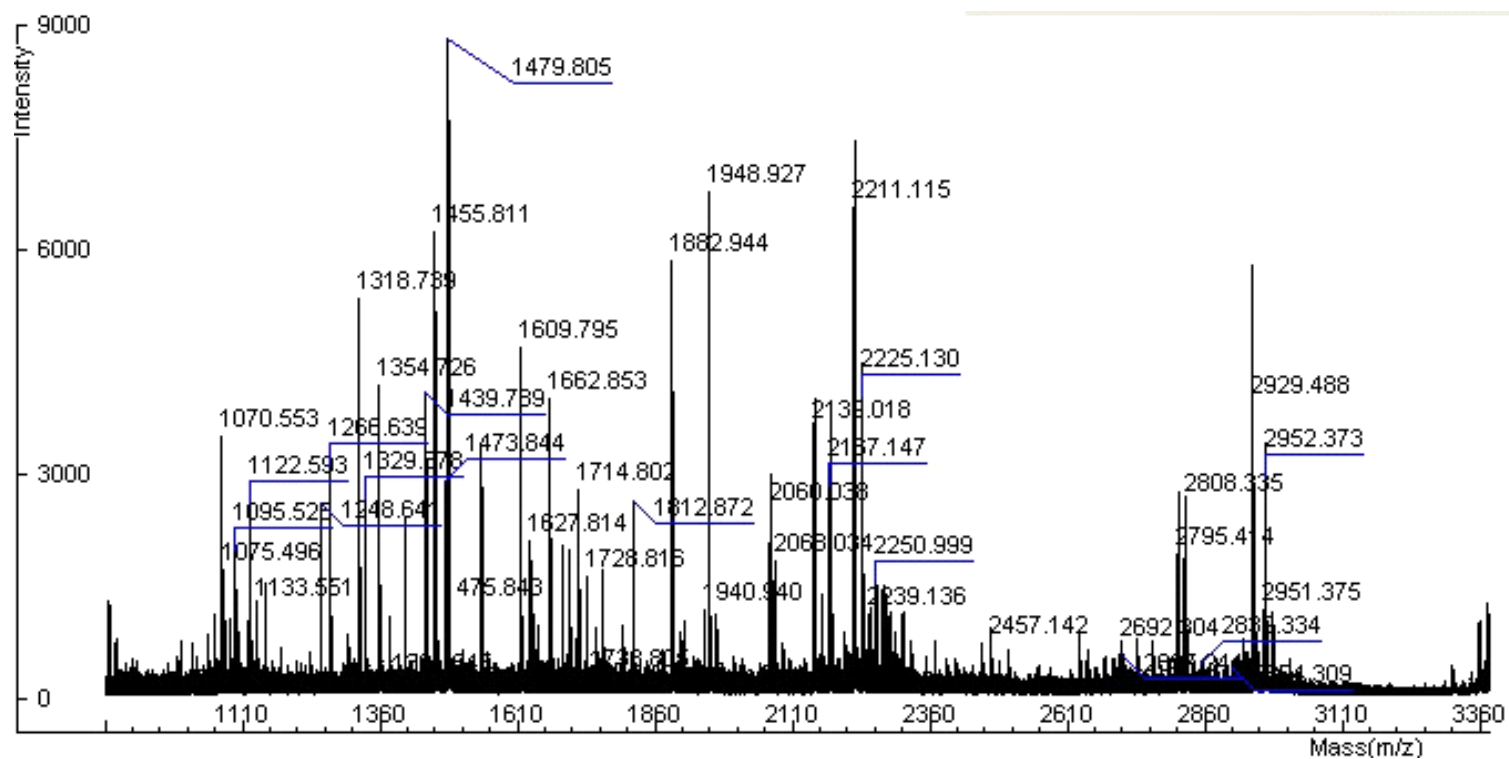


Figure 1b, spot no 16 (*Sdha*)

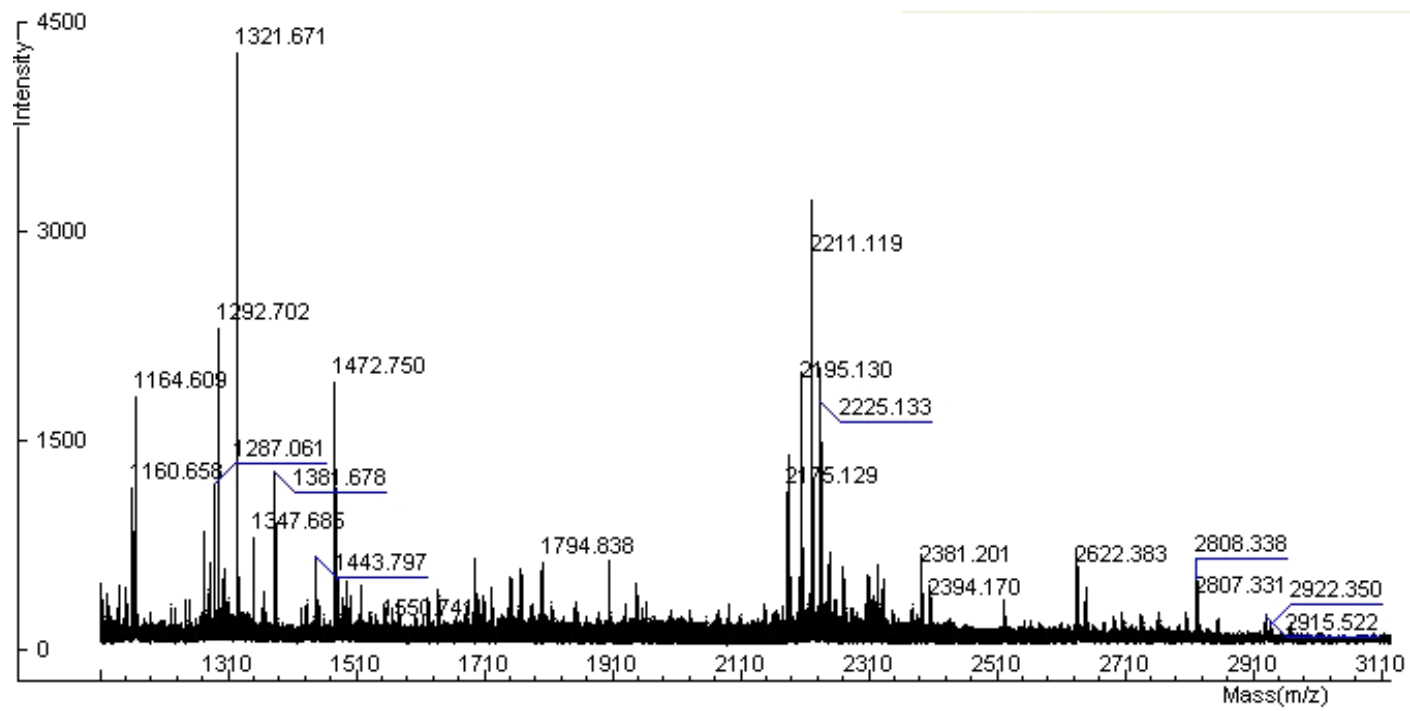


Figure 1c, spot no 17 (*Spin2b*)

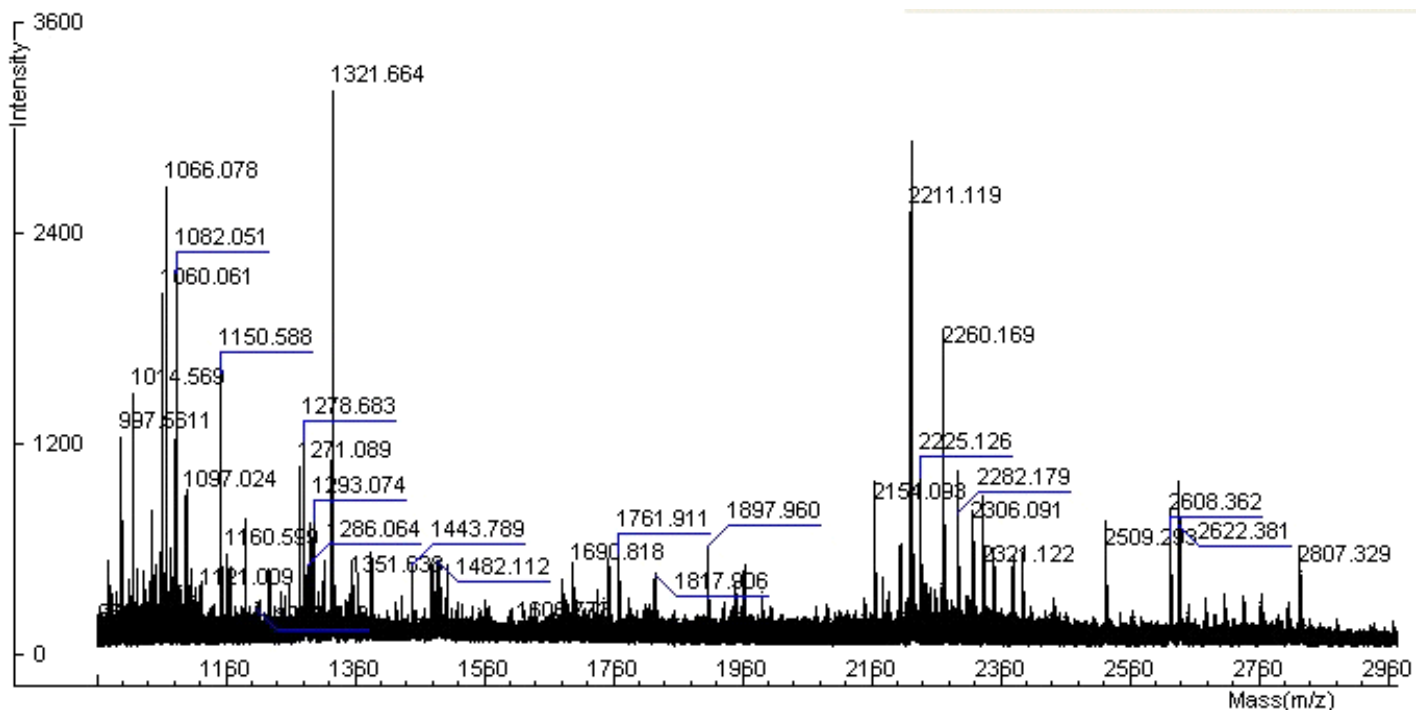


Figure 1d, spot no 18 (*Spin2a*)

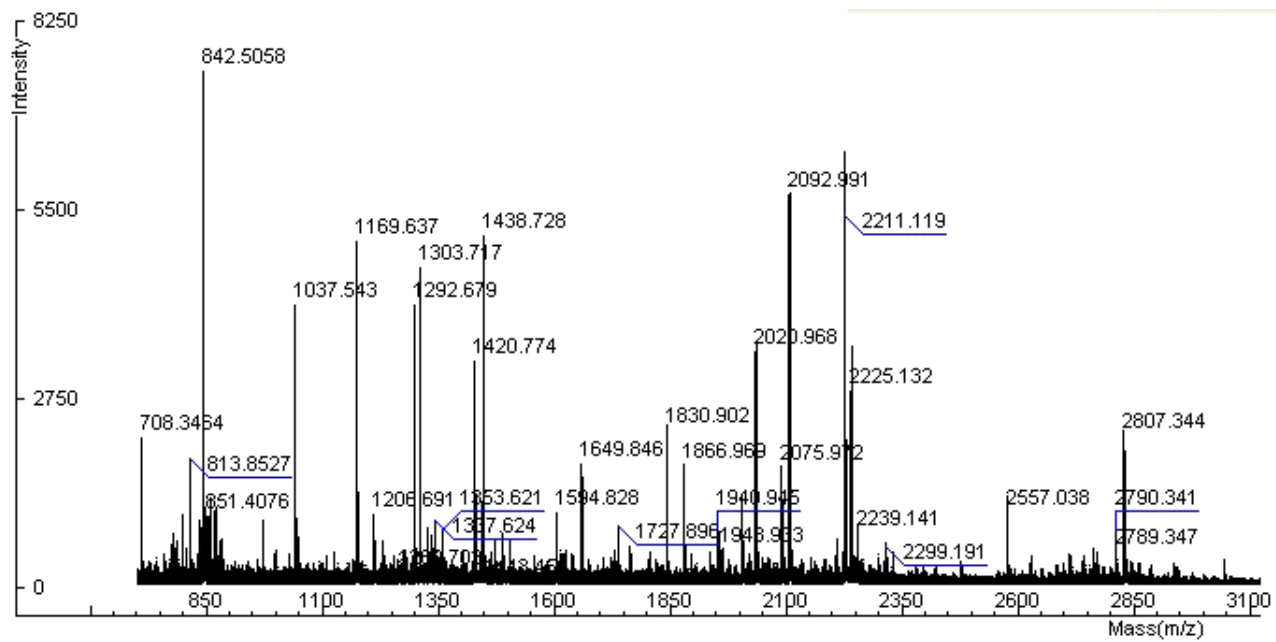


Figure 1e, spot no 21 (*Ehd2*)

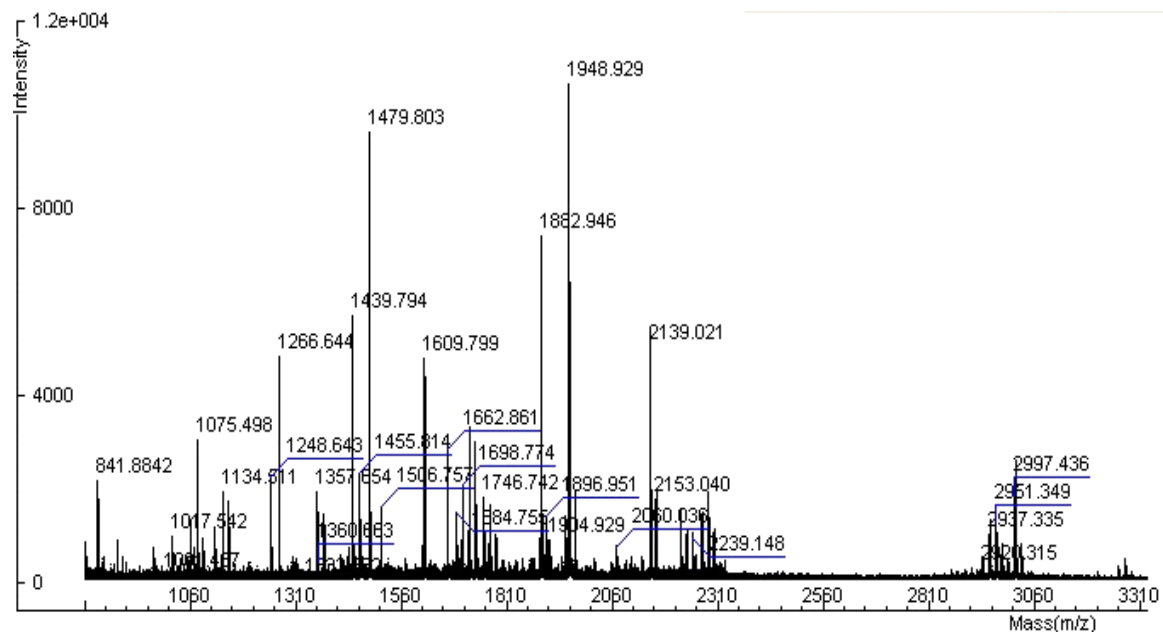


Figure 1f, spot no 25 (*Alb*)

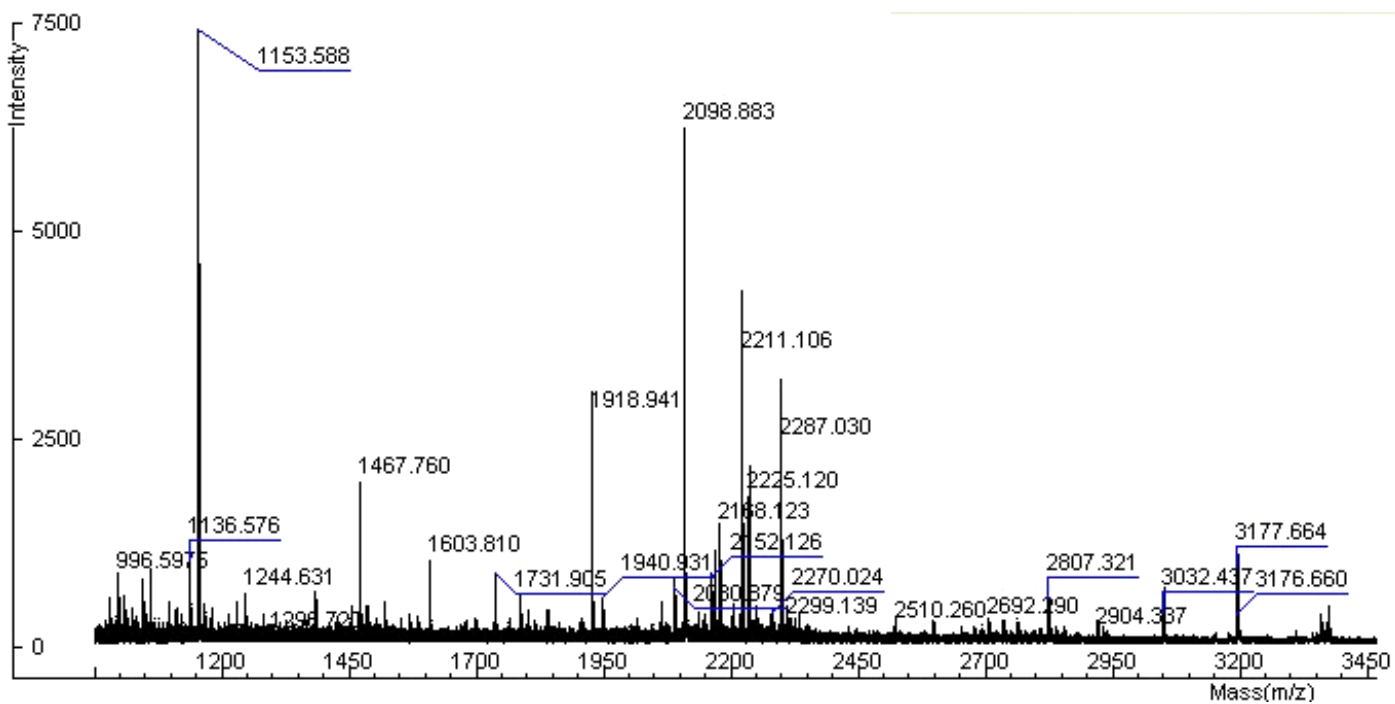


Figure 1g, spot no 30 (*Serpinal*)

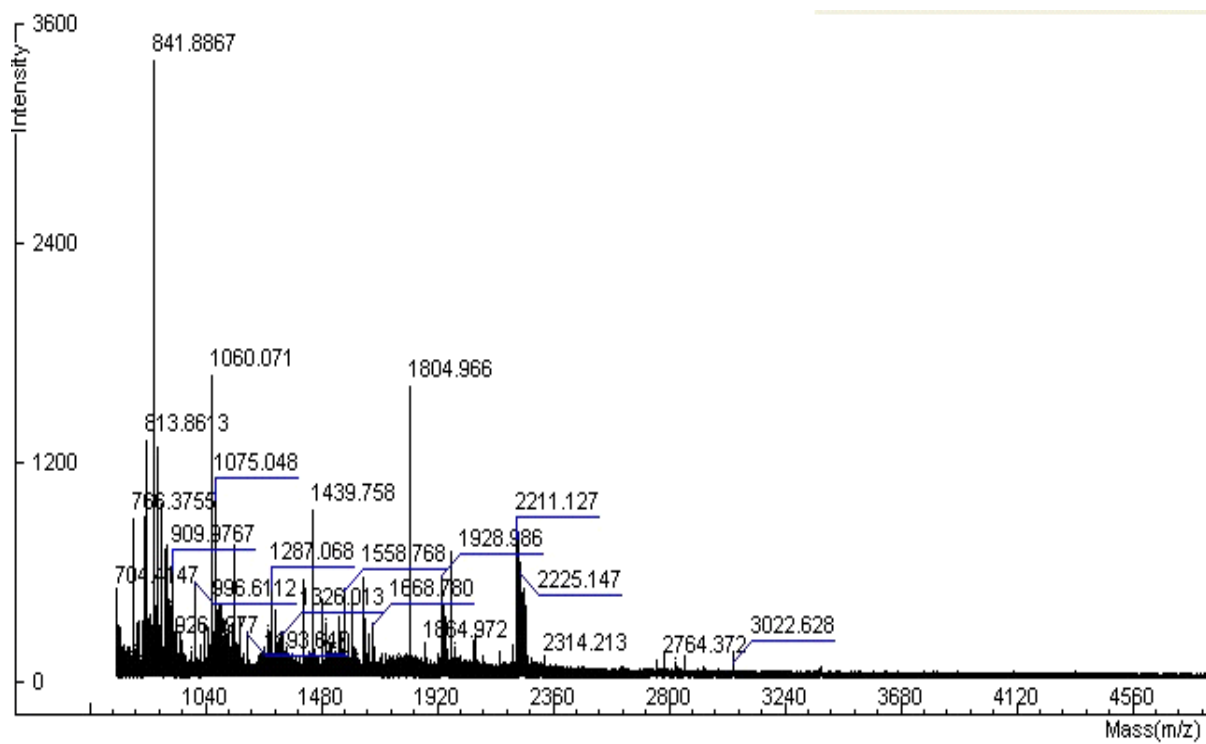


Figure 1h, spot no 34 (*Eno1*)



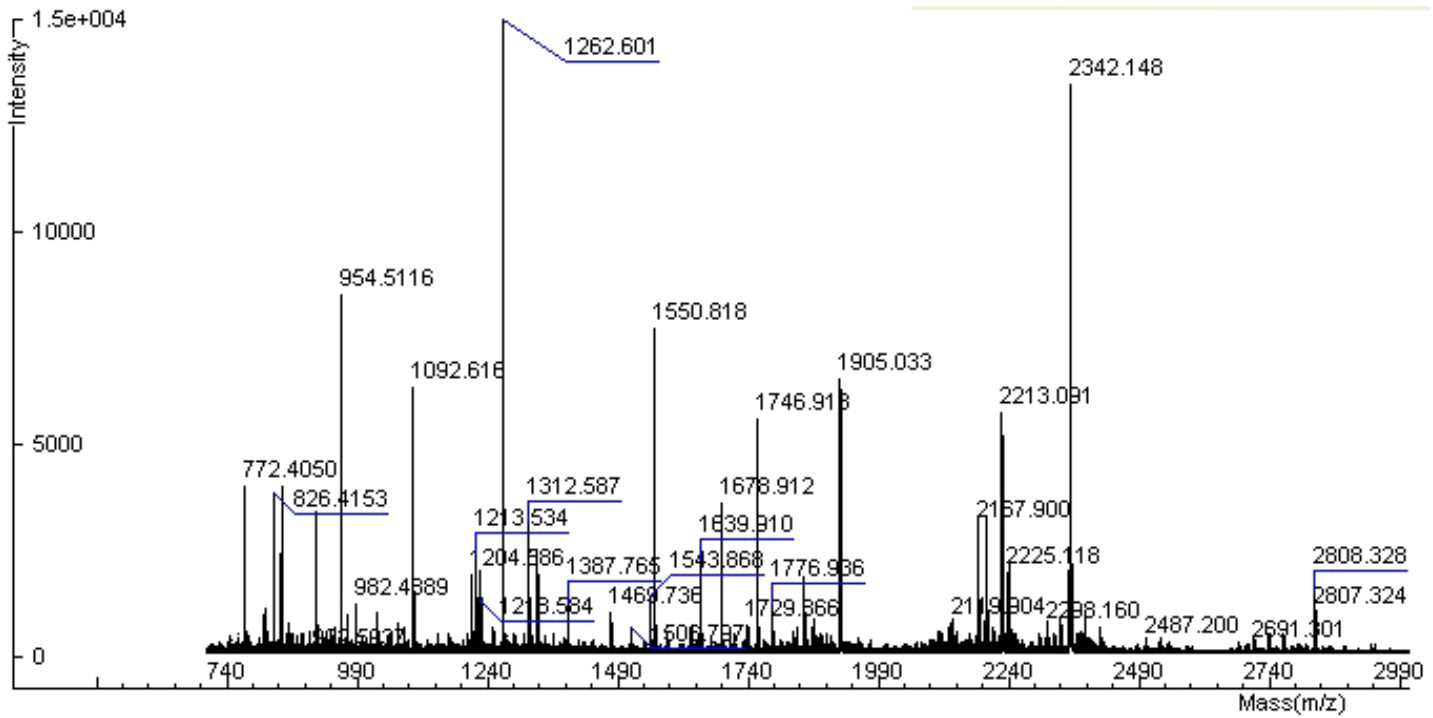


Figure 1i, spot no 41 (*Anxa1*)

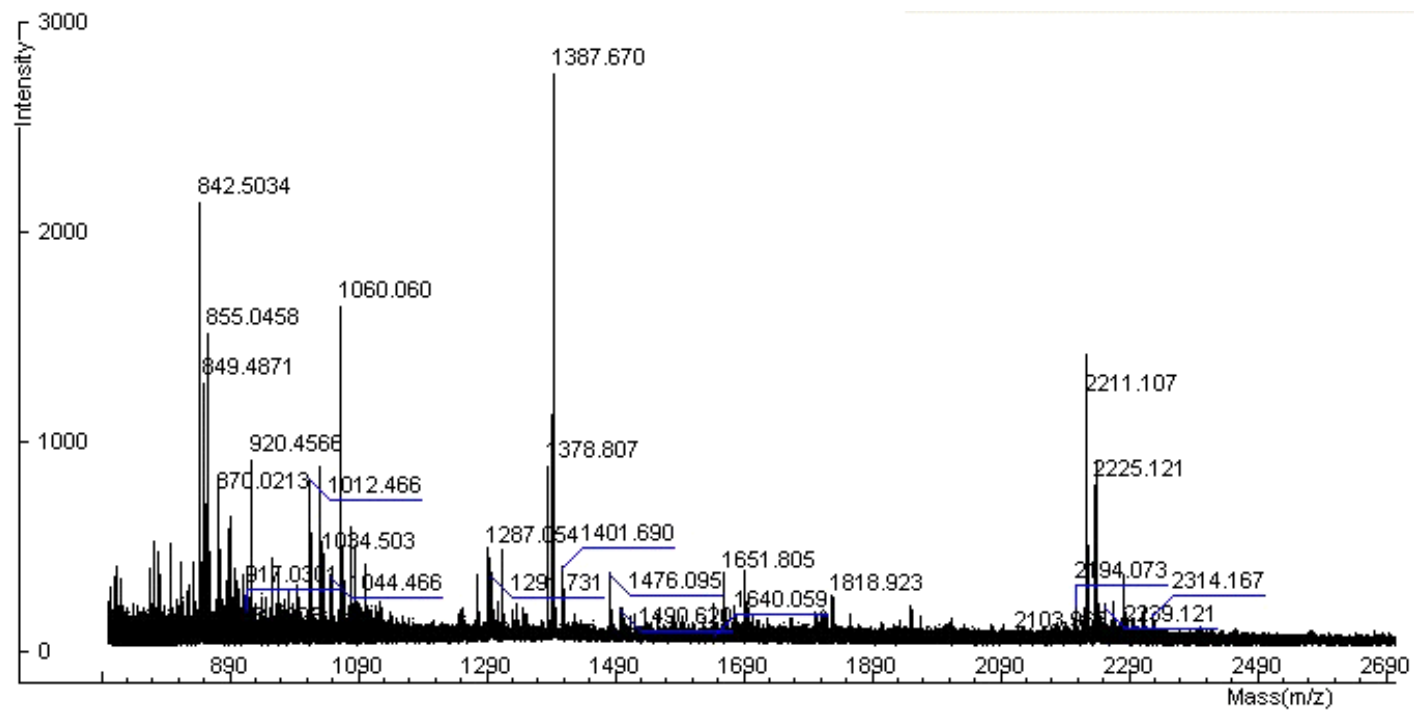


Figure 1j, spot no 43 (*Hp*)

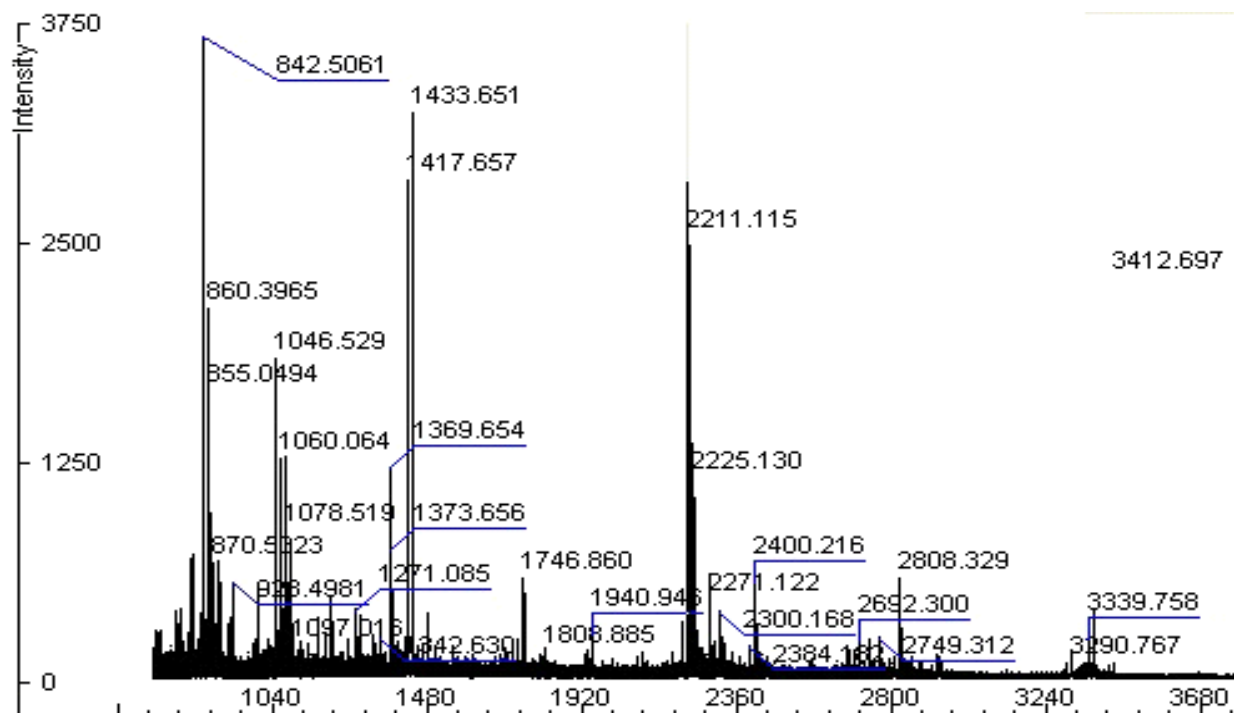


Figure 1k, spot no 51 (*Cnn1*)

**Supplemental Table 1.** STZ-induced diabetes and duration mediated protein profiles.

| Gene name      | Pos. | Protein identities   | Accession number | MW (KDa), pI <sup>1</sup> | Log <sub>10</sub> (Average ratio) <sup>2</sup> |                          |              |              | One way ANOVA <sup>3</sup> p-value | Two way ANOVA p-value <sup>4</sup> |          |          |
|----------------|------|--|------------------|---------------------------|--|--------------------------|--------------|--------------|------------------------------------|------------------------------------|----------|----------|
|                |      |  |                  |                           | 2/1  | 4/3                      | 3/1          | 4/2          |                                    | Treatment                          | Time     | Interact |
| <i>Alb</i>     | 25   | Albumin  | P02770           | 68.73, 6.09               | -1.22  | <b>-1.84</b>             | 1.85         | 1.22         | 0.011                              | 1.20E-02                           | 0.014    | 1.70E-01 |
| <i>Anxa1</i>   | 41   | Annexin 1  | P07150           | 38.8, 6.97                | 1.41   | <b>2.4</b>               | <b>1.96</b>  | <b>3.33</b>  | 7.80E-06                           | 0.00012                            | 1.30E-05 | 0.015    |
| <i>Anxa8</i>   | 45   | Annexin A8   | Q4FZU6           | 36.7, 5.55                | -1.1   | <b>1.84</b>              | 1.5          | <b>3.04</b>  | 0.00059                            | 0.038                              | 0.00066  | 0.0077   |
| <i>Apoa1</i>   | 52   | Apolipoprotein A-I   | P04639           | 30.0, 5.52                | 1.36   | <b>1.73</b>              | <b>1.71</b>  | <b>2.16</b>  | 0.00014                            | 2.40E-03                           | 8.00E-05 | 2.60E-01 |
| <i>Apoa4</i>   | 38   | Apolipoprotein A-IV  | P02651           | 44.5, 5.12                | 1.35   | <b>1.79</b>              | 1.22         | <b>1.62</b>  | 0.00017                            | 0.00015                            | 0.0021   | 0.09     |
| <i>Argbp2</i>  | 26   | Arg/Abl-interacting protein ArgBP2                               | O35413           | 134.1, 8.70               | <b>1.55</b>                                    | 1.09                     | 1.17         | <b>-1.81</b> | 0.00083                            | 0.0087                             | 0.00043  | 0.073    |
| <i>Arhgdib</i> | 49   | RHO, GDP dissociation inhibitor (GDI) beta                       | Q5M860           | 22.9, 4.98                | -1.12  | <b>1.87</b>              | <b>1.67</b>  | <b>3.08</b>  | 0.0001                             | 0.045                              | 4.80E-05 | 0.0075   |
| <i>Blmh</i>    | 35   | Bleomycin hydrolase  | P70645           | 52.3, 6.04                | 1.15   | <b>1.52</b>              | 1.13         | <b>1.37</b>  | 0.004                              | 0.0027                             | 0.047    | 0.071    |
| <i>Capg</i>    | 39   | Capping protein (actin filament),                                | Q6AYC4           | 38.8, 6.11                | 1.09   | <b>1.54</b>              | 1.24         | <b>1.55</b>  | 0.0068                             | 0.015                              | 0.017    | 0.063    |
| <i>Ces3</i>    | 32   | Carboxylesterase 3   | P16303           | 62.2, 6.21                | <b>-1.95</b>                                   | -1.25                    | 1.1          | <b>1.7</b>   | 0.0032                             | 0.0036                             | 0.043    | 0.028    |
| <i>Ckap4</i>   | 22   | Cytoskeleton-associated protein 4                                | gi 34862422      | 63.5, 5.44                | -1.45  | <b>-2.10</b>             | 1.36         | -1.07        | 0.015                              | 0.0037                             | 0.84     | 0.12     |
| <i>Cnn1</i>    | 51   | Calponin   | Q08290           | 33.3, 8.6                 | <b>-2.43</b>                                   | 1.88                     | <b>-4.29</b> | 1.06         | 0.021                              | 0.79                               | 0.022    | 0.015    |
| <i>Colla1</i>  | 9    | Procollagen type 1, alpha 1                                      | P02454           | 137.8, 5.77               | <b>-2.13</b>                                   | <b>-2.69</b>             | -2.61        | <b>-2.1</b>  | 0.0001                             | 0.00011                            | 0.00076  | 0.29     |
| <i>Colla2</i>  | 10   | Procollagen type 1, alpha 2                                      | P02466           | 129.7, 9.39               | <b>-2.03</b>                                   | <b>-2.76</b>             | -1.84        | -2.5         | 0.018                              | 0.017                              | 0.11     | 0.23     |
| <i>Col6a1</i>  | 6    | Procollagen, type VI, alpha 1                                    | gi 109509939     | 108.8, 5.21               | -1.48  | <b>-4.29</b>             | 1.44         | <b>-2.01</b> | 2.40E-05                           | 5.70E-06                           | 0.15     | 0.0006   |
| <i>Csde1</i>   | 11   | Unr protein, cold shock protein domain                           | P18395           | 88.9, 5.97                | 1.13   | -1.46                    | -1.35        | <b>-2.24</b> | 0.0014                             | 0.14                               | 0.00071  | 0.021    |
| <i>Dmn</i>     | 5    | Desmuslin  | Q810D0           | 140.7, 5.06               | -1.35  | <b>-4.14</b>             | <b>1.76</b>  | -1.74        | 7.10E-06                           | 1.90E-06                           | 0.92     | 9.90E-05 |
| <i>Ehd2</i>    | 21   | EH-domain containing 2   | Q4V8H8           | 61.2, 6.12                | -1.05  | <b>-1.54</b>             | -1.09        | <b>-1.45</b> | 0.0023                             | 0.0049                             | 0.02     | 0.019    |
| <i>Eno1</i>    | 34   | Alpha-enolase (2-phospho-D-glycerate hydro-lyase                 | P04764           | 47.1, 6.16                | 1.04   | <b>1.55</b>              | 1.09         | <b>1.43</b>  | 0.017                              | 0.016                              | 0.17     | 0.038    |
| <i>Etfa</i>    | 47   | Alpha ETF  | P13803           | 34.9, 8.62                | -1.3   | <b>-1.88</b>             | 1.1          | -1.05        | 0.018                              | 0.0041                             | 0.49     | 0.18     |
| <i>Fbln5</i>   | 29   | Fibulin 5  | Q9WVH8           | 50.1, 4.51                | 1.53   | <b>2.46</b>              | <b>2.28</b>  | <b>3.66</b>  | 2.20E-05                           | 0.0016                             | 7.70E-06 | 0.3      |
| <i>Flna</i>    | 1    | Alpha-Filamin  | gi 109462323     | 281.2, 5.69               | -1.45  | <b>-2.19<sup>a</sup></b> | <b>-2.32</b> | <b>-3.49</b> | 0.0011                             | 0.0063                             | 0.0013   | 0.093    |
| <i>Flnc</i>    | 4    | Filamin C, gamma   | gi 109473205     | 281.7, 5.54               | -1.21  | <b>-1.51</b>             | -1.14        | -1.32        | 0.0098                             | 0.0055                             | 0.079    | 0.2      |
| <i>Gnb1</i>    | 46   | Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta 1 | P54311           | 37.4, 5.40                | -1.26  | <b>-2.13</b>             | 1.05         | <b>-1.6</b>  | 0.0056                             | 0.0019                             | 0.1      | 0.049    |
| <i>Gsta3</i>   | 50   | glutathione-S-transferase, alpha type3                           | P04904           | 25.5, 8.89                | -1.3   | <b>-1.65</b>             | -1.18        | <b>-1.48</b> | 8.60E-05                           | 6.90E-05                           | 0.0014   | 0.1      |
| <i>Hnrnpk</i>  | 28   | Heterogeneous nuclear ribonucleoprotein K                        | P61980           | 50.97, 5.39               | 1.05   | <b>1.58</b>              | <b>1.29</b>  | <b>1.72</b>  | 0.002                              | 0.012                              | 0.0038   | 0.033    |

Supplemental Table 1 continued

| Gene name        | Pos. | Protein identities  | Accession number | MW (kDa), pI <sup>1</sup> | Log <sub>10</sub> (Average ratio) <sup>2</sup> |              |              |              | One way ANOVA <sup>3</sup> p-value | Two way ANOVA p-value <sup>4</sup> |           |          |
|------------------|------|---|------------------|---------------------------|--|--------------|--------------|--------------|------------------------------------|------------------------------------|-----------|----------|
|                  |      |   |                  |                           | 2/1  | 4/3          | 3/1          | 4/2          |                                    | Treatment                          | Time      | Interact |
| <i>Hnrpa2b1</i>  | 48   | Heterogeneous nuclear ribonucleoprotein A2/B1                         | gi 109473494     | 37.4, 8.97                | 1.11   | <b>1.58</b>  | 1            | 1.27         | 0.034                              | 1.20E-02                           | 0.66      | 9.70E-02 |
| <i>Hp</i>        | 43   | Haptoglobin   | P06866           | 38.6, 6.10                | <b>-1.79</b>                                   | 1.18         | 1.87         | <b>3.96</b>  | 0.00037                            | 0.08                               | 7.00E-05  | 0.096    |
| <i>Hspa8</i>     | 15   | Hsc70-ps1   | P63018           | 70.9, 5.43                | -1.33  | <b>-1.81</b> | <b>1.8</b>   | 1.33         | 0.0023                             | 0.0038                             | 0.0069    | 0.15     |
| <i>Hspb1</i>     | 53   | Heat shock protein 27   | P42930           | 22.8, 6.12                | <b>1.47</b>                                    | <b>2.13</b>  | <b>1.49</b>  | <b>2.15</b>  | 0.00021                            | 0.00024                            | 0.00021   | 0.05     |
| <i>Kng1</i>      | 20   | Major acute phase alpha 1   | P01048           | 47.0, 5.99                | -2.17  | <b>-1.89</b> | -1.14        | 1.01         | 0.019                              | 0.003                              | 0.61      | 0.9      |
| <i>Krt1-12</i>   | 36   | Keratin complex 1 gene 12   | Q6IFW5           | 48.8, 4.71                | -1.02  | <b>1.6</b>   | <b>2.5</b>   | <b>4.08</b>  | 0.001                              | 0.086                              | 0.0003    | 0.09     |
| <i>Lamc1</i>     | 3    | Laminin gamma-1   | gi 109498845     | 177.4, 5.09               | 1.06   | <b>-1.84</b> | -1.03        | <b>-2.1</b>  | 0.00097                            | 0.02                               | 0.002     | 0.0081   |
| <i>Lmna</i>      | 14   | Lamin A   | P48679           | 71.6, 6.20                | -2.02  | <b>-1.62</b> | 1.3          | <b>1.62</b>  | 0.00018                            | 7.50E-05                           | 0.0024    | 4.30E-01 |
| <i>Lum</i>       | 27   | Lumican   | P51886           | 38.3, 6.00                | -1.27  | <b>-1.97</b> | <b>1.7</b>   | 1.09         | 0.0037                             | 0.0025                             | 0.022     | 0.059    |
| <i>Mrlcb</i>     | 54a  | Myosin regulatory light chain 2-B, smooth muscle isoform              | P18666           | 19.8, 4.78                | <b>1.88</b>                                    | 1.05         | 1.02         | <b>-2.20</b> | 5.20E-07                           | 4.80E-05                           | 1.10E-06  | 0.00014  |
| <i>Mrlcb</i>     | 54b  | Myosin regulatory light chain 2-B, smooth muscle isoform              | P18666           | 19.8, 4.78                | <b>1.80</b>                                    | 1.03         | 1.02         | <b>-1.69</b> | 0.00013                            | 0.00072                            | 0.0027    | 0.0018   |
| <i>Myh11</i>     | 2    | Myosin heavy polypeptide smooth muscle                                | gi 109489759     | 227.3, 5.41               | -1.2   | <b>-1.8</b>  | 1.09         | -1.31        | 0.037                              | 0.02                               | 0.35      | 0.14     |
| <i>Nefl</i>      | 19   | Neurofilament light polypeptide                                       | P19527           | 61.4, 4.63                | -1.31  | <b>-2.13</b> | 1.36         | -1.2         | 0.026                              | 0.0074                             | 0.85      | 0.12     |
| <i>Nid1</i>      | 8    | Nidogen 1   | gi 109505096     | 137.0, 5.24               | -1.09  | <b>-1.73</b> | <b>-1.29</b> | <b>-2.04</b> | 0.0002                             | 0.0021                             | 0.00064   | 0.0096   |
| <i>P4hb</i>      | 33   | Prolyl 4-hydroxylase, beta polypeptide                                | P04785           | 56.9, 4.82                | 1.26   | <b>1.62</b>  | <b>1.62</b>  | <b>1.84</b>  | 0.001                              | 0.006                              | 0.0009    | 0.18     |
| <i>Ppp2r1a</i>   | 23   | Protein phosphatase 2   | Q5XI34           | 65.3, 5.00                | -1.07  | <b>-1.54</b> | 1.38         | -1.01        | 0.013                              | 0.012                              | 0.12      | 4.60E-02 |
| <i>PrkcsH</i>    | 12   | protein kinase C substrate 80K-H                                      | gi 109484382     | 59.2, 4.44                | -1.38  | <b>-1.64</b> | 1.07         | -1.11        | 0.0077                             | 0.0014                             | 0.6       | 0.18     |
| <i>S100a9</i>    | 56   | S100 calcium binding protein A9 (calgranulin B)                       | P50116           | 13.1, 7.05                | -1.05  | <b>3.12</b>  | 4.37         | <b>14.35</b> | 1.20E-06                           | 0.034                              | 1.780E-07 | 0.022    |
| <i>Sdha</i>      | 16   | Succinate dehydrogenase complex subunit A                             | Q0QF18           | 61.1, 6.04                | -1.3   | <b>-1.79</b> | 1.42         | 1.03         | 0.043                              | 0.013                              | 0.16      | 0.57     |
| <i>Serpina1</i>  | 30   | Alpha-1-proteinase inhibitor  | P17475           | 46.1, 5.70                | <b>1.72</b>                                    | <b>2.38</b>  | <b>2.29</b>  | <b>3.16</b>  | 1.30E-06                           | 2.80E-05                           | 1.30E-06  | 0.082    |
| <i>Serpinb1a</i> | 37   | Serine or cysteine protease inhibitor, clade B member 1a              | Q4G075           | 42.7, 5.92                | -1.08  | <b>1.91</b>  | 1.44         | <b>2.96</b>  | 0.002                              | 0.047                              | 0.0024    | 0.019    |
| <i>Sgta</i>      | 44   | Small glutamine-rich tetratricopeptide repeat (TPR)-containing, alpha | O70593           | 34.2, 5.05                | -1.6   | 1.17         | <b>2.29</b>  | <b>4.28</b>  | 0.00016                            | 0.26                               | 2.60E-05  | 0.067    |
| <i>Spin2a</i>    | 18   | Serine protease inhibitor 2a  | P05544           | 68.2, 5.31                | -1.45  | <b>-1.83</b> | 1.6          | 1.26         | 0.014                              | 0.005                              | 0.12      | 0.23     |
| <i>Spin2b</i>    | 17   | Serine protease inhibitor   | P05545           | 46.6, 5.31                | -1.33  | <b>-1.8</b>  | 1.7          | 1.26         | 0.011                              | 0.0064                             | 0.059     | 0.18     |

Supplemental Table 1 continued

| Gene name     | Pos. | Protein identities                                  | Accession number | MW (KDa), pI <sup>1</sup> | Log <sub>10</sub> (Average ratio) <sup>2</sup> |              |              |              | One way ANOVA <sup>3</sup> p-value | Two way ANOVA p-value <sup>4</sup> |          |          |
|---------------|------|---|------------------|---------------------------|--|--------------|--------------|--------------|------------------------------------|------------------------------------|----------|----------|
|               |      |   |                  |                           | 2/1  | 4/3          | 3/1          | 4/2          |                                    | Treatment                          | Time     | Interact |
| <i>Tagln</i>  | 55   | Transgelin  | P31232           | 22.6, 8.87                | -1.61  | 1.37         | <b>-2.68</b> | -1.21        | 0.0091                             | 0.95                               | 0.0045   | 0.029    |
| <i>Taldo1</i> | 42   | Transaldolase 1                                     | Q9EQS0           | 37.5, 6.57                | -1.03  | <b>1.88</b>  | <b>1.73</b>  | <b>2.81</b>  | 0.0015                             | 0.047                              | 0.00098  | 0.031    |
| <i>Tuba1</i>  | 31   | Tubulin alpha 1                                     | P68370           | 50.1, 4.94                | <b>1.43</b>                                    | <b>1.58</b>  | <b>1.82</b>  | <b>2.01</b>  | 2.90E-06                           | 0.00011                            | 1.70E-06 | 0.35     |
| <i>Ublcp1</i> | 40   | Ubiquitin –like domain containing CTD phosphatase 1 | Q5FWT7           | 36.9, 6.07                | -1.08  | <b>2.19</b>  | 1.32         | <b>3.13</b>  | 0.0003                             | 0.019                              | 0.00033  | 0.0066   |
| <i>Vcl</i>    | 7    | Vinculin  | gi 109502103     | 123.6, 5.54               | 1  | <b>-1.52</b> | -1.11        | <b>-1.49</b> | 0.0098                             | 0.031                              | 0.036    | 0.026    |
| <i>Vil2</i>   | 13   | Villin 2  | P31977           | 69.4, 5.83                | 1.14   | <b>1.62</b>  | <b>1.56</b>  | <b>1.95</b>  | 0.0029                             | 0.02                               | 0.0024   | 0.11     |
| <i>Vim</i>    | 24   | Vimentin  | P31000           | 53.7, 5.06                | -1.25  | <b>-1.76</b> | 1.07         | -1.29        | 0.0013                             | 0.00036                            | 0.35     | 0.039    |

<sup>1</sup>The theoretical molecular weight (MW) and isoelectric point (pI) were calculated using ExpASY compute pI/Mw tool from the data base entries.

<sup>2,3,4</sup> The difference in the standardized abundance for the proteins between the groups are expressed as average ratio that are calculated by taking the means of standardized volume values, from four independent biological replicates per group, for the protein spot in the corresponding groups (Group 1 = one week control, Group 2 = one week STZ-induced diabetic, Group 3 = two months control, Group 4 = two months STZ-induced diabetic), Values are displayed in the range of  $-\infty$  to  $-1$  for decreases in expression and  $+1$  to  $+\infty$  for increases in expression. One-way and two-way analysis of variances (ANOVA) p-values calculated using DeCyder software version 6.5, using mixed sample internal standard methods as described in the material and methods.

<sup>a</sup> Boldface for ratios indicating significant fold changes ( $p \leq 0.05$ )

**Supplemental Table 2.** Database Search Results of spectra acquired on the prOTOF MALDI O-TOF Mass Spectrometry using TOFworks™, an integrated workflow-based software platform. Monoisotopic peptide peak lists were generated in the mass range  $m/z$  500–5000, with a signal to noise ratio threshold of 3.0, and peak resolution threshold of 10,000 using peak picking algorithm of the TOFworks software version 1.0.1.797. Trypsin autolysis fragment peaks and peaks from the matrix were not excluded unless and otherwise stated. The resulting peptide mass lists were used to search the sequences present in an indexed rat subset database (36,274 sequences), created from NCBI nr 3,893,302 sequences (release 07/04/06) and stored locally, by running ProFound™ search engine V 2003.6.2.1 (Genomic Solutions, Ann Arbor, MI). The searching criteria used were (1) Protein molecular weight search window of 10 to 300 KDa; (2) protein expectation  $P < 0.001$ ; (3) minimum sequence coverage of 10%; (4) peptide mass tolerance limits of 30 parts per million (ppm); (5) complete cysteine modification by iodoacetamide (57 Da) and partial methionine oxidation (M)(16 Da). A positive identification was accepted when a minimum of 6 peptide masses matched a particular protein with a mass error tolerance of  $\leq 30$  ppm, and sequence coverage  $\geq 25\%$ , and low expectation value ( $P < 0.001$ ).

| Pos.     | Gene name   | Accession number           | Expect.         | % seq. cove. | No. matched peak | No. unmatched peak | MALDI-TOF MS          |                   |                   | Modification    |
|----------|-------------|----------------------------|-----------------|--------------|------------------|--------------------|-----------------------|-------------------|-------------------|-----------------|
|          |             |                            |                 |              |                  |                    | Measured mass (M + H) | Match error (ppm) | Peptide Sequence  |                 |
| 13       | <i>Vil2</i> | P31977                     | 3.09E-04        | 34           | 18               | 24                 | 976.538               | 0                 | QLFDQVVK          |                 |
|          |             |                            |                 |              |                  |                    | 1104.582              | 5                 | IGFPWSEIR         |                 |
|          |             |                            |                 |              |                  |                    | 1175.606              | 6                 | IQVWHAHR          |                 |
|          |             |                            |                 |              |                  |                    | 1182.592              | 4                 | APDFVVFYAPR       |                 |
|          |             |                            |                 |              |                  |                    | 1310.688              | 5                 | KAPDFVVFYAPR      |                 |
|          |             |                            |                 |              |                  |                    | 1416.673              | 7                 | AQEEAERLEADR      |                 |
|          |             |                            |                 |              |                  |                    | 1472.802              | 14                | RKPDTIEVQQMK      |                 |
|          |             |                            |                 |              |                  |                    | 1472.802              | 19                | ITEAEKNERVQR      |                 |
|          |             |                            |                 |              |                  |                    | 1488.777              | 1                 | RKPDTIEVQQMK      | 1 Oxidation (M) |
|          |             |                            |                 |              |                  |                    | 1493.692              | 6                 | THNDIIHNENMR      |                 |
|          |             |                            |                 |              |                  |                    | 1509.688              | 7                 | THNDIIHNENMR      | 1 Oxidation (M) |
|          |             |                            |                 |              |                  |                    | 1640.780              | 6                 | RKEDEVVEWQHR      |                 |
|          |             |                            |                 |              |                  |                    | 1651.817              | 5                 | SQEQLAAELAEYTAK   |                 |
|          |             |                            |                 |              |                  |                    | 1809.850              | 8                 | ILQLCMGNHELYMR    | 1 Oxidation (M) |
|          |             |                            |                 |              |                  |                    | 1962.951              | 4                 | IAQDLEMYGINYFEIK  | 1 Oxidation (M) |
|          |             |                            |                 |              |                  |                    | 2023.993              | 7                 | FYPEDVADELIQDITQK |                 |
| 2082.014 | 8           | VTTMDAELEFAIQPNTTGK        | 1 Oxidation (M) |              |                  |                    |                       |                   |                   |                 |
| 2823.406 | 1           | EGILSDEIYCPPETAVLLGSYAVQAK |                 |              |                  |                    |                       |                   |                   |                 |
| 16       | <i>Sdha</i> | Q0QF18                     | 3.29E-04        | 54           | 25               | 53                 | 1070.545              | 0                 | KPFAEHWR          |                 |
|          |             |                            |                 |              |                  |                    | 1095.518              | 0                 | WHFYDTVK          |                 |
|          |             |                            |                 |              |                  |                    | 1122.585              | 3                 | NTIATGGYGR        |                 |
|          |             |                            |                 |              |                  |                    | 1133.543              | -1                | SMQSHAAVFR        |                 |

|    |               |        |          |    |    |    |           |     |                                     |                 |
|----|---------------|--------|----------|----|----|----|-----------|-----|-------------------------------------|-----------------|
|    |               |        |          |    |    |    | 1149.570  | 27  | SMQSHAAVFR                          | 1 Oxidation (M) |
|    |               |        |          |    |    |    | 1318.731  | 1   | VTLDYRPVIDK                         |                 |
|    |               |        |          |    |    |    | 1329.670  | 2   | GEGGILINSQGER                       |                 |
|    |               |        |          |    |    |    | 1354.718  | 2   | TGHSLHTLYGR                         |                 |
|    |               |        |          |    |    |    | 1400.747  | 1   | VSQLYGDLQHLK                        |                 |
|    |               |        |          |    |    |    | 1473.836  | 1   | LGANSLDLVVFGR                       |                 |
|    |               |        |          |    |    |    | 1539.790  | 2   | GVIALCIEDGSIHR                      |                 |
|    |               |        |          |    |    |    | 1662.845  | 25  | ANAGEESVMNLDKLR                     | 1 Oxidation (M) |
|    |               |        |          |    |    |    | 1757.851  | 4   | AAFGLSEAGFNTACLK                    |                 |
|    |               |        |          |    |    |    | 1812.864  | 4   | IDEYDYSKPIEGQQK                     |                 |
|    |               |        |          |    |    |    | 1940.932  | -24 | FADGSVRTSELRLSMQK                   | 1 Oxidation (M) |
|    |               |        |          |    |    |    | 2068.026  | 0   | VRIDEYDYSKPIEGQQK                   |                 |
|    |               |        |          |    |    |    | 2167.139  | 3   | DHVYLQLHHLPPQLATR                   |                 |
|    |               |        |          |    |    |    | 2249.991  | 11  | TYFSCTSAHTSTGDGTAMVTR               |                 |
|    |               |        |          |    |    |    | 2265.991  | 8   | TYFSCTSAHTSTGDGTAMVTR               | 1 Oxidation (M) |
|    |               |        |          |    |    |    | 2274.990  | -22 | CCCVADRTGHSLHTLYGR                  |                 |
|    |               |        |          |    |    |    | 2457.134  | 9   | SHTVAAQGGINAALGNMEEDNWR             | 1 Oxidation (M) |
|    |               |        |          |    |    |    | 2794.406  | 4   | GCGPEKDHVYLQLHHLPPQLATR             |                 |
|    |               |        |          |    |    |    | 2864.340  | -18 | IDEYDYSKPIEGQQKPF AEHWR             |                 |
|    |               |        |          |    |    |    | 2929.480  | 7   | VSDAISTQYPVVDHEFDVAVVGAGG<br>AGLR   |                 |
|    |               |        |          |    |    |    | 2950.367  | 4   | HVNGQDQIVPGLYACGEAACASVH<br>GANR    |                 |
| 17 | <i>Spin2b</i> | P05545 | 5.32E-04 | 31 | 12 | 28 | 1160.650  | -28 | SVKVPMMKIK                          |                 |
|    |               |        |          |    |    |    | 1164.601  | 7   | IFSQQADLSR                          |                 |
|    |               |        |          |    |    |    | 1292.694  | 5   | KIFSQQADLSR                         |                 |
|    |               |        |          |    |    |    | 1321.6634 | 5   | IAELFSELDER                         |                 |
|    |               |        |          |    |    |    | 1347.677  | 4   | EQPILSEFQEK                         |                 |
|    |               |        |          |    |    |    | 1443.742  | 3   | TSMVLVNYLLFK                        | 1 Oxidation (M) |
|    |               |        |          |    |    |    | 1472.742  | 5   | ALYQAEAFVADFK                       |                 |
|    |               |        |          |    |    |    | 2195.122  | 3   | FSISTDYNLEEVLPPELGIR                |                 |
|    |               |        |          |    |    |    | 2381.193  | 5   | DLTTPYIRDEELSCSVLELK                |                 |
|    |               |        |          |    |    |    | 2622.375  | 5   | IKDLTTPYIRDEELSCSVLELK              |                 |
|    |               |        |          |    |    |    | 2915.515  | -12 | IAELFSELDERTSMVLVNYLLFKGK           |                 |
|    |               |        |          |    |    |    | 3504.761  | 9   | LSQPEDQAEINTGSALFIDKEQPILSE<br>FQEK |                 |
| 18 | <i>Spin2a</i> | P05544 | 9.51E-05 | 50 | 17 | 38 | 1014.561  | -4  | WKDSLIPR                            |                 |
|    |               |        |          |    |    |    | 1150.580  | 3   | VFSQQADLSR                          |                 |
|    |               |        |          |    |    |    | 1160.591  | 13  | FSISTDYSLK                          |                 |
|    |               |        |          |    |    |    | 1187.633  | -1  | DLYVSQVVHK                          |                 |



|    |             |        |          |    |    |    |          |     |                                     |                 |
|----|-------------|--------|----------|----|----|----|----------|-----|-------------------------------------|-----------------|
|    |             |        |          |    |    |    | 1278.675 | 2   | KVFSQQADLSR                         |                 |
|    |             |        |          |    |    |    | 1321.656 | 0   | IAELFSDLEER                         |                 |
|    |             |        |          |    |    |    | 1351.630 | 2   | DTLSHEDHGKGR                        |                 |
|    |             |        |          |    |    |    | 1443.781 | -2  | TSMVLVNYLLFK                        | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 1486.753 | 2   | ALYQAEAFIADFK                       |                 |
|    |             |        |          |    |    |    | 1761.903 | 3   | MQQVESSLQPETLKK                     | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 2154.085 | 3   | ALYQAEAFIADFKQPNEAK                 |                 |
|    |             |        |          |    |    |    | 2260.161 | 1   | AVLDVDETGTEATAATGVATVIR             |                 |
|    |             |        |          |    |    |    | 2282.171 | -1  | ALYQAEAFIADFKQPNEAKK                |                 |
|    |             |        |          |    |    |    | 2337.237 | -26 | QLHSLTLASSNTDFALSLYKK               |                 |
|    |             |        |          |    |    |    | 2367.171 | 2   | EVTTPYVRDEELSCSVLELK                |                 |
|    |             |        |          |    |    |    | 2608.354 | 3   | IKEVTPYVRDEELSCSVLELK               |                 |
|    |             |        |          |    |    |    | 3532.783 | 6   | LSQPEDQVEINTGSALFIDKEQPILSE<br>FQEK |                 |
| 21 | <i>Ehd2</i> | Q4V8H8 | 7.60E-05 | 48 | 23 | 33 | 708.339  | 0   | WFAER                               |                 |
|    |             |        |          |    |    |    | 851.400  | 0   | MGPFVER                             | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 855.490  | -8  | LPNSVLGR                            |                 |
|    |             |        |          |    |    |    | 1037.535 | 1   | GYDFPAVLR                           |                 |
|    |             |        |          |    |    |    | 1037.535 | -2  | AKTWMVGTK                           | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 1169.630 | 6   | LLPLEEHYR                           |                 |
|    |             |        |          |    |    |    | 1206.683 | 2   | VHAYIISYLK                          |                 |
|    |             |        |          |    |    |    | 1292.671 | 3   | LNPFGNTFLNR                         |                 |
|    |             |        |          |    |    |    | 1337.616 | 4   | ADMVETQQLMR                         | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 1353.613 | 5   | ADMVETQQLMR                         | 2 Oxidation (M) |
|    |             |        |          |    |    |    | 1420.766 | 3   | KLNPFNTFLNR                         |                 |
|    |             |        |          |    |    |    | 1438.720 | 5   | LFELEEQDLFR                         |                 |
|    |             |        |          |    |    |    | 1495.703 | 13  | MQELMAHDFTK                         | 2 Oxidation (M) |
|    |             |        |          |    |    |    | 1594.820 | 4   | RLFELEEQDLFR                        |                 |
|    |             |        |          |    |    |    | 1649.838 | 5   | LEISDEFSEAIGALR                     |                 |
|    |             |        |          |    |    |    | 1830.894 | 6   | SKYDEIFYNLAPADGK                    |                 |
|    |             |        |          |    |    |    | 1866.961 | 5   | TSFIQYLLEQEVPGSR                    |                 |
|    |             |        |          |    |    |    | 1991.040 | 5   | VYIGSFWSQPLLVPDNR                   |                 |
|    |             |        |          |    |    |    | 2020.960 | 7   | IQLEHHISPGDFPDCQK                   |                 |
|    |             |        |          |    |    |    | 2092.984 | 7   | QEELESVEAGVQGGAFEGTR                |                 |
|    |             |        |          |    |    |    | 2789.339 | 6   | LSDVDRDGMLDDEEFALASHLIEAK           |                 |
|    |             |        |          |    |    |    | 2805.337 | 7   | LSDVDRDGMLDDEEFALASHLIEAK           | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 3171.522 | 7   | FGSFHSPALEDADFDGKPMVLVAGQ<br>YSTGK  |                 |
| 25 | <i>Alb</i>  | P02770 | 1.85E-04 | 54 | 24 | 52 | 1017.534 | 5   | SIHTLFGDK                           |                 |

|    |                 |        |          |    |    |    |          |     |                           |                 |
|----|-----------------|--------|----------|----|----|----|----------|-----|---------------------------|-----------------|
|    |                 |        |          |    |    |    | 1067.460 | 7   | CCSGSLVER                 |                 |
|    |                 |        |          |    |    |    | 1075.490 | -1  | NECFLQHK                  |                 |
|    |                 |        |          |    |    |    | 1075.490 | 9   | CPYEEHIK                  |                 |
|    |                 |        |          |    |    |    | 1134.503 | 7   | CCTLPEAQR                 |                 |
|    |                 |        |          |    |    |    | 1149.590 | -15 | LVQEVTDFAK                |                 |
|    |                 |        |          |    |    |    | 1248.635 | 5   | FKDLGEQHFK                |                 |
|    |                 |        |          |    |    |    | 1266.636 | 5   | FPNAEFAEITK               |                 |
|    |                 |        |          |    |    |    | 1357.647 | 7   | TVMGDFAQFVVK              |                 |
|    |                 |        |          |    |    |    | 1373.644 | 8   | TVMGDFAQFVVK              | 1 Oxidation (M) |
|    |                 |        |          |    |    |    | 1439.786 | 6   | APQVSTPTLVEAAR            |                 |
|    |                 |        |          |    |    |    | 1455.807 | 6   | RHPDYSVSLLR               |                 |
|    |                 |        |          |    |    |    | 1459.739 | 6   | LQACCDKPVVQK              |                 |
|    |                 |        |          |    |    |    | 1609.792 | 6   | DVFLGTFLYEYSR             |                 |
|    |                 |        |          |    |    |    | 1662.853 | 5   | LPCVEDYLSAILNR            |                 |
|    |                 |        |          |    |    |    | 1683.747 | 8   | LRDNYGELADCCAK            |                 |
|    |                 |        |          |    |    |    | 1713.798 | 6   | QEPERNECFLQHK             |                 |
|    |                 |        |          |    |    |    | 1745.734 | 6   | YNEVLTQCCTESDK            |                 |
|    |                 |        |          |    |    |    | 1748.692 | 22  | ECCHGDLLECADDR            |                 |
|    |                 |        |          |    |    |    | 1882.938 | 5   | RPCFSALTVDETYVVK          |                 |
|    |                 |        |          |    |    |    | 2060.028 | 4   | RHPYFYAPELLYYAEK          |                 |
|    |                 |        |          |    |    |    | 2138.013 | 7   | AETFTFHSDICTLPDKEK        |                 |
|    |                 |        |          |    |    |    | 2261.972 | 10  | ECCHGDLLECADDRAELAK       |                 |
|    |                 |        |          |    |    |    | 2937.327 | 9   | CCAEGDPPACYGTVLAEFQPLVEEP |                 |
|    |                 |        |          |    |    |    |          |     | K                         |                 |
| 30 | <i>Serpinal</i> | P17475 | 4.30E-05 | 36 | 15 | 28 | 938.521  | -6  | SAILYFPK                  |                 |
|    |                 |        |          |    |    |    | 1060.623 | -5  | TLLSSLGITR                |                 |
|    |                 |        |          |    |    |    | 1153.580 | 2   | RPFNPEHTR                 |                 |
|    |                 |        |          |    |    |    | 1244.623 | 1   | MQHLEQTLTK                | 1 Oxidation (M) |
|    |                 |        |          |    |    |    | 1467.752 | -1  | WKRPFNPEHTR               |                 |
|    |                 |        |          |    |    |    | 1603.802 | -1  | ISSNLADFAFSLYR            |                 |
|    |                 |        |          |    |    |    | 1731.897 | -1  | KISSNLADFAFSLYR           |                 |
|    |                 |        |          |    |    |    | 1918.933 | 1   | VFNNDADLSGITEDAPLK        |                 |
|    |                 |        |          |    |    |    | 2152.118 | -2  | GTEAAGATVVEAVPMSLPPQVK    |                 |
|    |                 |        |          |    |    |    | 2158.929 | 3   | NNYHSEAFSVNFADSEEAK       |                 |
|    |                 |        |          |    |    |    | 2168.115 | -1  | GTEAAGATVVEAVPMSLPPQVK    | 1 Oxidation (M) |
|    |                 |        |          |    |    |    | 2287.022 | 2   | NNYHSEAFSVNFADSEEAKK      |                 |
|    |                 |        |          |    |    |    | 2904.329 | 2   | FLEEVKNNYHSEAFSVNFADSEEAK |                 |
|    |                 |        |          |    |    |    | 3032.429 | 3   | FLEEVKNNYHSEAFSVNFADSEEAK |                 |
|    |                 |        |          |    |    |    |          |     | K                         |                 |
|    |                 |        |          |    |    |    | 3176.652 | 0   | AFHLLQTLNRPDSELQLNTGNGLF  |                 |

|          |              |                  |                 |    |    |    |          |    |                           |                 |
|----------|--------------|------------------|-----------------|----|----|----|----------|----|---------------------------|-----------------|
| 34       | <i>Eno1</i>  | P04764           | 5.87E-04        | 37 | 11 | 29 | 704.407  | 9  | VNK                       |                 |
|          |              |                  |                 |    |    |    | 766.368  | 4  | GVPLYR                    |                 |
|          |              |                  |                 |    |    |    | 1143.622 | 12 | EIFDSR                    |                 |
|          |              |                  |                 |    |    |    | 1406.727 | 14 | IGAEVYHNLK                |                 |
|          |              |                  |                 |    |    |    | 1439.750 | 11 | GNPTVEVDLYTAK             |                 |
|          |              |                  |                 |    |    |    | 1633.833 | 12 | YITPDQLADLYK              |                 |
|          |              |                  |                 |    |    |    | 1668.772 | 21 | VNQIGSVTESLQACK           |                 |
|          |              |                  |                 |    |    |    | 1804.944 | 12 | IDQLMIEMDG TENK           | 2 Oxidation (M) |
|          |              |                  |                 |    |    |    | 1928.979 | 13 | AAVPSGASTGIYEALER         |                 |
|          |              |                  |                 |    |    |    | 1960.941 | 13 | LAMQEFMILPVGASSFR         | 2 Oxidation (M) |
|          |              |                  |                 |    |    |    | 3022.620 | 18 | DATNVGDEGGFAPNILENK       |                 |
| <hr/>    |              |                  |                 |    |    |    |          |    |                           |                 |
| 41       | <i>Anxa1</i> | P07150           | 3.78E-05        | 60 | 19 | 33 | 772.397  | -6 | HIADLAGNPEVILPVPFNVINGGSH |                 |
|          |              |                  |                 |    |    |    | 826.407  | -7 | AGNK                      |                 |
|          |              |                  |                 |    |    |    | 908.434  | -6 | SYPHLR                    |                 |
|          |              |                  |                 |    |    |    | 954.504  | -4 | VFQNYR                    |                 |
|          |              |                  |                 |    |    |    | 954.504  | -4 | ALYEAGER                  |                 |
|          |              |                  |                 |    |    |    | 1092.608 | 0  | KVFQNYR                   |                 |
|          |              |                  |                 |    |    |    | 1213.526 | 1  | VFQNYRK                   |                 |
|          |              |                  |                 |    |    |    | 1221.602 | -1 | VYREELKR                  |                 |
|          |              |                  |                 |    |    |    | 1262.593 | 0  | DITSDTSGDFR               |                 |
|          |              |                  |                 |    |    |    | 1328.605 | -1 | QEQEYVQAVK                |                 |
|          |              |                  |                 |    |    |    | 1387.757 | -2 | TPAQFDADEL R              |                 |
|          |              |                  |                 |    |    |    | 1543.860 | -1 | CATSTPAFFAEK              |                 |
|          |              |                  |                 |    |    |    | 1550.810 | 1  | GVDEATHIDILTK             |                 |
|          |              |                  |                 |    |    |    | 1639.902 | 1  | GVDEATHIDILTKR            |                 |
|          |              |                  |                 |    |    |    | 1678.904 | 0  | GTDVNVFN TILTTR           |                 |
|          |              |                  |                 |    |    |    | 1746.905 | 1  | ALTGHLEEVVLAMLK           | 1 Oxidation (M) |
|          |              |                  |                 |    |    |    | 1776.928 | -1 | KGTDVNVFN TILTTR          |                 |
| 1835.005 | 0            | GLGTDEDTLIEILTTR |                 |    |    |    |          |    |                           |                 |
| 1905.024 | 1            | AAYLQETGKPLDETLK |                 |    |    |    |          |    |                           |                 |
| <hr/>    |              |                  |                 |    |    |    |          |    |                           |                 |
| 43       | <i>Hp</i>    | P06866           | 4.84E-04        | 25 | 11 | 27 | 849.479  | -8 | RKGTDVNVFN TILTTR         |                 |
|          |              |                  |                 |    |    |    | 920.449  | -7 | AAYLQETGKPLDETLKK         |                 |
|          |              |                  |                 |    |    |    | 1012.458 | -1 | VVLHPER                   |                 |
|          |              |                  |                 |    |    |    | 1028.452 | -2 | GSFPWQAK                  |                 |
|          |              |                  |                 |    |    |    | 1033.495 | -6 | MGYVSGWGR                 | 1 Oxidation (M) |
|          |              |                  |                 |    |    |    | 1308.642 | 0  | MGYVSGWGR                 |                 |
|          |              |                  |                 |    |    |    | 1378.799 | 1  | HTFCAGLTK                 | 1 Oxidation (M) |
|          |              |                  |                 |    |    |    | 1651.797 | 3  | YVMLPVADQEK               | 1 Oxidation (M) |
|          |              | GAVSPVGVQPILNK   |                 |    |    |    |          |    |                           |                 |
|          |              | ATDLKDWVQETMAK   | 1 Oxidation (M) |    |    |    |          |    |                           |                 |

|    |             |        |          |    |    |    |          |    |                        |                 |
|----|-------------|--------|----------|----|----|----|----------|----|------------------------|-----------------|
|    |             |        |          |    |    |    | 1818.915 | -1 | VMPICLPSKDYVAPGR       | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 2251.073 | 4  | YVMLPVADQEKCELHYEK     |                 |
|    |             |        |          |    |    |    | 2267.067 | 3  | YVMLPVADQEKCELHYEK     | 1 Oxidation (M) |
| 51 | <i>Cnn1</i> | Q08290 | 2.62E-04 | 37 | 14 | 30 | 928.490  | -2 | RHLYDPK                |                 |
|    |             |        |          |    |    |    | 1046.521 | 2  | EWIEGVTGR              |                 |
|    |             |        |          |    |    |    | 1074.599 | 1  | RFEPEKLR               |                 |
|    |             |        |          |    |    |    | 1091.564 | -1 | GPAYGLSAEVK            |                 |
|    |             |        |          |    |    |    | 1188.630 | -2 | NIIGLQMGTKN            |                 |
|    |             |        |          |    |    |    | 1204.631 | 3  | NIIGLQMGTKN            | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 1321.679 | 4  | DGIILCEFINK            |                 |
|    |             |        |          |    |    |    | 1373.648 | 0  | YDHQREQELR             |                 |
|    |             |        |          |    |    |    | 1417.649 | 3  | FASQQGMTAYGTR          |                 |
|    |             |        |          |    |    |    | 1433.643 | 2  | FASQQGMTAYGTR          | 1 Oxidation (M) |
|    |             |        |          |    |    |    | 2271.114 | 3  | VNESTQNWHQLENIGNFIK    |                 |
|    |             |        |          |    |    |    | 2384.174 | -7 | IGSNFMDGLKDGIIILCEFINK |                 |
|    |             |        |          |    |    |    | 2399.202 | 0  | KVNESTQNWHQLENIGNFIK   |                 |
|    |             |        |          |    |    |    | 2400.209 | 10 | IGSNFMDGLKDGIIILCEFINK | 1 Oxidation (M) |

**Supplemental Table 3.** Database Search Results of spectra acquired on the LC-LTQ Mass Spectrometry. The tandem mass spectra were annotated and generated peak list files (.DTA), by running SEQUEST extract\_msn algorithm in Bioworks version 3.2 (Thermo Electron, Bremen, Germany). The resulting peptide mass lists were then used to interrogated sequences present in an indexed rat subset database (36,274 sequences), that was created from NCBI nr 3,893,302 sequences (release 07/04/06) and stored locally, by running SEQUEST SEARCH algorithm of Bioworks software version 3.2. SEQUEST searching were performed with maximum peptide and fragment ion mass tolerance of 2.5 and 1.0 Da respectively, and with partial methionine oxidation (M) and complete carbamidomethylation of cysteine (C), and 2 missed cleavage sites were also allowed in the search parameter. For each protein identification, a minimum of two peptides with a significant peptide expectation ( $P < 0.001$ ), peptide Xcorr 1.9, 2.7, and 3.5 for the charge states and +1, +2, and +3 respectively, minimum Delta CN (Delta correlation) of 0.1.

| Pos.     | Gene name   | Accession number | P (Pro.)<br>P (pep.) | % seq.<br>cove. | Score<br>Xc, z          | $\Delta$ Cn | LC-MS/MS              |            | Peptide Sequence       | Modification                               |  |
|----------|-------------|------------------|----------------------|-----------------|-------------------------|-------------|-----------------------|------------|------------------------|--|--|
|          |             |                  |                      |                 |                         |             | Measured mass (M + H) | $\Delta$ M |                        |  |  |
| 1        | <i>Flna</i> | gi 109462323     | 9.62E-09             | 11.07           | 220.23                  |             |                       |            |                        |  |  |
|          |             |                  | 8.72E-04             |                 | 2.71, 2                 | 0.24        | 988.54218             | 0.40026    | K.KGEITGEVR.M          |  |  |
|          |             |                  | 6.22E-05             |                 | 2.79, 2                 | 0.34        | 1108.6109             | 0.89922    | R.ALTQTGGPHVK.A        |  |  |
|          |             |                  | 6.06E-05             |                 | 3.04, 2                 | 0.40        | 1108.5745             | 1.39665    | K.RAEFTVETR.S          |  |  |
|          |             |                  | 3.39E-05             |                 | 3.46, 2                 | 0.54        | 1460.5849             | 0.78568    | K.M#DC*QEC*PEGYR.V     | Oxidation (M),<br>Carbamidomethylation (C) |  |
|          |             |                  | 1.05E-04             |                 | 2.83, 2                 | 0.34        | 1502.7193             | -0.20015   | R.SGQSAAGASPAGGIDTR.D  |  |  |
|          |             |                  | 3.44E-04             |                 | 2.75, 2                 | 0.28        | 1185.6601             | 1.39800    | K.IVSPSGAAVPC*K.V      | Carbamidomethylation (C)                   |  |
|          |             |                  | 6.95E-05             |                 | 2.71, 2                 | 0.18        | 1053.4847             | 0.96623    | K.NDNDTFTVK.Y          |  |  |
|          |             |                  | 4.30E-05             |                 | 2.76, 2                 | 0.41        | 1230.6241             | 0.34713    | K.AHVVPC*FDASK.V       | Carbamidomethylation (C)                   |  |
|          |             |                  | 5.14E-06             |                 | 2.73, 2                 | 0.28        | 1151.6306             | 0.99614    | K.DKGEYTLVVK.W         |  |  |
|          |             |                  | 9.62E-09             |                 | 4.02, 2                 | 0.52        | 1652.8602             | 1.17180    | K.VTAQGPGLPSGNIANK.T   |  |  |
|          |             |                  | 2.66E-05             |                 | 2.84, 2                 | 0.29        | 1225.5695             | 0.39629    | R.EATTEFSVDAR.A        |  |  |
|          |             |                  | 8.50E-04             |                 | 2.83, 2                 | 0.34        | 1660.8905             | -0.67146   | K.TGVAINKPAEFTVDAK.H   |  |  |
|          |             |                  | 3.18E-04             |                 | 2.86, 2                 | 0.25        | 1589.6954             | 1.00481    | K.DNGNGTYSC*SYVPR.K    | Carbamidomethylation (C)                   |  |
|          |             |                  | 3.86E-07             |                 | 4.29, 2                 | 0.61        | 1570.8071             | 0.38420    | R.GAGTGGLGLAVEGPSEAK.M |  |  |
| 6.12E-06 | 2.73, 2     | 0.40             | 1083.5356            | 0.98393         | K.SPFEVYVDK.S           |             |                       |            |                        |  |  |
| 5.15E-04 | 2.97, 2     | 0.31             | 1077.5938            | 0.93767         | K.LDVQFSLAK.G           |             |                       |            |                        |  |  |
| 2.46E-08 | 4.61, 2     | 0.42             | 1938.0178            | 1.05742         | K.DAGEGLLAVQITDPEGKPK.K |             |                       |            |                        |  |  |

|   |              |              |          |       |         |      |           |          |                           |                          |
|---|--------------|--------------|----------|-------|---------|------|-----------|----------|---------------------------|--------------------------|
|   |              |              | 3.39E-04 |       | 3.17, 2 | 0.38 | 1500.7540 | 0.09245  | K.DAGEGGLSLAIEGPSK.A      |                          |
|   |              |              | 8.98E-07 |       | 2.93, 2 | 0.19 | 1400.6480 | 0.70683  | K.YGGDEIPFSPYR.V          |                          |
|   |              |              | 1.78E-07 |       | 4.59, 2 | 0.50 | 1913.9127 | 0.55315  | R.EGSYSISVLYGEEEVPR.S     |                          |
|   |              |              |          |       |         |      |           |          | K.GLVEPVDVVDNADGTQTVNYVPS |                          |
|   |              |              | 2.66E-07 |       | 3.88, 2 | 0.48 | 2544.2575 | 0.89531  | R.E                       |                          |
|   |              |              | 3.29E-07 |       | 2.79, 2 | 0.31 | 1226.7718 | 0.86235  | R.LIALLEVLSQL.R           |                          |
| 2 | <i>Myh11</i> | gi 109489759 | 1.11E-13 | 23.95 | 378.32  |      |           |          |                           |                          |
|   |              |              | 1.24E-08 |       | 4.16, 2 | 0.52 | 1607.6965 | -0.10058 | R.NTDQASM#PDNTAAQK.V      | Oxidation (M)            |
|   |              |              | 4.80E-05 |       | 3.86, 3 | 0.17 | 1214.5582 | 0.35917  | R.SHEAQVQEMR.Q            |                          |
|   |              |              | 8.40E-04 |       | 3.48, 2 | 0.33 | 1269.5449 | 0.89408  | R.ALETQM#EEM#R.T          | Oxidation (M)            |
|   |              |              | 1.11E-04 |       | 3.34, 2 | 0.43 | 1209.6221 | -0.06355 | K.LRGPPPQETSQ             |                          |
|   |              |              | 9.66E-04 |       | 2.70, 2 | 0.31 | 1153.5405 | -0.09149 | K.M#TESSLPSASK.T          | Oxidation (M)            |
|   |              |              | 2.09E-06 |       | 3.67, 2 | 0.36 | 1347.6022 | 0.65630  | R.QLEEAEEESQR.I           |                          |
|   |              |              | 8.81E-04 |       | 3.50, 3 | 0.16 | 1347.6022 | 1.20868  | R.QLEEAEEESQR.I           |                          |
|   |              |              | 5.13E-05 |       | 3.03, 2 | 0.36 | 1224.6219 | 0.78508  | R.ASRDEIFATSK.E           |                          |
|   |              |              | 6.34E-05 |       | 2.56, 2 | 0.45 | 889.49890 | 0.71691  | K.STVAALEAK.I             |                          |
|   |              |              | 1.08E-04 |       | 3.21, 2 | 0.38 | 1187.6630 | 0.80876  | R.SKLQEVEGAVK.A           |                          |
|   |              |              | 8.52E-05 |       | 3.56, 2 | 0.30 | 1456.6260 | 1.17528  | K.EM#EGLGQQYEEK.A         | Oxidation (M)            |
|   |              |              | 4.62E-04 |       | 3.22, 2 | 0.42 | 1257.6796 | 0.26799  | K.KEEELQAALAR.V           |                          |
|   |              |              | 8.40E-06 |       | 3.85, 3 | 0.21 | 1400.7744 | 1.29316  | K.KLEGQLQELQSK.C          |                          |
|   |              |              | 5.06E-07 |       | 4.39, 2 | 0.49 | 1400.7744 | 0.80254  | K.KLEGQLQELQSK.C          |                          |
|   |              |              | 3.94E-05 |       | 3.35, 2 | 0.29 | 1331.6801 | 0.71367  | K.AESELKELEQR.H           |                          |
|   |              |              | 5.73E-05 |       | 3.38, 3 | 0.39 | 1441.7645 | 1.36600  | R.HVSTLNIQLSDSK.K         |                          |
|   |              |              | 8.22E-05 |       | 3.17, 2 | 0.33 | 1220.6521 | 0.57048  | K.KFDQLLAEEK.G            |                          |
|   |              |              | 3.08E-06 |       | 3.37, 2 | 0.39 | 1253.6484 | 0.68474  | R.TGVLAHLEER.D            |                          |
|   |              |              | 1.51E-06 |       | 3.29, 2 | 0.46 | 1440.6311 | 0.71831  | K.EMEGLGQQYEEK.A          |                          |
|   |              |              | 1.06E-04 |       | 2.77, 2 | 0.27 | 1551.7260 | 0.80658  | R.EDQSILC*TGESGAGK.T      | Carbamidomethylation (C) |
|   |              |              | 1.10E-07 |       | 2.87, 2 | 0.39 | 1690.7554 | 0.89885  | R.QLHEYETELEDER.K         |                          |
|   |              |              | 1.49E-11 |       | 4.43, 2 | 0.58 | 1776.8861 | 0.58562  | R.VSDLTTNLAEEEEKAK.N      |                          |
|   |              |              | 1.20E-05 |       | 2.85, 2 | 0.34 | 1092.5571 | 0.82353  | K.FDQLLAEEK.G             |                          |
|   |              |              | 3.48E-08 |       | 4.40, 2 | 0.48 | 1665.7272 | 0.86232  | R.NSLQDQLDEEM#EAK.Q       | Oxidation (M)            |
|   |              |              | 6.71E-06 |       | 3.86, 3 | 0.30 | 1470.8162 | 1.46912  | K.LKEVLLQVEDER.K          |                          |
|   |              |              | 2.04E-08 |       | 4.14, 2 | 0.48 | 1470.8162 | 1.21343  | K.LKEVLLQVEDER.K          |                          |
|   |              |              | 2.04E-08 |       | 4.67, 2 | 0.46 | 1629.8330 | 0.65386  | R.ALEEALAEKEELER.T        |                          |
|   |              |              | 1.87E-10 |       | 3.50, 3 | 0.39 | 1629.8330 | 1.00699  | R.ALEEALAEKEELER.T        |                          |
|   |              |              | 3.79E-05 |       | 2.71, 2 | 0.24 | 1229.6372 | 1.12908  | K.EVLLQVEDER.K            |                          |
|   |              |              | 2.41E-06 |       | 3.33, 2 | 0.42 | 1202.6779 | 0.70757  | R.YEILAANAIPK.G           |                          |
|   |              |              | 1.27E-07 |       | 4.97, 3 | 0.35 | 1972.0596 | 1.12583  | K.KLEGDLKDLELQADSAVK.G    |                          |

|   |              |              |          |      |         |      |           |          |                            |                          |
|---|--------------|--------------|----------|------|---------|------|-----------|----------|----------------------------|--------------------------|
|   |              |              | 4.37E-07 |      | 3.44, 2 | 0.44 | 1584.8227 | 0.37212  | K.IVQLEEQIEQEAR.E          |                          |
|   |              |              | 4.72E-08 |      | 3.86, 3 | 0.47 | 1963.9277 | 1.06532  | K.LQNEVESVTGM#LNEAEGK.A    | Oxidation (M)            |
|   |              |              | 7.59E-07 |      | 3.11, 2 | 0.37 | 1630.8675 | 0.87300  | K.VC*HLVGINVDFTR.A         | Carbamidomethylation (C) |
|   |              |              | 1.01E-08 |      | 5.46, 2 | 0.56 | 1949.9298 | 0.69719  | K.TELEDTLSTATQQELR.A       |                          |
|   |              |              | 9.42E-06 |      | 2.60, 2 | 0.36 | 1203.6368 | 0.23967  | K.ALELDPNLYR.I             |                          |
|   |              |              | 7.38E-06 |      | 2.59, 2 | 0.54 | 1305.6684 | 0.06352  | K.EQADFAIEALAK.A           |                          |
|   |              |              | 2.96E-12 |      | 5.52, 2 | 0.55 | 2063.9549 | 0.44205  | K.NM#DPLNDNVTSLLNASSDK.F   | Oxidation (M)            |
|   |              |              | 1.63E-05 |      | 3.53, 3 | 0.29 | 2175.0776 | 1.26468  | K.QADLEKEELAEELASSLSGR.N   |                          |
|   |              |              | 1.65E-09 |      | 4.02, 2 | 0.40 | 1662.8254 | 0.72026  | K.LQDLASTIEVMEEGK.K        |                          |
|   |              |              | 3.31E-10 |      | 5.43, 2 | 0.68 | 1961.9185 | 0.65154  | R.TQLEEELEDELQATEDAK.L     |                          |
|   |              |              | 1.11E-13 |      | 6.41, 2 | 0.11 | 2374.1733 | 0.73003  | K.EVASLGSQQLQDTQELLQEETR.Q |                          |
| 3 | <i>Lamc1</i> | gi 109498845 | 9.00E-10 | 7.80 | 90.22   |      |           |          |                            |                          |
|   |              |              | 3.06E-09 |      | 4.37, 3 | 0.43 | 2017.9189 | 1.24769  | R.TGQC*EC*QPGITGQHC*ER.C   | Carbamidomethylation (C) |
|   |              |              | 1.94E-04 |      | 2.76, 2 | 0.24 | 860.44720 | 0.98308  | K.TAAEEALR.R               |                          |
|   |              |              | 1.44E-04 |      | 2.86, 2 | 0.34 | 1031.5116 | 1.08745  | K.VSNLENEAR.K              |                          |
|   |              |              | 9.00E-10 |      | 3.73, 2 | 0.55 | 1923.8658 | 0.74410  | R.ATAESANQC*LPC*DC*NGR.S   | Carbamidomethylation (C) |
|   |              |              | 3.36E-05 |      | 3.26, 2 | 0.49 | 1438.6080 | 0.80950  | R.DGSEASLEWSSDR.Q          |                          |
|   |              |              | 7.85E-05 |      | 3.92, 2 | 0.50 | 1539.6965 | 0.61218  | K.C*IYNTAGFYC*DR.C         | Carbamidomethylation (C) |
|   |              |              | 4.19E-08 |      | 3.62, 2 | 0.49 | 1495.7063 | 0.32842  | R.LNTFGDEVFNPK.V           |                          |
|   |              |              | 1.61E-06 |      | 3.70, 2 | 0.54 | 1573.7645 | 0.25041  | K.EGFFGNPLAPNPADK.C        |                          |
|   |              |              | 8.21E-07 |      | 3.07, 2 | 0.39 | 1442.7849 | 0.25932  | R.LSAEDLVLEGAGLR.V         |                          |
| 4 | <i>Flnc</i>  | gi 109473205 | 9.14E-10 | 5.7  | 120.19  |      |           |          |                            |                          |
|   |              |              | 1.85E-04 |      | 2.79, 2 | 0.26 | 929.48395 | 0.63896  | K.HVTNSPFK.I               |                          |
|   |              |              | 2.31E-04 |      | 2.15, 2 | 0.31 | 1078.5527 | 0.33953  | K.AEIAFEDRK.D              |                          |
|   |              |              | 5.27E-05 |      | 3.63, 3 | 0.23 | 1871.9934 | 1.46720  | K.TARPNITDNKDGTITVR.Y      |                          |
|   |              |              | 1.41E-04 |      | 2.80, 2 | 0.38 | 1124.5597 | 0.89938  | K.TPC*EEVYVK.H             | Carbamidomethylation (C) |
|   |              |              | 1.61E-09 |      | 3.50, 2 | 0.41 | 1386.7164 | 0.51067  | K.YGGPQHIVGSPFK.A          |                          |
|   |              |              | 9.14E-10 |      | 2.60, 2 | 0.43 | 1565.7682 | 0.69693  | R.VPQFTVDC*SQAGR.A         | Carbamidomethylation (C) |
|   |              |              | 6.38E-06 |      | 3.78, 2 | 0.46 | 1188.6372 | 0.72344  | R.GPGLSQAFVGQK.N           |                          |
|   |              |              | 1.01E-04 |      | 2.91, 2 | 0.39 | 1549.8067 | -0.08235 | R.TSQLNVGTSTDVSLK.I        |                          |
|   |              |              | 1.15E-04 |      | 2.08, 2 | 0.17 | 1442.7485 | 1.12529  | R.EAGAGGLSIAVEGPSK.A       |                          |
|   |              |              | 7.74E-04 |      | 2.02, 2 | 0.30 | 1289.7310 | 0.02263  | R.LTVTSLQETGLK.V           |                          |

|   |               |              |          |       |         |      |           |          |                          |                          |
|---|---------------|--------------|----------|-------|---------|------|-----------|----------|--------------------------|--------------------------|
|   |               |              | 6.80E-05 |       | 2.29, 2 | 0.35 | 1788.9465 | 0.87087  | R.QAPSIATIGSTC*DLNLK.I   | Carbamidomethylation (C) |
|   |               |              | 6.49E-07 |       | 2.54, 2 | 0.25 | 1503.8012 | -0.10811 | K.ITEGDLSQLTASIR.A       |                          |
| 5 | <i>Dmn</i>    | Q810D0       | 1.78E-14 | 13.86 | 170.29  |      |           |          |                          |                          |
|   |               |              | 1.78E-14 |       | 5.70, 2 | 0.63 | 2003.8648 | 0.86345  | R.DEQSASTSSQASAGDAHQAR.G |                          |
|   |               |              | 2.89E-04 |       | 3.63, 3 | 0.12 | 1560.6416 | 1.17799  | R.M#REEYGM#QAEER.Q       | Oxidation (M)            |
|   |               |              | 5.09E-04 |       | 2.75, 2 | 0.30 | 934.51050 | 0.97740  | R.ATGPAAPPPR.L           |                          |
|   |               |              | 1.85E-05 |       | 3.60, 3 | 0.42 | 2003.8648 | 0.97409  | R.DEQSASTSSQASAGDAHQAR.G |                          |
|   |               |              | 9.44E-04 |       | 2.72, 2 | 0.39 | 952.43707 | 0.32054  | K.GTEQAGFDK.T            |                          |
|   |               |              | 7.61E-11 |       | 5.85, 2 | 0.60 | 1896.8907 | 1.07683  | R.GHQGNVAAGAVNSTQSNR.T   |                          |
|   |               |              | 1.01E-06 |       | 3.79, 3 | 0.30 | 1544.6467 | -0.22946 | R.MREEYGM#QAEER.Q        | Oxidation (M)            |
|   |               |              | 9.82E-05 |       | 3.69, 3 | 0.28 | 1544.6467 | 0.73624  | R.M#REEYGMQAEER.Q        | Oxidation (M)            |
|   |               |              | 3.65E-08 |       | 3.88, 3 | 0.37 | 1947.8692 | 1.21408  | R.DTGSEVEAHSVSHHGGWR.V   |                          |
|   |               |              | 1.08E-05 |       | 3.69, 2 | 0.42 | 1528.6518 | 0.97197  | R.MREEYGMQAEER.Q         |                          |
|   |               |              | 3.72E-04 |       | 2.72, 2 | 0.24 | 981.5000  | 0.64903  | R.YTDSVLQR.K             |                          |
|   |               |              | 7.54E-08 |       | 2.70, 2 | 0.30 | 1416.6965 | -0.06038 | R.QSQGEPGSVSDVK.K        |                          |
|   |               |              | 5.19E-04 |       | 3.05, 2 | 0.29 | 1177.6245 | 0.90288  | R.MKEELSALTR.Q           |                          |
|   |               |              | 9.48E-05 |       | 2.90, 2 | 0.47 | 1414.6154 | 0.92242  | R.ESM#QLYEDEV.R.E        | Oxidation (M)            |
|   |               |              | 2.77E-05 |       | 2.76, 2 | 0.39 | 1398.6206 | 0.30058  | R.ESMQLYEDEV.R.E         |                          |
|   |               |              | 2.09E-04 |       | 3.81, 2 | 0.34 | 1213.6535 | 0.93218  | R.NQALELEQLR.A           |                          |
|   |               |              | 1.69E-08 |       | 3.81, 2 | 0.49 | 1921.9575 | 0.73684  | K.VVNVEIVEEPM#SYVGGGK.V  | Oxidation (M)            |
|   |               |              | 1.32E-05 |       | 3.63, 2 | 0.47 | 1620.8512 | 0.77669  | K.STETVIGEM#INLGLK.G     | Oxidation (M)            |
| 6 | <i>Col6a1</i> | gi 109509939 | 3.33E-14 | 21.76 | 160.29  |      |           |          |                          |                          |
|   |               |              | 4.50E-07 |       | 3.48, 2 | 0.43 | 1340.5825 | 0.70574  | R.GDPGEAGPQGDQGR.E       |                          |
|   |               |              | 1.64E-09 |       | 4.60, 2 | 0.36 | 1929.7692 | 0.71782  | K.GDEGEAGDPGEDNNDVSPR.G  |                          |
|   |               |              | 7.83E-10 |       | 3.79, 2 | 0.53 | 1701.8667 | 0.21868  | R.VAVVQYSGQGQQPGR.A      |                          |
|   |               |              | 6.73E-04 |       | 3.20, 2 | 0.43 | 1022.5629 | 0.96764  | R.GVLYQTVSR.K            |                          |
|   |               |              | 8.26E-05 |       | 2.33, 2 | 0.26 | 1180.5593 | 0.02410  | R.GDEGPPGPEGLR.G         |                          |
|   |               |              | 1.72E-07 |       | 3.31, 2 | 0.48 | 1289.6848 | 0.30449  | R.LSIIATDHTYR.R          |                          |
|   |               |              | 3.72E-04 |       | 3.21, 2 | 0.46 | 1488.6940 | 0.90172  | K.EPC*GGLEDAVNEAK.H      | Carbamidomethylation (C) |
|   |               |              | 1.71E-04 |       | 1.89, 1 | 0.40 | 1257.5745 | 0.04968  | K.TAEYDVAFGER.H          |                          |
|   |               |              | 4.85E-06 |       | 2.86, 2 | 0.37 | 957.57275 | 0.96855  | R.IALVITDGR.S            |                          |
|   |               |              | 2.90E-10 |       | 5.11, 2 | 0.56 | 1985.9178 | 0.54484  | K.NNVEQVC*C*TFEC*QAAR.G  | Carbamidomethylation (C) |
|   |               |              | 9.26E-11 |       | 5.09, 3 | 0.53 | 1985.9178 | 0.42893  | K.NNVEQVC*C*TFEC*QAAR.G  | Carbamidomethylation (C) |
|   |               |              | 9.49E-04 |       | 3.84, 3 | 0.33 | 1493.8686 | 1.41498  | K.KGLEELLIGGSHLK.E       |                          |
|   |               |              | 2.37E-07 |       | 4.84, 2 | 0.46 | 1493.8686 | 0.71233  | K.KGLEELLIGGSHLK.E       |                          |



|   |             |              |          |       |         |      |           |          |                                 |                          |
|---|-------------|--------------|----------|-------|---------|------|-----------|----------|---------------------------------|--------------------------|
|   |             |              | 3.93E-05 |       | 2.23, 2 | 0.34 | 1073.6102 | 0.48711  | R.VPNYQALLR.G                   |                          |
|   |             |              | 4.26E-08 |       | 2.93, 2 | 0.53 | 1257.5745 | 1.01763  | K.TAEYDVAFGER.H                 |                          |
|   |             |              | 7.38E-06 |       | 3.56, 2 | 0.45 | 1580.8431 | 0.63579  | K.VFSVAITPDHLEPR.L              |                          |
|   |             |              | 2.36E-07 |       | 4.31, 2 | 0.48 | 1703.9002 | -0.11824 | K.YLIVVTDGHPLEGYK.E             |                          |
|   |             |              | 6.80E-04 |       | 3.96, 3 | 0.16 | 1949.9814 | 0.75809  | R.VLLFSDGNSQGATAEAIEK.A         |                          |
|   |             |              | 2.54E-12 |       | 5.26, 2 | 0.56 | 1949.9814 | 0.60332  | R.VLLFSDGNSQGATAEAIEK.A         |                          |
|   |             |              | 3.33E-14 |       | 5.76, 2 | 0.61 | 2188.1835 | 1.37417  | R.DTTPLSVLC*GSDIQVSVGIK.D       | Carbamidomethylation (C) |
| 7 | <i>Vcl</i>  | gi 109502103 | 4.16E-09 | 10.49 | 100.24  |      |           |          |                                 |                          |
|   |             |              | 6.86E-04 |       | 2.47, 2 | 0.36 | 872.48358 | 0.21233  | K.GNDIIAAAK.R                   |                          |
|   |             |              | 3.74E-05 |       | 3.08, 2 | 0.25 | 1183.5598 | 0.45929  | R.LANVM#M#GPYR.Q                | Oxidation (M)            |
|   |             |              | 7.42E-07 |       | 3.53, 2 | 0.45 | 1497.6928 | 0.74468  | R.DPNASPGDAGEQAIR.Q             |                          |
|   |             |              | 1.37E-07 |       | 3.33, 2 | 0.53 | 1269.6796 | 0.48271  | K.AVAGNISDPGLQK.S               |                          |
|   |             |              | 1.34E-05 |       | 3.28, 2 | 0.41 | 1191.6037 | 1.06289  | K.M#SAEINEIIR.V                 | Oxidation (M)            |
|   |             |              | 5.48E-05 |       | 3.12, 2 | 0.42 | 1303.7103 | 0.93352  | K.SLLDASEEAIKK.D                |                          |
|   |             |              | 4.16E-09 |       | 4.82, 2 | 0.53 | 1457.7957 | 1.02043  | K.AQQVSQGLDVLTAK.V              |                          |
|   |             |              | 2.08E-08 |       | 4.08, 2 | 0.60 | 1292.6402 | 0.87541  | K.MTGLVDEAIDTK.S                |                          |
|   |             |              | 4.41E-05 |       | 3.09, 2 | 0.55 | 1089.6149 | 0.61492  | R.SLGEIAALTSK.L                 |                          |
|   |             |              | 1.97E-08 |       | 4.20, 2 | 0.47 | 1477.7137 | 0.67107  | K.MLGQMTDQVADLR.A               |                          |
| 8 | <i>Nid1</i> | gi 109505096 | 2.33E-11 | 20.71 | 220.23  |      |           |          |                                 |                          |
|   |             |              | 3.31E-08 |       | 3.09, 2 | 0.55 | 1260.5637 | 0.76299  | K.IETSHMDGTNR.R                 |                          |
|   |             |              | 1.51E-04 |       | 2.73, 2 | 0.30 | 1131.5516 | 0.74452  | R.QC*VAEGSPQR.V                 | Carbamidomethylation (C) |
|   |             |              | 1.65E-07 |       | 3.84, 2 | 0.45 | 1572.7292 | 1.02809  | R.C*QC*KPGYQGDGFR.C             |                          |
|   |             |              | 2.11E-05 |       | 2.96, 2 | 0.42 | 1242.6200 | 0.22066  | R.AEC*LNPAPSR.R                 | Carbamidomethylation (C) |
|   |             |              | 3.71E-08 |       | 3.10, 2 | 0.44 | 1351.7327 | 0.71636  | R.ASLHGGEPTTIIR.Q               |                          |
|   |             |              | 2.52E-08 |       | 3.74, 2 | 0.42 | 1517.7957 | 0.10881  | K.KDENQVPAVVGFSK.G              |                          |
|   |             |              | 2.82E-04 |       | 2.85, 2 | 0.48 | 1149.5062 | 0.72352  | R.DYATGFC*C*R.C                 | Carbamidomethylation (C) |
|   |             |              | 3.40E-05 |       | 2.70, 2 | 0.19 | 1590.6380 | -0.35898 | R.C*EC*MEGYHFSDR.G              | Carbamidomethylation (C) |
|   |             |              | 7.01E-09 |       | 3.61, 3 | 0.37 | 2736.2111 | 1.18777  | R.DGSPDALQNPC*YIGTHGC*DSNAC*R.P | Carbamidomethylation (C) |
|   |             |              | 1.78E-09 |       | 3.69, 2 | 0.58 | 1364.7089 | 0.53619  | K.TNSVIAM#DLAVSK.E              | Oxidation (M)            |
|   |             |              | 2.76E-08 |       | 3.92, 3 | 0.25 | 2745.2539 | 1.02304  | R.EYTVTEPDQDSAVPSHTHVYQWR.Q     |                          |
|   |             |              | 6.40E-10 |       | 3.57, 2 | 0.46 | 1386.7851 | 1.12676  | R.RVLFDTGLVNPR.G                |                          |

|    |               |        |          |       |         |      |           |          |                           |                          |
|----|---------------|--------|----------|-------|---------|------|-----------|----------|---------------------------|--------------------------|
|    |               |        | 2.76E-07 |       | 2.67, 2 | 0.44 | 1390.6750 | 0.70317  | R.TIFWTDSHLDR.I           |                          |
|    |               |        | 1.18E-07 |       | 3.13, 2 | 0.45 | 1389.7009 | 0.78227  | K.DENQVPAVVGFSK.G         |                          |
|    |               |        | 2.78E-06 |       | 3.54, 2 | 0.45 | 1348.7141 | 0.83452  | K.TNSVIAMDLAVSK.E         |                          |
|    |               |        | 5.00E-06 |       | 2.74, 2 | 0.31 | 1341.6181 | 1.10307  | K.SNGAYNIFANDR.E          |                          |
|    |               |        | 4.01E-06 |       | 2.95, 2 | 0.45 | 1230.6840 | 0.09575  | R.VLFDTGLVNPR.G           |                          |
|    |               |        | 7.73E-05 |       | 3.22, 2 | 0.56 | 1324.6069 | 0.74419  | R.GNLYWTDWNR.E            |                          |
|    |               |        | 1.08E-09 |       | 3.73, 2 | 0.51 | 1621.8220 | -0.08784 | K.VVYWTDISEPSIGR.A        |                          |
|    |               |        | 1.94E-06 |       | 2.77, 2 | 0.45 | 1349.7438 | 0.69049  | K.VIIGLAFDC*VDK.V         | Carbamidomethylation (C) |
|    |               |        | 2.33E-11 |       | 4.69, 2 | 0.58 | 1771.9265 | 0.87798  | K.VLEGLQYPPFAVTSYGK.N     |                          |
|    |               |        | 3.38E-10 |       | 4.52, 2 | 0.63 | 2025.9949 | 0.66985  | R.EDLSPFIIQM#AAEYVQR.G    | Oxidation (M)            |
| 9  | <i>Colla1</i> | P02454 | 7.63E-12 | 6.06  | 60.20   |      |           |          |                           |                          |
|    |               |        | 6.81E-04 |       | 2.72, 2 | 0.26 | 945.43848 | 0.19475  | K.QGPSGASGER.G            |                          |
|    |               |        | 2.63E-05 |       | 2.83, 2 | 0.21 | 836.43732 | 0.46739  | R.GPAGPQGR.G              |                          |
|    |               |        | 6.29E-08 |       | 3.29, 2 | 0.53 | 1311.6287 | 0.86370  | K.GETGPSGPAGPTGAR.G       |                          |
|    |               |        | 7.63E-12 |       | 4.09, 2 | 0.49 | 1532.7816 | 0.69866  | R.GETGPAGPAGPIGPAGAR.G    |                          |
|    |               |        | 1.76E-07 |       | 2.78, 2 | 0.41 | 1452.7263 | 0.37383  | K.SAGVSVPGPMGPSGR.G       |                          |
|    |               |        | 8.59E-04 |       | 4.00, 2 | 0.50 | 1800.8697 | 1.24970  | R.GPPGPM#GPPGLAGPPGESGR.E | Oxidation (M)            |
| 10 | <i>Colla2</i> | P02466 | 9.17E-12 | 6.63  | 88.21   |      |           |          |                           |                          |
|    |               |        | 1.66E-08 |       | 2.70, 2 | 0.41 | 1187.6279 | 0.90154  | R.SGHPGPVGPAGVR.G         |                          |
|    |               |        | 4.58E-05 |       | 1.81, 1 | 0.21 | 868.46356 | -0.04376 | R.GPSGPQGR.G              |                          |
|    |               |        | 1.43E-07 |       | 4.27, 2 | 0.46 | 1251.6076 | 0.41924  | R.GEAGAAGPSGPAGPR.G       |                          |
|    |               |        | 1.82E-04 |       | 1.98, 1 | 0.37 | 937.51013 | 0.05017  | R.GPAGPSGPAGK.D           |                          |
|    |               |        | 1.30E-06 |       | 2.94, 2 | 0.48 | 937.51013 | 0.71337  | R.GPAGPSGPAGK.D           |                          |
|    |               |        | 3.62E-05 |       | 2.19, 2 | 0.35 | 918.51556 | 0.52184  | R.PGPIGPAGPR.G            |                          |
|    |               |        | 1.14E-09 |       | 4.17, 2 | 0.21 | 1399.6820 | 0.26636  | K.GVSAGPGPM#GLMGPR.G      | Oxidation (M)            |
|    |               |        | 9.50E-06 |       | 3.28, 2 | 0.54 | 1399.6820 | 0.26636  | K.GVSAGPGPMGLM#GPR.G      | Oxidation (M)            |
|    |               |        | 9.17E-12 |       | 3.66, 2 | 0.48 | 1560.8128 | 0.88078  | R.GEPGPAGSVGPVGA VGPR.G   |                          |
|    |               |        | 1.04E-09 |       | 3.06, 2 | 0.51 | 1383.6871 | 0.80168  | K.GVSAGPGPMGLMGPR.G       |                          |
| 11 | <i>Csdel</i>  | P18395 | 6.65E-12 | 22.93 | 150.25  |      |           |          |                           |                          |
|    |               |        | 1.36E-04 |       | 2.53, 2 | 0.39 | 1247.6743 | 0.67644  | K.IKPEIHPEER.M            |                          |
|    |               |        | 3.88E-05 |       | 2.79, 2 | 0.43 | 1129.6087 | 0.64724  | R.PGQQIATC*VR.L           | Carbamidomethylation (C) |
|    |               |        | 7.98E-06 |       | 2.70, 2 | 0.39 | 1253.5215 | 0.96804  | R.GPDNSM#GFGAER.K         | Oxidation                |
|    |               |        | 7.69E-12 |       | 4.02, 2 | 0.54 | 1763.8322 | 0.93439  | K.SPAAPGQSPTGSVC*YER.N    | Carbamidomethylation (C) |
|    |               |        | 2.62E-04 |       | 3.44, 3 | 0.33 | 1413.7696 | 1.41193  | R.LKNITLDDASAPR.L         |                          |
|    |               |        | 1.43E-07 |       | 3.58, 2 | 0.40 | 1237.5266 | 0.31108  | R.GPDNSMGFGAER.K          |                          |
|    |               |        | 3.05E-04 |       | 2.70, 2 | 0.18 | 1609.7452 | 0.71086  | K.VGDDVEFEVSSDRR.T        |                          |
|    |               |        | 2.92E-05 |       | 3.84, 3 | 0.39 | 2017.9825 | 0.90171  | K.THSVNGITEEANPTIYS GK.V  |                          |

|    |              |              |          |       |         |      |           |          |                                 |                          |
|----|--------------|--------------|----------|-------|---------|------|-----------|----------|---------------------------------|--------------------------|
|    |              |              | 2.90E-11 |       | 4.94, 2 | 0.58 | 1897.8789 | 0.70363  | K.DKEAEDGHIIAYDDC*GVK.L         | Carbamidomethylation (C) |
|    |              |              | 5.41E-11 |       | 4.35, 2 | 0.63 | 1453.6441 | 0.34685  | K.VGDDVEFEVSSDR.R               |                          |
|    |              |              | 2.79E-08 |       | 3.80, 2 | 0.18 | 1507.6811 | 0.78606  | K.DNFGFIETANHDK.E               |                          |
|    |              |              | 1.51E-04 |       | 2.74, 2 | 0.22 | 1058.6608 | 0.44780  | R.IKVDFVIPK.E                   |                          |
|    |              |              | 6.65E-12 |       | 4.81, 2 | 0.60 | 2238.0771 | 0.76689  | K.DVEGSTSPQIGDKVEFSISDK.Q       |                          |
|    |              |              | 5.07E-06 |       | 2.71, 2 | 0.48 | 1573.7984 | -0.22710 | K.LLTSYGFIQC*SER.Q              | Carbamidomethylation (C) |
|    |              |              | 1.39E-07 |       | 4.04, 2 | 0.53 | 1746.8333 | 0.61186  | K.DQFGFINYEVGDSKK.L             |                          |
| 12 | <i>Prksh</i> | gi 109484382 | 1.99E-07 | 12.76 | 60.22   |      |           |          |                                 |                          |
|    |              |              | 1.35E-06 |       | 3.73, 2 | 0.43 | 1301.6848 | 0.83806  | R.KLWEEQQAANK.A                 |                          |
|    |              |              | 2.48E-07 |       | 2.79, 2 | 0.36 | 1306.6485 | 0.85503  | K.ETVVTSTTEPSR.C                |                          |
|    |              |              | 4.08E-04 |       | 2.86, 2 | 0.54 | 1552.6902 | 0.65925  | K.YEQGTGC*WQGNR.S               | Carbamidomethylation (C) |
|    |              |              | 1.99E-07 |       | 4.43, 2 | 0.49 | 1530.8122 | 0.73418  | K.EKESLQQLAEVTR.E               |                          |
|    |              |              | 3.39E-04 |       | 2.84, 2 | 0.24 | 1058.6245 | 0.73821  | K.KILIEEWK.T                    |                          |
|    |              |              | 1.82E-05 |       | 2.93, 2 | 0.43 | 1189.6059 | 0.78996  | K.SLEDQVETLR.T                  |                          |
| 14 | <i>Lmma</i>  | P48679       | 2.18E-13 | 36.70 | 220.28  |      |           |          |                                 |                          |
|    |              |              | 2.65E-05 |       | 3.75, 2 | 0.55 | 1502.7233 | 0.87419  | R.AQHEDQVEQYKK.E                |                          |
|    |              |              | 1.05E-04 |       | 2.97, 2 | 0.22 | 1102.5738 | -0.02217 | R.KLLEGEER.L                    |                          |
|    |              |              | 3.48E-05 |       | 3.12, 2 | 0.29 | 1029.5938 | 0.55046  | K.LEAALGEAKK.Q                  |                          |
|    |              |              | 5.37E-05 |       | 2.65, 2 | 0.36 | 1406.7013 | 0.08924  | R.TVLC*GTC*GQPADK.A             | Carbamidomethylation (C) |
|    |              |              | 7.29E-04 |       | 2.52, 2 | 0.25 | 1171.6429 | 0.06743  | K.KEGDLLAAQAR.L                 |                          |
|    |              |              | 2.05E-10 |       | 4.23, 2 | 0.65 | 1736.7598 | 0.91564  | R.GSHC*SSSGDPAEYNLR.S           | Carbamidomethylation (C) |
|    |              |              | 7.56E-06 |       | 2.75, 2 | 0.41 | 1148.5793 | 0.70024  | R.ITESEEVVSR.E                  |                          |
|    |              |              | 2.64E-06 |       | 2.97, 2 | 0.51 | 1293.6433 | 0.78008  | K.AAYEAELGDARK.T                |                          |
|    |              |              | 1.77E-08 |       | 3.31, 2 | 0.53 | 1203.5739 | 0.55205  | R.VAVEEVDEEGK.F                 |                          |
|    |              |              | 9.41E-04 |       | 2.64, 2 | 0.44 | 1089.5534 | 0.26567  | R.SLETENAGLR.L                  |                          |
|    |              |              | 1.23E-05 |       | 3.70, 3 | 0.25 | 1629.8078 | 0.93491  | R.LQEKEDLQELNDR.L               |                          |
|    |              |              | 5.21E-08 |       | 4.53, 2 | 0.46 | 1629.8078 | 0.68291  | R.LQEKEDLQELNDR.L               |                          |
|    |              |              | 3.35E-04 |       | 2.33, 2 | 0.42 | 1043.5479 | 1.29570  | K.EGDLLAAQAR.L                  |                          |
|    |              |              | 3.28E-06 |       | 3.18, 2 | 0.48 | 1165.5483 | 0.51225  | K.AAYEAELGDAR.K                 |                          |
|    |              |              | 4.54E-05 |       | 3.06, 2 | 0.30 | 1187.6378 | 0.45720  | K.LRDLEDSLAR.E                  |                          |
|    |              |              | 3.27E-05 |       | 4.34, 3 | 0.63 | 2268.1062 | 0.92191  | K.AASGSGAQVGGSSISSGSSASSVTVTR.S |                          |
|    |              |              | 2.18E-13 |       | 5.55, 2 | 0.66 | 2268.1062 | 0.60210  | K.AASGSGAQVGGSSISSGSSASSVTVTR.S |                          |

|    |              |        |          |       |         |      |           |          |                       |               |
|----|--------------|--------|----------|-------|---------|------|-----------|----------|-----------------------|---------------|
|    |              |        | 2.24E-13 |       | 4.84, 2 | 0.58 | 1752.8623 | 0.83037  | R.NSNLVGAAHEELQQSR.I  |               |
|    |              |        | 8.32E-11 |       | 4.48, 2 | 0.46 | 1605.8118 | 0.89690  | R.VAVEEVDEEGKFVR.L    |               |
|    |              |        | 1.71E-08 |       | 4.33, 2 | 0.61 | 1491.7471 | 0.55856  | R.TALINATGEEVAM#R.K   | Oxidation (M) |
|    |              |        | 1.22E-04 |       | 2.65, 2 | 0.38 | 1182.6113 | 0.87822  | R.TLEGELHDLR.G        |               |
|    |              |        | 2.28E-10 |       | 3.13, 2 | 0.44 | 1566.7507 | 0.51152  | R.SVGGSGGGSFGDNLVTR.S |               |
|    |              |        | 1.97E-06 |       | 4.02, 2 | 0.36 | 1491.8053 | 0.91863  | R.LQTLKEELDFQK.N      |               |
|    |              |        | 6.84E-07 |       | 3.54, 2 | 0.50 | 1475.7522 | 0.48039  | R.TALINATGEEVAMR.K    |               |
| 15 | <i>Hspa8</i> | P63018 | 4.01E-10 | 14.71 | 90.3    |      |           |          |                       |               |
|    |              |        | 2.34E-06 |       | 3.62, 3 | 0.37 | 1745.8089 | 1.36545  | K.NQTAEKEEFEHQQK.E    |               |
|    |              |        | 5.46E-09 |       | 4.17, 2 | 0.57 | 1691.7255 | 0.82451  | K.STAGDTHLGGEDFDNR.M  |               |
|    |              |        | 1.54E-05 |       | 3.14, 2 | 0.37 | 1270.5619 | 0.57393  | R.FDDAVVQSDM#K.H      | Oxidation (M) |
|    |              |        | 1.33E-04 |       | 3.35, 2 | 0.46 | 1410.6682 | 0.64946  | R.RFDDAVVQSDMK.H      |               |
|    |              |        | 7.13E-09 |       | 4.35, 2 | 0.63 | 1481.8071 | 0.75859  | K.SQIHDIVLVGGSTR.I    |               |
|    |              |        | 1.15E-06 |       | 2.85, 2 | 0.45 | 1254.5671 | 0.57256  | R.FDDAVVQSDMK.H       |               |
|    |              |        | 4.00E-05 |       | 3.09, 2 | 0.44 | 1319.5936 | 0.58905  | K.NSLESYAFNM#K.A      | Oxidation (M) |
|    |              |        | 1.12E-05 |       | 3.41, 2 | 0.42 | 1480.7542 | 0.29534  | R.ARFEELNADLFR.G      |               |
|    |              |        | 4.01E-10 |       | 5.23, 2 | 0.57 | 1659.8952 | 0.61333  | R.IINEPTAAAIAYGLDK.K  |               |
| 19 | <i>Nefl</i>  | P19527 | 1.65E-12 | 29.70 | 170     |      |           |          |                       |               |
|    |              |        | 4.58E-04 |       | 2.92, 2 | 0.20 | 1074.5789 | 0.72124  | R.KLLEGEETR.L         |               |
|    |              |        | 5.46E-05 |       | 2.15, 1 | 0.54 | 1061.5109 | -0.03625 | R.LAAEDATNEK.Q        |               |
|    |              |        | 5.74E-06 |       | 3.18, 2 | 0.50 | 1061.5109 | 0.71196  | R.LAAEDATNEK.Q        |               |
|    |              |        | 2.33E-05 |       | 3.00, 2 | 0.27 | 1001.5374 | 1.11864  | R.KGADEAALAR.A        |               |
|    |              |        | 2.22E-04 |       | 2.72, 2 | 0.33 | 946.48400 | 0.19060  | K.LLEGEETR.L          |               |
|    |              |        | 2.55E-04 |       | 2.72, 2 | 0.30 | 1021.5313 | 0.54668  | R.ALYEQEIR.D          |               |
|    |              |        | 2.65E-04 |       | 3.32, 2 | 0.39 | 1728.8874 | 0.78911  | K.QALQGEREGLEETLR.N   |               |
|    |              |        | 2.09E-09 |       | 4.57, 2 | 0.44 | 1548.7322 | 0.93950  | K.QNADISAMQDTINK.L    |               |
|    |              |        | 9.54E-10 |       | 4.73, 2 | 0.58 | 1723.7955 | 0.66638  | R.SAYSGLQSSSYLM#SAR.A | Oxidation (M) |
|    |              |        | 2.88E-09 |       | 4.86, 2 | 0.53 | 1747.8497 | 0.81218  | R.SAYSSYSAPVSSLSVR.R  |               |
|    |              |        | 3.96E-06 |       | 2.37, 1 | 0.24 | 1121.5837 | 0.16235  | K.EYQDLLNVK.M         |               |
|    |              |        | 1.07E-06 |       | 4.78, 2 | 0.39 | 1525.8260 | 1.40520  | R.YLKEYQDLLNVK.M      |               |
|    |              |        | 1.65E-12 |       | 5.03, 2 | 0.56 | 1707.8006 | 0.97637  | R.SAYSGLQSSSYLMSAR.A  |               |
|    |              |        | 3.24E-06 |       | 4.01, 2 | 0.44 | 1538.8134 | 0.57208  | R.IDSLM#DEIAFLKK.V    | Oxidation (M) |
|    |              |        | 2.74E-06 |       | 3.91, 3 | 0.31 | 1678.9196 | 1.17386  | K.RIDSLMDEIAFLKK.V    |               |
|    |              |        | 9.20E-06 |       | 2.33, 1 | 0.33 | 1154.7143 | 0.04309  | K.VLEAELLVLR.Q        |               |
|    |              |        | 6.20E-07 |       | 2.82, 2 | 0.59 | 1154.7143 | 0.30547  | K.VLEAELLVLR.Q        |               |
|    |              |        | 1.63E-08 |       | 3.98, 2 | 0.46 | 1522.8184 | 0.06951  | R.IDSLMDEIAFLKK.V     |               |
|    |              |        | 1.18E-08 |       | 3.69, 2 | 0.45 | 1394.7236 | 1.08281  | R.IDSLMDEIAFLK.K      |               |
| 20 | <i>Knfl</i>  | P01048 | 5.81E-08 | 20.00 | 70.21   |      |           |          |                       |               |
|    |              |        | 4.85E-05 |       | 3.41, 2 | 0.31 | 1407.6685 | 1.25756  | K.SAHSQVVAGM#NYK.I    | Oxidation (M) |
|    |              |        | 3.79E-07 |       | 3.91, 2 | 0.42 | 1391.6735 | 0.52446  | K.SAHSQVVAGMNYK.I     |               |

|    |                |             |          |       |         |      |           |          |                           |  |
|----|----------------|-------------|----------|-------|---------|------|-----------|----------|---------------------------|--|
|    |                |             | 3.47E-04 |       | 3.50, 3 | 0.28 | 1783.9060 | 0.25965  | K.EGTTRLLNSC*EYKGR.L      | Carbamidomethylation (C)                   |
|    |                |             | 8.02E-04 |       | 2.67, 2 | 0.39 | 1026.5229 | 0.42017  | R.LLNSC*EYK.G             | Carbamidomethylation (C)                   |
|    |                |             | 5.81E-08 |       | 4.18, 2 | 0.58 | 1873.9542 | 0.65203  | R.VTEGTKKDGAETLYSFK.Y     |  |
|    |                |             | 7.21E-04 |       | 3.65, 3 | 0.39 | 2142.0234 | 1.44616  | R.C*QALDM#M#ISRPPGFSPFR.L | Carbamidomethylation (C) and Oxidation (M) |
|    |                |             | 7.28E-05 |       | 2.93, 2 | 0.43 | 1802.8708 | 0.02825  | K.YNAELESQNFVLYR.V        |  |
| 22 | <i>Ckap4</i>   | gi 34862422 | 1.48E-10 | 12.70 | 60.2    |      |           |          |                           |  |
|    |                |             | 2.89E-04 |       | 2.55, 2 | 0.15 | 973.53131 | 0.61827  | R.ERDIEALK.S              |  |
|    |                |             | 1.48E-10 |       | 3.46, 2 | 0.57 | 1357.6859 | 0.80095  | K.VGAHGSEEAVVFR.D         |  |
|    |                |             | 3.77E-04 |       | 2.74, 2 | 0.27 | 1178.5899 | -0.07881 | K.SSVSQVESDLK.M           |  |
|    |                |             | 1.13E-07 |       | 4.77, 2 | 0.58 | 1760.8007 | 0.68687  | K.SSLQTM#ESDVYTEVR.E      | Oxidation (M)                              |
|    |                |             | 1.49E-04 |       | 3.69, 2 | 0.42 | 1439.6649 | 0.57659  | R.DFTSLENTVEER.L          |  |
|    |                |             | 3.27E-10 |       | 3.95, 2 | 0.53 | 1577.8170 | -0.28218 | K.SINDNIAIFTDVQK.R        |  |
| 23 | <i>Ppp2r1a</i> | Q5XI34      | 3.30E-07 | 10.53 | 70.16   |      |           |          |                           |  |
|    |                |             | 9.24E-06 |       | 2.88, 2 | 0.24 | 1239.6328 | 0.91741  | K.ELVSDANQHVK.S           |  |
|    |                |             | 7.70E-05 |       | 2.74, 2 | 0.36 | 1160.5793 | 0.70830  | K.LTQDQDQVDVK.Y           |  |
|    |                |             | 8.61E-05 |       | 2.97, 2 | 0.46 | 1323.5972 | 0.65667  | R.NLC*SDDTPM#VR.R         | Oxidation (M), Carbamidomethylation (C)    |
|    |                |             | 8.52E-05 |       | 2.85, 2 | 0.40 | 1307.6023 | 0.11959  | R.NLC*SDDTPMVR.R          | Carbamidomethylation (C)                   |
|    |                |             | 2.98E-04 |       | 2.77, 2 | 0.30 | 929.53021 | 0.66606  | K.VLELDNVK.S              |  |
|    |                |             | 3.30E-07 |       | 3.25, 2 | 0.51 | 1109.5374 | 0.72673  | R.LAGGDWFTSR.T            |  |
|    |                |             | 5.15E-04 |       | 2.75, 2 | 0.23 | 1392.7191 | 0.81093  | K.TDLVPAFQNLN#K.D         | Oxidation (M)                              |
| 24 | <i>Vim</i>     | P31000      | 1.93E-06 | 9.87  | 40      |      |           |          |                           |  |
|    |                |             | 8.70E-05 |       | 3.47, 2 | 0.51 | 1216.6280 | 0.17107  | R.RQVDQLTNDK.A            |  |
|    |                |             | 1.55E-05 |       | 2.73, 2 | 0.32 | 1115.5690 | 1.04314  | K.VELQELNDR.F             |  |
|    |                |             | 1.92E-06 |       | 2.77, 2 | 0.37 | 1444.7066 | 0.89433  | R.SLYSSSPGGAYVTR.S        |  |
|    |                |             | 3.59E-06 |       | 3.59, 2 | 0.60 | 1490.7824 | 0.80377  | R.QVQSLTC*EVDALK.G        |  |
| 26 | <i>Argbp2</i>  | O35413      | 1.51E-13 | 11.87 | 124.30  |      |           |          |                           |  |
|    |                |             | 7.39E-05 |       | 2.74, 2 | 0.15 | 1258.4735 | 0.85300  | K.SHS@DNGTDAFK.E          |  |
|    |                |             | 7.91E-06 |       | 2.49, 2 | 0.25 | 1212.5313 | 0.50798  | R.PSSSASMAGDFR.K          |  |
|    |                |             | 2.25E-05 |       | 2.42, 2 | 0.30 | 1064.6098 | 0.82134  | K.KGDTVYILR.K             |  |
|    |                |             | 1.21E-07 |       | 3.06, 2 | 0.41 | 1250.6375 | 0.73564  | R.PVSVYQSSIDR.S           |  |
|    |                |             | 5.05E-13 |       | 4.96, 3 | 0.46 | 2201.1308 | 1.33493  | K.SSILQHERPVSVYQSSIDR.S   |  |
|    |                |             | 2.78E-05 |       | 2.85, 2 | 0.48 | 2018.8726 | 0.57146  | K.GSEDYDPPLPHSYSSDR.I     |  |

|    |               |        |          |       |         |      |           |          |                             |  |
|----|---------------|--------|----------|-------|---------|------|-----------|----------|-----------------------------|--|
|    |               |        | 6.91E-05 |       | 2.74, 2 | 0.47 | 1199.5902 | -0.70796 | R.SYSSTLTDLGR.S             |  |
|    |               |        | 1.93E-07 |       | 3.87, 2 | 0.46 | 1299.5728 | 0.92713  | K.C*DDGWVFGTSR.R            | Carbamidomethylation (C)                   |
|    |               |        | 1.51E-13 |       | 5.92, 2 | 0.56 | 2403.1311 | 0.59648  | R.ADLPGSSSTFTTSFISSPSSPSR.A |  |
|    |               |        | 2.37E-06 |       | 2.36, 2 | 0.27 | 1251.6983 | 0.35185  | R.VGIFPISYVEK.L             |  |
| 27 | <i>Lum</i>    | P51886 | 9.18E-07 | 10.4  | 30.19   |      |           |          |                             |  |
|    |               |        | 2.13E-06 |       | 3.64, 2 | 0.41 | 1225.5808 | 0.92327  | R.NNQIDHIDEK.A              |  |
|    |               |        | 2.64E-05 |       | 3.36, 2 | 0.46 | 1243.6640 | 0.42986  | K.SLQDLQLANNK.I             |  |
|    |               |        | 9.18E-07 |       | 3.87, 2 | 0.59 | 1690.7992 | 0.13219  | K.SLEYLDLSFNQM#SK.L         | Oxidation (M)                              |
| 28 | <i>Hnrnpk</i> | P61980 | 1.22E-14 | 34.34 | 110     |      |           |          |                             |  |
|    |               |        | 1.57E-06 |       | 3.22, 2 | 0.42 | 1154.4895 | 1.00810  | R.RDYDDMSPR.R               |  |
|    |               |        | 5.77E-05 |       | 2.79, 2 | 0.39 | 1053.6414 | 0.87175  | R.VVLIGGKPADR.V             |  |
|    |               |        | 7.07E-11 |       | 4.50, 3 | 0.44 | 1735.8067 | 1.28476  | K.RPAEDMEEEQAFKR.S          |  |
|    |               |        | 7.02E-06 |       | 3.18, 2 | 0.28 | 1349.6478 | 0.89763  | R.SRNTDEMVELR.I             |  |
|    |               |        | 5.72E-07 |       | 2.92, 2 | 0.45 | 1259.5749 | 0.68303  | K.IDEPLEGSEDR.I             |  |
|    |               |        | 4.25E-07 |       | 4.57, 3 | 0.58 | 2068.9782 | 0.99350  | R.HESGASIKIDEPLEGSEDR.I     |  |
|    |               |        | 6.32E-04 |       | 2.89, 2 | 0.36 | 1098.4825 | 0.61316  | K.GSDFDC*ELR.L              | Carbamidomethylation (C)                   |
|    |               |        | 1.22E-14 |       | 5.25, 2 | 0.62 | 2121.0207 | 0.92339  | K.ALRTDYNASVSPDSSGPER.I     |  |
|    |               |        | 4.23E-05 |       | 3.11, 2 | 0.26 | 1194.6993 | 0.68999  | R.NLPLPPPPPPR.G             |  |
|    |               |        | 4.88E-11 |       | 3.32, 2 | 0.49 | 1553.9261 | 0.80486  | K.IILDLISESPIKGR.A          |  |
|    |               |        | 1.26E-04 |       | 3.37, 2 | 0.51 | 1340.8035 | 0.72478  | K.IILDLISESPIK.G            |  |
| 29 | <i>Fbln5</i>  | Q9WVH8 | 1.11E-09 | 13.39 | 60.2    |      |           |          |                             |  |
|    |               |        | 4.90E-07 |       | 2.56, 3 | 0.33 | 1447.6299 | 1.28075  | R.SC*QDINEC*EHR.N           | Carbamidomethylation (C)                   |
|    |               |        | 6.91E-06 |       | 2.81, 2 | 0.53 | 1355.5875 | 0.73381  | R.C*MC*PAENTGC*R.D          | Carbamidomethylation (C)                   |
|    |               |        | 1.16E-05 |       | 2.77, 2 | 0.54 | 1374.7409 | 1.25737  | R.QTGPISATLVMTR.P           |  |
|    |               |        | 1.11E-09 |       | 3.21, 2 | 0.64 | 1580.7737 | -0.02268 | R.SVPADIFQM#QATTR.Y         | Oxidation (M)                              |
|    |               |        | 1.96E-08 |       | 4.61, 2 | 0.61 | 1564.7788 | 1.49272  | R.SVPADIFQMATTR.Y           |  |
|    |               |        | 1.40E-06 |       | 3.23, 2 | 0.32 | 1362.7092 | 1.06157  | R.YPGAYYIFQIK.S             |  |
| 31 | <i>Tubal</i>  | P68370 | 1.64E-10 | 22.62 | 110.27  |      |           |          |                             |  |
|    |               |        | 3.85E-05 |       | 2.75, 3 | 0.15 | 1396.6929 | 0.87931  | R.LDHKFDLM#YAK.R            | Oxidation (M)                              |
|    |               |        | 2.47E-05 |       | 2.74, 2 | 0.44 | 1380.6980 | 0.60039  | R.LDHKFDLMYAK.R             |  |
|    |               |        | 2.47E-05 |       | 2.74, 2 | 0.50 | 1265.6086 | 0.31857  | K.YM#AC*C*LLYR.G            | Oxidation (M),<br>Carbamidomethylation (C) |
|    |               |        | 1.48E-04 |       | 1.81, 1 | 0.26 | 887.43317 | 0.05798  | K.FDLMYAK.R                 |  |
|    |               |        | 3.35E-05 |       | 2.70, 2 | 0.37 | 1249.6137 | 0.72033  | K.YMAC*C*LLYR.G             | Carbamidomethylation (C)                   |

|    |                |        |          |       |         |      |           |         |                           |  |
|----|----------------|--------|----------|-------|---------|------|-----------|---------|---------------------------|--|
|    |                |        | 4.47E-08 |       | 5.02, 3 | 0.40 | 2346.0131 | 1.39471 | R.AFVHWYVGEEM#EEGEFSEAR.E | Oxidation (M)                              |
|    |                |        | 2.43E-07 |       | 3.36, 2 | 0.60 | 1756.9632 | 0.69670 | R.IHFPLATYAPVISA.EK.A     |  |
|    |                |        | 7.73E-08 |       | 4.63, 2 | 0.47 | 1880.9298 | 0.52698 | R.AVC*M#LSNTTAAIEAWAR.L   | Carbamidomethylation (C)                   |
|    |                |        | 1.01E-05 |       | 3.52, 3 | 0.37 | 1756.9632 | 0.85123 | R.IHFPLATYAPVISA.EK.A     |  |
|    |                |        | 1.29E-08 |       | 3.75, 3 | 0.31 | 2330.0183 | 0.25986 | R.AFVHWYVGEEM#EEGEFSEAR.E |  |
|    |                |        | 1.64E-10 |       | 5.36, 2 | 0.64 | 2007.8930 | 0.72368 | K.TIGGGDDSFNTFFSETGAGK.H  |  |
|    |                |        | 2.32E-04 |       | 2.22, 1 | 0.34 | 1085.6201 | 0.25415 | K.EIIDLVLD.R.I            |  |
|    |                |        | 3.97E-04 |       | 2.71, 2 | 0.34 | 1085.6201 | 0.41313 | K.EIIDLVLD.R.I            |  |
| 32 | <i>Ces3</i>    | P16303 | 1.56E-08 | 17.35 | 90.21   |      |           |         |                           |  |
|    |                |        | 6.62E-06 |       | 4.25, 2 | 0.43 | 1382.6699 | 0.99004 | R.AKEAAEESHWK.H           |  |
|    |                |        | 6.46E-05 |       | 3.50, 3 | 0.26 | 1382.6699 | 1.10880 | R.AKEAAEESHWK.H           |  |
|    |                |        | 5.84E-06 |       | 2.70, 2 | 0.42 | 1183.5378 | 0.22124 | K.EAAEESHWK.H             |  |
|    |                |        | 6.00E-06 |       | 3.52, 2 | 0.34 | 1002.5326 | 1.33025 | K.IGASTQAAQR.L            |  |
|    |                |        | 4.89E-07 |       | 3.51, 2 | 0.48 | 1391.7075 | 0.30011 | K.TTTSAVM#VHC*LR.Q        | Oxidation (M),<br>Carbamidomethylation (C) |
|    |                |        | 4.43E-07 |       | 3.99, 2 | 0.39 | 1279.5648 | 0.73223 | K.DGASEEETNLSK.M          |  |
|    |                |        | 7.99E-05 |       | 3.09, 2 | 0.40 | 1375.7126 | 0.63583 | K.TTTSAVMVHC*LR.Q         | Carbamidomethylation (C)                   |
|    |                |        | 8.72E-06 |       | 2.72, 2 | 0.40 | 1029.5462 | 0.25786 | K.TPEEILAEK.S             |  |
|    |                |        | 4.54E-05 |       | 3.91, 3 | 0.36 | 1620.8743 | 1.15549 | R.LKDKEVAFWSEL.R.A        |  |
|    |                |        | 1.56E-08 |       | 3.71, 2 | 0.46 | 1451.7893 | 1.41228 | K.SFNTVPYIVGINK.Q         |  |
| 33 | <i>P4hb</i>    | P04785 | 1.94E-07 | 13.56 | 60.20   |      |           |         |                           |  |
|    |                |        | 3.16E-07 |       | 2.50, 2 | 0.38 | 1409.6794 | 0.08525 | K.YKPESDELTAEK.I          |  |
|    |                |        | 3.35E-07 |       | 3.51, 3 | 0.48 | 1729.9118 | 1.45377 | K.LGETYKDHENIVIAK.M       |  |
|    |                |        | 8.33E-06 |       | 4.03, 2 | 0.31 | 1355.6478 | 1.47771 | K.NFEEVAFDEKK.N           |  |
|    |                |        | 2.64E-05 |       | 3.12, 2 | 0.41 | 1222.6235 | 0.57026 | R.LITLEEEM#TK.Y           | Oxidation (M)                              |
|    |                |        | 1.21E-05 |       | 3.51, 3 | 0.34 | 1424.7784 | 1.45942 | K.YQLDKDGVVLFK.K          |  |
|    |                |        | 2.42E-06 |       | 3.32, 2 | 0.29 | 1424.7784 | 0.83000 | K.YQLDKDGVVLFK.K          |  |
|    |                |        | 1.94E-07 |       | 2.65, 2 | 0.29 | 1081.6768 | 0.71233 | K.THILLFLPK.S             |  |
| 35 | <i>Blmh</i>    | P70645 | 1.13E-07 | 14.32 | 50.21   |      |           |         |                           |  |
|    |                |        | 4.59E-05 |       | 3.63, 3 | 0.40 | 1563.7525 | 1.11565 | K.KC*FPESHTTEATR.R        | Carbamidomethylation (C)                   |
|    |                |        | 2.11E-07 |       | 4.24, 2 | 0.59 | 1875.8098 | 0.60228 | K.GEISSTQDAM#M#EEIFR.V    | Oxidation (M)                              |
|    |                |        | 2.37E-06 |       | 2.75, 2 | 0.35 | 1262.7143 | 0.88103 | K.VGPITPLQFYK.E           |  |
|    |                |        | 2.19E-04 |       | 3.20, 2 | 0.40 | 1465.7685 | 0.47368 | K.TLYNNQPIDFLK.K          |  |
|    |                |        | 1.13E-07 |       | 3.31, 2 | 0.54 | 1439.6565 | 0.61012 | R.DGEAVWFGC*DVGK.H        | Carbamidomethylation (C)                   |
| 36 | <i>Krt1-12</i> | Q61FW5 | 3.22E-06 | 4.6   | 20.0    |      |           |         |                           |  |

|    |                  |        |          |       |         |      |           |          |                           |               |
|----|------------------|--------|----------|-------|---------|------|-----------|----------|---------------------------|---------------|
|    |                  |        | 7.73E-06 |       | 2.81, 2 | 0.33 | 1007.5156 | 0.90282  | K.YENELALR.Q              |               |
|    |                  |        | 3.22E-06 |       | 3.44, 2 | 0.41 | 1029.5938 | 0.28703  | R.VLDELTLAR.A             |               |
| 37 | <i>Serpina1a</i> | Q4G075 | 7.11E-14 | 42.70 | 178.24  |      |           |          |                           |               |
|    |                  |        | 5.70E-04 |       | 1.93, 1 | 0.43 | 980.44659 | 0.32184  | K.ADLGMSGSR.D             |               |
|    |                  |        | 6.85E-07 |       | 2.92, 2 | 0.48 | 980.44659 | 0.11504  | K.ADLGMSGSR.D             |               |
|    |                  |        | 1.97E-05 |       | 2.86, 2 | 0.31 | 1278.6800 | 0.71831  | R.FQSLNAEVSKR.G           |               |
|    |                  |        | 2.16E-06 |       | 3.24, 2 | 0.49 | 1472.6838 | 0.91193  | K.FM#KQDTTDAPFR.L         | Oxidation (M) |
|    |                  |        | 3.50E-07 |       | 4.55, 3 | 0.34 | 1465.7757 | 0.45783  | K.RENLENIDVHVK.L          |               |
|    |                  |        | 3.26E-06 |       | 3.16, 2 | 0.38 | 1465.7757 | 0.60979  | K.RENLENIDVHVK.L          |               |
|    |                  |        | 4.93E-07 |       | 2.74, 1 | 0.32 | 1230.6939 | -0.01331 | K.KIEEQITLEK.L            |               |
|    |                  |        | 3.34E-05 |       | 2.85, 1 | 0.25 | 1122.5789 | -0.11536 | R.FQSLNAEVSK.R            |               |
|    |                  |        | 1.47E-06 |       | 2.78, 2 | 0.39 | 1122.5789 | 0.55120  | R.FQSLNAEVSK.R            |               |
|    |                  |        | 1.69E-04 |       | 2.97, 2 | 0.38 | 1230.6939 | 0.65117  | K.KIEEQITLEK.L            |               |
|    |                  |        | 2.04E-09 |       | 4.02, 2 | 0.55 | 1575.7186 | 0.85600  | K.TFHFDSVEDVHSR.F         |               |
|    |                  |        | 1.20E-07 |       | 4.07, 3 | 0.49 | 1575.7186 | 1.47440  | K.TFHFDSVEDVHSR.F         |               |
|    |                  |        | 1.17E-06 |       | 3.11, 2 | 0.46 | 1309.6746 | 0.68157  | R.ENLENIDVHVK.L           |               |
|    |                  |        | 2.10E-07 |       | 3.62, 3 | 0.34 | 2237.0291 | 1.36963  | K.M#YGADLAPVDFQHASEDARK.E | Oxidation (M) |
|    |                  |        | 7.35E-09 |       | 3.78, 2 | 0.60 | 1338.7276 | 0.44719  | R.HNPTANVLFGR.V           |               |
|    |                  |        | 8.19E-08 |       | 4.77, 2 | 0.59 | 2108.9341 | 0.54853  | K.M#YGADLAPVDFQHASEDAR.K  | Oxidation (M) |
|    |                  |        | 7.11E-14 |       | 4.48, 2 | 0.57 | 2092.9392 | 0.83086  | K.MYGADLAPVDFQHASEDAR.K   |               |
|    |                  |        | 1.66E-09 |       | 4.46, 2 | 0.49 | 1782.9384 | 0.91875  | K.FKIEESYILNSNLGR.L       |               |
|    |                  |        | 8.63E-06 |       | 4.13, 2 | 0.46 | 1364.7248 | 0.85381  | K.KFFFGYISDLK.C           |               |
|    |                  |        | 4.79E-09 |       | 4.52, 2 | 0.49 | 1587.8662 | 0.20269  | K.IPELLAVGVVDSM#TK.L      | Oxidation (M) |
|    |                  |        | 3.99E-06 |       | 4.08, 2 | 0.48 | 1179.7136 | 1.06706  | R.LVLVNAIYFK.G            |               |
|    |                  |        | 3.71E-04 |       | 2.75, 1 | 0.33 | 1221.6473 | 1.00232  | R.LGLQDLFNSSK.A           |               |
|    |                  |        | 2.57E-07 |       | 3.50, 2 | 0.40 | 1221.6473 | 0.21611  | R.LGLQDLFNSSK.A           |               |
|    |                  |        | 3.86E-07 |       | 2.91, 2 | 0.38 | 1236.6298 | 0.20513  | K.FFFGYISDLK.C            |               |
|    |                  |        | 3.19E-05 |       | 2.92, 2 | 0.14 | 2108.9341 | 1.41711  | K.M#YGADLAPVDFQHASEDAR.K  | Oxidation (M) |
| 38 | <i>Apoa4</i>     | P02651 | 2.15E-07 | 16.37 | 40.2    |      |           |          |                           |               |
|    |                  |        | 1.27E-05 |       | 2.94, 2 | 0.29 | 984.54724 | 1.12663  | R.RAVEPLGDK.F             |               |
|    |                  |        | 5.04E-06 |       | 3.55, 2 | 0.42 | 1268.5939 | 0.76645  | K.VSQM#FGDNVQK.L          | Oxidation (M) |
|    |                  |        | 2.15E-07 |       | 3.36, 2 | 0.62 | 1312.7106 | 0.89287  | K.NLAPLVEDVQSK.L          |               |
|    |                  |        | 1.90E-04 |       | 2.71, 2 | 0.26 | 1287.6539 | 0.79216  | K.ATIDQNLEDLR.S           |               |
| 39 | <i>Capg</i>      | Q6AYC4 | 1.02E-11 | 37.82 | 160.31  |      |           |          |                           |               |
|    |                  |        | 1.45E-04 |       | 2.84, 2 | 0.47 | 1203.6691 | 0.39263  | K.TTSGTTPAAIRK.L          |               |
|    |                  |        | 9.07E-05 |       | 1.93, 1 | 0.42 | 1280.6150 | 0.04276  | K.VSDATGQM#NLTK.V         | Oxidation (M) |
|    |                  |        | 1.22E-04 |       | 3.77, 3 | 0.32 | 1379.6702 | 1.02073  | K.YREGGVESAFHK.T          |               |
|    |                  |        | 2.49E-07 |       | 3.53, 2 | 0.46 | 1280.6150 | 0.14608  | K.VSDATGQM#NLTK.V         | Oxidation (M) |
|    |                  |        | 3.67E-04 |       | 2.82, 2 | 0.43 | 1075.5742 | 0.07817  | K.TTSGTTPAAIRK            |               |
|    |                  |        | 7.23E-04 |       | 2.84, 2 | 0.39 | 1379.6702 | 1.39006  | K.YREGGVESAFHK.T          |               |



|    |               |        |          |       |         |      |           |          |                             |                          |
|----|---------------|--------|----------|-------|---------|------|-----------|----------|-----------------------------|--------------------------|
|    |               |        | 1.18E-09 |       | 2.95, 1 | 0.28 | 1264.6201 | 0.06995  | K.VSDATGQMNLTK.V            |                          |
|    |               |        | 2.43E-06 |       | 4.05, 3 | 0.31 | 2117.0622 | 1.30429  | R.EGGVESAFHKTTSGTTPAAIR.K   |                          |
|    |               |        | 1.07E-07 |       | 3.06, 2 | 0.51 | 1264.6201 | 0.13713  | K.VSDATGQMNLTK.V            |                          |
|    |               |        | 5.97E-04 |       | 2.71, 2 | 0.17 | 1904.9646 | 1.00069  | R.M#RYSPTQVEILPQGR.E        | Oxidation (M)            |
|    |               |        | 1.58E-08 |       | 3.11, 2 | 0.54 | 1601.8282 | -0.06978 | R.YSPNTQVEILPQGR.E          |                          |
|    |               |        | 1.02E-11 |       | 5.79, 2 | 0.63 | 2349.0839 | 0.84355  | K.EGNPEEDITADQTNAQAAALYK.V  |                          |
|    |               |        | 1.64E-08 |       | 4.57, 3 | 0.59 | 2349.0839 | 1.27042  | K.EGNPEEDITADQTNAQAAALYK.V  |                          |
|    |               |        |          |       |         |      |           |          | K.AQVEIITDGEEPAEM#IQVLGPKPA | Oxidation (M)            |
|    |               |        | 2.95E-04 |       | 3.74, 3 | 0.27 | 2792.4750 | 1.49542  | LK.E                        |                          |
|    |               |        | 2.25E-06 |       | 4.08, 2 | 0.45 | 2383.2061 | 0.64502  | K.AQVEIITDGEEPAEM#IQVLGPK.P | Oxidation (M)            |
|    |               |        |          |       |         |      |           |          | K.AQVEIITDGEEPAEMIQVLGPKPAL |                          |
|    |               |        | 7.97E-06 |       | 3.52, 3 | 0.36 | 2776.4802 | 0.71994  | K.E                         |                          |
|    |               |        | 2.93E-09 |       | 5.36, 2 | 0.56 | 2205.0168 | 0.75542  | R.EVQGNESDLFM#SYFPQGLK.Y    | Oxidation (M)            |
|    |               |        | 4.61E-06 |       | 3.28, 2 | 0.45 | 2367.2111 | 0.92974  | K.AQVEIITDGEEPAEMIQVLGPK.P  |                          |
|    |               |        | 7.20E-07 |       | 3.27, 2 | 0.42 | 1375.7327 | 0.84856  | R.QAALQVADGFISR.M           |                          |
|    |               |        | 2.14E-05 |       | 3.76, 2 | 0.51 | 2189.0219 | 0.90264  | R.EVQGNESDLFMSYFPQGLK.Y     |                          |
| 40 | <i>Ublcp1</i> | Q5FWT7 | 8.33E-05 | 22.33 | 60.20   |      |           |          |                             |                          |
|    |               |        | 9.27E-06 |       | 3.83, 2 | 0.26 | 1470.7256 | 0.96320  | K.M#KELGVSTNANYK.I          | Oxidation (M)            |
|    |               |        | 8.35E-05 |       | 2.78, 2 | 0.27 | 1343.7318 | 0.89836  | K.EYKVEVLNPPR.E             |                          |
|    |               |        | 6.73E-04 |       | 2.67, 2 | 0.50 | 1252.5965 | 0.39860  | R.SC*AETGVELMR.P            | Carbamidomethylation (C) |
|    |               |        |          |       |         |      |           |          |                             |                          |
|    |               |        | 1.24E-04 |       | 3.81, 2 | 0.36 | 1309.6568 | 0.92009  | K.KNTIMFDDIGR.N             |                          |
|    |               |        | 4.79E-07 |       | 2.78, 2 | 0.31 | 1243.6317 | 0.58940  | K.LDDFLELNHK.Y              |                          |
|    |               |        | 8.33E-05 |       | 4.01, 3 | 0.38 | 1847.0061 | 1.25150  | K.KLLVLDVDYTLFDHR.S         |                          |
| 42 | <i>Taldol</i> | Q9EQS0 | 3.87E-08 | 29.08 | 100.19  |      |           |          |                             |                          |
|    |               |        | 1.00E-05 |       | 2.98, 2 | 0.19 | 1098.5789 | 0.33782  | K.LGGPQEEQIK.N              |                          |
|    |               |        | 5.45E-04 |       | 3.47, 3 | 0.28 | 1515.6896 | 0.99133  | R.WLHNEDQM#AVEK.L           | Oxidation (M)            |
|    |               |        | 2.35E-06 |       | 2.72, 2 | 0.45 | 1248.5742 | 0.69585  | K.SYEPQEDPGVK.S             |                          |
|    |               |        | 2.18E-05 |       | 3.03, 2 | 0.49 | 1268.6303 | 0.76779  | R.LSFDKDAM#VAR.A            | Oxidation (M)            |
|    |               |        | 1.37E-04 |       | 2.83, 2 | 0.21 | 997.51351 | 0.67526  | K.TIVM#GASFR.N              | Oxidation (M)            |
|    |               |        | 7.22E-04 |       | 2.90, 2 | 0.24 | 1050.5135 | 0.87905  | R.M#ESALDQLK.Q              | Oxidation (M)            |
|    |               |        | 3.87E-08 |       | 3.19, 2 | 0.38 | 1252.6353 | 0.46221  | R.LSFDKDAMVAR.A             |                          |
|    |               |        | 5.43E-07 |       | 2.86, 2 | 0.32 | 1311.6691 | 0.04521  | R.ILDWHVANTDK.K             |                          |
|    |               |        | 1.28E-05 |       | 3.71, 2 | 0.50 | 1276.6532 | 0.93730  | K.LSSTWEGIQAGK.E            |                          |
|    |               |        | 7.55E-07 |       | 3.71, 2 | 0.53 | 1392.7497 | 0.92491  | K.ALAGC*DFLTISP.K.L         | Carbamidomethylation (C) |
| 44 | <i>Sgta</i>   | O70593 | 8.41E-11 | 13.56 | 40.2    |      |           |          |                             |                          |
|    |               |        | 1.7E-05  |       | 2.79, 2 | 0.52 | 1051.5207 | 1.10100  | K.HAEAVAYYK.K               |                          |
|    |               |        | 8.41E-11 |       | 3.33, 2 | 0.60 | 1417.6077 | 0.70110  | R.TPPSEEDSAEAER.L           |                          |
|    |               |        | 1.07E-05 |       | 3.72, 2 | 0.56 | 1480.7154 | 1.48114  | K.LGNVVGAVQDC*ER.A          | Carbamidomethylation (C) |

|    |                 |              |          |       |         |      |           |         |                                |                          |
|----|-----------------|--------------|----------|-------|---------|------|-----------|---------|--------------------------------|--------------------------|
|    |                 |              | 1.87E-08 |       | 2.75, 2 | 0.46 | 1393.6481 | 0.68181 | K.ALELDPNDNTYK.S               | tion (C)                 |
| 45 | <i>Anxa8</i>    | Q4FZU6       | 2.78E-11 | 46.79 | 150.24  |      |           |         |                                |                          |
|    |                 |              | 8.88E-04 |       | 2.91, 2 | 0.18 | 1052.5371 | 0.98332 | K.SELSGKFER.L                  |                          |
|    |                 |              | 4.74E-04 |       | 2.70, 2 | 0.50 | 922.45499 | 0.48200 | K.ILGTDEM#K.F                  | Oxidation (M)            |
|    |                 |              | 6.35E-04 |       | 2.90, 2 | 0.28 | 943.44073 | 1.03166 | R.VFEEYEK.I                    |                          |
|    |                 |              | 2.78E-11 |       | 3.62, 2 | 0.54 | 1746.8578 | 0.59962 | K.SETHGSLEEAM#LTVVK.C          | Oxidation (M)            |
|    |                 |              | 8.84E-06 |       | 3.11, 2 | 0.33 | 1231.6317 | 0.95073 | K.AWVEQEGVSVK.G                |                          |
|    |                 |              | 5.55E-04 |       | 2.74, 2 | 0.32 | 1073.5949 | 0.37993 | K.GAGTLDGTLIR.N                |                          |
|    |                 |              | 3.36E-06 |       | 2.73, 2 | 0.32 | 1669.7447 | 0.92849 | K.TLSSM#IMGDTSGYYK.T           |                          |
|    |                 |              | 3.80E-04 |       | 2.91, 2 | 0.37 | 1023.5961 | 0.78456 | K.FITILC*TR.S                  | Carbamidomethylation (C) |
|    |                 |              | 1.61E-05 |       | 3.55, 2 | 0.45 | 1231.7260 | 0.35238 | R.ILVC*LLQGC*R.D               | Carbamidomethylation (C) |
|    |                 |              | 2.94E-09 |       | 3.89, 2 | 0.60 | 1730.8629 | 0.49407 | K.SETHGSLEEAMLTVVK.C           |                          |
|    |                 |              | 5.31E-09 |       | 3.68, 2 | 0.59 | 1420.7529 | 0.94902 | K.DLTETLKSELGK.F               |                          |
|    |                 |              | 9.73E-08 |       | 3.58, 2 | 0.55 | 1351.7442 | 1.06489 | R.LIVALM#YPPYR.Y               | Oxidation (M)            |
|    |                 |              | 2.73E-05 |       | 2.84, 2 | 0.30 | 1653.7498 | 0.74663 | K.TLSSMIMGDTSGYYK.T            |                          |
|    |                 |              | 6.23E-09 |       | 4.56, 2 | 0.40 | 2568.2211 | 0.86333 | R.DDVSGFVDPGLALQDAQDLHAAG EK.I |                          |
|    |                 |              | 3.23E-04 |       | 4.72, 2 | 0.51 | 1571.8638 | 1.24187 | K.GIGTNEQAIIDVLT.K.R           |                          |
| 46 | <i>Gnb1</i>     | P54311       | 9.06E-11 | 19.12 | 50.22   |      |           |         |                                |                          |
|    |                 |              | 5.17E-06 |       | 2.85, 2 | 0.47 | 1017.5575 | 0.81847 | R.LLVASQDGK.L                  |                          |
|    |                 |              | 5.64E-07 |       | 3.25, 2 | 0.55 | 1523.7340 | 0.79580 | R.ELAGHTGYLSC*C*R.F            | Carbamidomethylation (C) |
|    |                 |              | 1.83E-07 |       | 3.08, 2 | 0.28 | 1352.6051 | 0.95273 | K.IYAM#HWGTDSR.L               | Oxidation (M)            |
|    |                 |              | 1.74E-07 |       | 3.74, 2 | 0.43 | 1225.6186 | 0.71510 | R.LFVSGAC*DASAK.L              | Carbamidomethylation (C) |
|    |                 |              | 9.06E-11 |       | 4.41, 2 | 0.57 | 2016.0120 | 1.38671 | K.AC*ADATLSQITNNIDPVGR.I       | Carbamidomethylation (C) |
| 47 | <i>Etfa</i>     | P13803       | 2.68E-07 | 10.51 | 30.16   |      |           |         |                                |                          |
|    |                 |              | 5.52E-07 |       | 2.77, 2 | 0.31 | 1143.6157 | 0.96636 | K.VLVAQHDAYK.G                 |                          |
|    |                 |              | 2.68E-07 |       | 3.11, 2 | 0.39 | 1310.7078 | 0.63474 | R.TIYAGNALC*TVK.C              | Carbamidomethylation (C) |
|    |                 |              | 3.94E-04 |       | 3.04, 2 | 0.45 | 1290.7027 | 0.04693 | R.LGGEVSC*LVAGTK.C             | Carbamidomethylation (C) |
| 48 | <i>Hnrpa2b1</i> | gi 109473494 | 1.33E-14 | 21.53 | 70.34   |      |           |         |                                |                          |
|    |                 |              | 7.09E-04 |       | 2.62, 2 | 0.40 | 993.51613 | 0.56021 | K.LTDC*VVMR.D                  | Carbamidomethylation (C) |

|    |                |        |           |       |         |      |           |          |                                   |  |
|----|----------------|--------|-----------|-------|---------|------|-----------|----------|-----------------------------------|--|
|    |                |        | 1.40E-06  |       | 6.75, 3 | 0.63 | 2205.9002 | 1.48394  | R.NM#GGPYGGGNYGPGSGGSGGY<br>GGR.S | Oxidation (M)                              |
|    |                |        | 1.33E-14  |       | 6.35, 2 | 0.58 | 2205.9002 | 0.79852  | R.NM#GGPYGGGNYGPGSGGSGGY<br>GGR.S | Oxidation (M)                              |
|    |                |        | 2.21E-04  |       | 3.32, 2 | 0.35 | 1377.6293 | 0.78569  | R.GGGNFGPGPGSNFR.G                |  |
|    |                |        | 3.89E-04  |       | 2.96, 2 | 0.25 | 1013.4435 | 0.85381  | R.GGNFGFGDSR.G                    |  |
|    |                |        | 1.78E-14  |       | 5.75, 2 | 0.64 | 2189.9052 | 0.80425  | R.NMGGPYGGGNYGPGSGGSGGY<br>GGR.S  |  |
|    |                |        | 9.78E-05  |       | 2.00, 1 | 0.29 | 1050.4415 | 0.23254  | R.DYFEEYGK.I                      |  |
|    |                |        | 3.22E-06  |       | 3.65, 2 | 0.34 | 1188.6470 | 0.88640  | K.IDTIEIITDR.Q                    |  |
| 49 | <i>Arhgdib</i> | Q5M860 | 1.314E-12 | 36.00 | 70.23   |      |           |          |                                   |  |
|    |                |        | 6.29E-04  |       | 2.81, 2 | 0.30 | 1084.6149 | 0.44670  | K.LNYKPPPQK.S                     |  |
|    |                |        | 6.26E-04  |       | 2.24, 2 | 0.33 | 957.47888 | 0.47002  | K.YVQQTYSR.N                      |  |
|    |                |        | 3.73E-07  |       | 3.93, 2 | 0.55 | 1696.7581 | 0.27166  | K.ELQEM#DKDDESLTK.Y               | Oxidation (M)                              |
|    |                |        | 9.83E-09  |       | 4.53, 2 | 0.50 | 1680.7633 | 0.88445  | K.ELQEMDKDDESLTK.Y                | Oxidation (M)                              |
|    |                |        | 1.31E-12  |       | 3.48, 2 | 0.41 | 2219.1239 | -0.26083 | R.LSLVC*DSAPGPITM#DLTGDLK.A       | Oxidation (M),<br>Carbamidomethylation (C) |
|    |                |        | 1.54E-09  |       | 4.27, 2 | 0.54 | 2163.2019 | 1.19390  | K.TLLGDVPVADPTVPNVTVTR.L          |  |
|    |                |        | 1.73E-11  |       | 3.92, 2 | 0.43 | 2203.1290 | 0.80462  | R.LSLVC*DSAPGPITMDLTGDLK.A        | Carbamidomethylation (C)                   |
|    |                |        | 3.07E-05  |       | 3.64, 3 | 0.49 | 2203.1290 | 0.96586  | R.LSLVC*DSAPGPITMDLTGDLK.A        | Carbamidomethylation (C)                   |
| 50 | <i>Gsta3</i>   | P04904 | 3.89E-11  | 29.41 | 78.22   |      |           |          |                                   |  |
|    |                |        | 1.41E-05  |       | 2.48, 2 | 0.21 | 985.60406 | 0.04125  | R.VSNLPTVKK.F                     |  |
|    |                |        | 2.25E-05  |       | 2.50, 1 | 0.30 | 1245.5970 | 0.15869  | K.SHGQDYLVGNR.L                   |  |
|    |                |        | 9.34E-05  |       | 3.78, 3 | 0.43 | 1585.8444 | 1.25235  | K.VLKSHGQDYLVGNR.L                |  |
|    |                |        | 1.03E-06  |       | 3.55, 2 | 0.40 | 1245.5970 | 0.80937  | K.SHGQDYLVGNR.L                   |  |
|    |                |        | 6.31E-07  |       | 3.20, 2 | 0.43 | 1631.8614 | 0.14423  | R.KPLEDEKC*VESAVK.I               | Carbamidomethylation (C)                   |
|    |                |        | 3.40E-07  |       | 3.53, 3 | 0.21 | 1631.8614 | 1.41497  | R.KPLEDEKC*VESAVK.I               | Carbamidomethylation (C)                   |
|    |                |        | 1.05E-05  |       | 2.69, 2 | 0.53 | 1006.5931 | 0.02696  | K.AILNYIATK.Y                     |  |
|    |                |        | 5.65E-09  |       | 4.00, 2 | 0.54 | 2186.9766 | 0.70020  | R.NDGSLM#FQQVPM#VEIDGM#K.L        | Oxidation (M)                              |
|    |                |        | 3.89E-11  |       | 4.50, 2 | 0.39 | 2170.9817 | 0.85672  | R.NDGSLM#FQQVPM#VEIDGMK.L         | Oxidation (M)                              |
|    |                |        | 3.47E-05  |       | 2.74, 2 | 0.50 | 2170.9817 | 0.85672  | R.NDGSLM#FQQVPMVEIDGM#K.L         | Oxidation (M)                              |
| 52 | <i>Apoal</i>   | P04639 | 1.16E-09  | 28.57 | 90.21   |      |           |          |                                   |  |
|    |                |        | 6.56E-04  |       | 2.87, 2 | 0.28 | 1197.5853 | 0.93204  | K.IM#SM#IDEAKK.K                  | Oxidation (M)                              |
|    |                |        | 1.35E-04  |       | 3.16, 2 | 0.34 | 1349.6365 | 0.77415  | R.NEM#NKDLENVK.Q                  | Oxidation (M)                              |
|    |                |        | 2.32E-04  |       | 2.76, 2 | 0.28 | 1069.4903 | 0.43679  | K.IM#SM#IDEAKK.K                  | Oxidation (M)                              |

|    |               |        |          |       |         |      |           |         |                        |                                    |
|----|---------------|--------|----------|-------|---------|------|-----------|---------|------------------------|------------------------------------|
|    |               |        | 6.11E-04 |       | 3.89, 2 | 0.32 | 1333.6416 | 0.99346 | R.NEMNKDLENVK.Q        |                                    |
|    |               |        | 5.56E-04 |       | 2.80, 2 | 0.42 | 849.44647 | 0.27110 | K.VVAEEFR.D            |                                    |
|    |               |        | 6.86E-06 |       | 3.54, 2 | 0.36 | 1417.6416 | 0.39284 | K.M#QPHLDEFQEK.W       | Oxidation (M)                      |
|    |               |        | 4.44E-05 |       | 2.86, 2 | 0.36 | 1195.5378 | 0.21660 | K.WNEEVEAYR.Q          |                                    |
|    |               |        | 1.16E-09 |       | 4.26, 2 | 0.48 | 1454.7889 | 0.99675 | R.VKDFATVYVDAVK.D      |                                    |
|    |               |        | 3.83E-07 |       | 3.14, 2 | 0.47 | 1460.6903 | 0.21697 | R.DYVSQFESSTLGK.Q      |                                    |
| 53 | <i>Hspb1</i>  | P42930 | 3.37E-08 | 12.14 | 20.0    |      |           |         |                        |                                    |
|    |               |        | 2.08E-05 |       | 3.44, 2 | 0.36 | 987.60980 | 0.65434 | R.RVPFSLLR.S           |                                    |
|    |               |        | 3.37E-08 |       | 3.54, 2 | 0.54 | 1832.9752 | 0.65178 | K.AVTQSAEITIPVTFEAR.A  |                                    |
| 54 | <i>Mrlcb</i>  | P18666 | 1.52E-09 | 47.09 | 78.23   |      |           |         |                        |                                    |
|    |               |        | 6.32E-05 |       | 2.18, 2 | 0.25 | 1253.5579 | 0.75746 | K.EAFNM#IDQNR.D        | Oxidation (M)                      |
|    |               |        | 1.51E-04 |       | 2.48, 2 | 0.34 | 1035.5139 | 1.19951 | R.ELLTTMGDR.F          |                                    |
|    |               |        | 5.08E-05 |       | 2.55, 2 | 0.30 | 1228.6168 | 0.30547 | K.LNGTDPEDVIR.N        |                                    |
|    |               |        | 6.46E-05 |       | 2.62, 2 | 0.42 | 1344.6463 | 0.19608 | K.EDLHDM#LASLGK.N      | Oxidation (M)                      |
|    |               |        | 1.03E-08 |       | 3.65, 2 | 0.44 | 1415.6325 | 1.00627 | R.FTDEEVDLYR.E         |                                    |
|    |               |        | 9.70E-05 |       | 3.08, 2 | 0.50 | 1260.6007 | 1.38494 | K.GNFNYIEFTR.I         |                                    |
|    |               |        | 1.52E-09 |       | 4.59, 2 | 0.59 | 2106.9800 | 1.07198 | R.ATSNVFM#FDQSQIQEFK.E | Oxidation (M)                      |
|    |               |        | 5.44E-07 |       | 3.30, 2 | 0.46 | 2186.9464 | 1.04608 | R.ATSNVFM#FDQSQIQEFK.E | Phosphorylation (T), Oxidation (M) |
| 55 | <i>Tagln</i>  | P31232 | 5.44E-08 | 42.79 | 120.21  |      |           |         |                        |                                    |
|    |               |        | 4.22E-07 |       | 2.76, 2 | 0.41 | 953.45746 | 0.31035 | K.AAEDYGVTK.T          |                                    |
|    |               |        | 1.96E-04 |       | 2.08, 1 | 0.44 | 953.45746 | 0.02875 | K.AAEDYGVTK.T          |                                    |
|    |               |        | 4.08E-06 |       | 3.14, 2 | 0.36 | 1210.5585 | 1.10332 | K.KYDEELEER.L          |                                    |
|    |               |        | 1.24E-06 |       | 3.04, 2 | 0.32 | 1530.8526 | 0.70769 | K.LVNSLYPEGSKPVK.V     |                                    |
|    |               |        | 4.65E-04 |       | 2.92, 2 | 0.34 | 1082.4636 | 0.80474 | K.YDEELEER.L           |                                    |
|    |               |        | 1.25E-04 |       | 2.73, 2 | 0.27 | 1260.6292 | 0.89531 | K.VPENPPSM#VFK.Q       | Oxidation (M)                      |
|    |               |        | 8.26E-04 |       | 2.71, 2 | 0.23 | 1237.6245 | 0.37565 | K.QM#EQVAQFLK.A        | Oxidation (M)                      |
|    |               |        | 8.50E-04 |       | 2.82, 2 | 0.33 | 1010.4400 | 0.82932 | R.GDPNWFMM#K.K         | Oxidation (M)                      |
|    |               |        | 1.53E-05 |       | 2.96, 2 | 0.37 | 1244.6344 | 0.98650 | K.VPENPPSMVFK.Q        |                                    |
|    |               |        | 2.81E-05 |       | 3.08, 2 | 0.37 | 1206.6762 | 1.06479 | R.TVM#ALGSLAVTK.N      | Oxidation (M)                      |
|    |               |        | 3.61E-05 |       | 4.18, 2 | 0.42 | 1190.6812 | 1.09734 | R.TVMALGSLAVTK.N       |                                    |
|    |               |        | 5.44E-08 |       | 4.06, 2 | 0.51 | 1546.7093 | 0.89114 | K.TDM#FQTVDLFEGK.D     | Oxidation (M)                      |
|    |               |        | 7.00E-08 |       | 4.20, 2 | 0.53 | 1530.7144 | 0.97283 | K.TDMFQTVDLFEGK.D      |                                    |
| 56 | <i>S100a9</i> | P50116 | 8.29E-08 | 21.24 | 20.19   |      |           |         |                        |                                    |
|    |               |        | 6.36E-04 |       | 2.71, 2 | 0.24 | 1172.6058 | 1.05522 | R.KYGHPDTLTK.A         |                                    |
|    |               |        | 8.29E-08 |       | 3.89, 2 | 0.51 | 1664.8754 | 0.96245 | R.SISTIINVFHQYSR.K     |                                    |

P (pro): The protein probability is the highest peptide probability that was found

P (pep): The protein probability that the search could have produced a better match using a random sequence.

Coverage: The percentage of identified peptides

Score: This is the original Eng-Yates-Scoring, in which a primary match receives 10 points, a secondary match receives 8 points, a tertiary match gets 6 points, 4 points, 2 points, etc. The points for all the peptides are summed together. This was the original way of sorting a consensus report.

Xc: The cross correlation of the primary match. Xc (Cross Correlation) is a measure of the “goodness of fit” of a theoretical spectra created from the sequences b + y ions, along with water and amine losses compared to the actual MS/MS spectra acquired by the instrument.

$\Delta C_n$ : The delta correlation of the primary match being compared to the secondary match.

$\Delta M$ : The delta mass is the difference between the mass theoretical mass of the peptide identified and the actual mass measurement of the instrument.