

Supplemental Table S1. Other peptides identified from wild type mice spinal cord by MS/MS

| Precursor | Peptide name | Peptide sequence | Obs. Mass | Theor. Mass | Error (ppm) | PEAKS Score | LC-ESI-IT | LC-ESI-Q-TOF |
|--|------------------|-----------------------------------|-----------|-------------|-------------|-------------|-----------|--------------|
| ATP synthase, H ⁺ transporting, mitochondrial F0 complex, subunit F | C-terminus | D.PKFEVIDKPKS.# | 1286.97 | 1286.69 | 218 | 89 | X | |
| Complexin | C-terminus | D.TVIKYLPGPLQDMFKK.# | 1877.04 | 1877.05 | 5 | 98 | | X |
| Cytochrome c oxidase subunit 5a | C-terminus | L.RPTLNELGISTPEELGLDKV.# | 2180.96 | 2180.17 | 362 | 99 | X | X |
| Cytochrome c oxidase subunit 5a | C-terminus | L.GISTPEELGLDKV.# | 1357.11 | 1356.71 | 295 | 99 | X | |
| Hemoglobin alpha | C-terminus | H.ASLDKFLASVSTVLTISKYR.# | 2085.77 | 2085.15 | 297 | 92 | X | |
| Myelin basic protein isoform 4 | 11-17 | R.SKYLATA.S | 752.35 | 752.41 | 80 | 91 | | X |
| Myelin basic protein isoform 4 | 26-33 | H.GFLPRHRD.T | 996.39 | 996.53 | 141 | 52 | | X |
| Myelin basic protein isoform 4 | 34-44 | D.TGILDSIGRFF.S | 1224.65 | 1224.65 | 0 | 99 | | X |
| Myelin basic protein isoform 4 | 36-44 | G.ILDSIGRFF.S | 1066.55 | 1066.58 | 28 | 99 | X | |
| Myelin basic protein isoform 4 | 42-48 | G.RFFSGDR.G | 883.28 | 883.43 | 170 | 99 | | X |
| Myelin basic protein isoform 4 | 42-49 | G.RFFSGDRG.A | 940.49 | 940.45 | 43 | 96 | | X |
| Myelin basic protein isoform 4 | 89-98 | R.TTHYGSLPQK.S | 1130.6 | 1130.57 | 27 | 99 | | X |
| Myelin basic protein isoform 4 | 104-112 | R.TQDENPVVH.F | 1037.55 | 1037.48 | 67 | 99 | | X |
| Myelin basic protein isoform 4 | 104-121 | R.TQDENPVVHFFKNIVTPR.T | 2140.43 | 2140.11 | 150 | 94 | X | X |
| Myelin basic protein isoform 4 | 109-121 | N.PVVHFFKNIVTPR.T | 1553.04 | 1552.89 | 97 | 99 | X | X |
| Myelin basic protein isoform 4 | 128-135 | Q.GKGRGLSL.S | 786.53 | 786.47 | 76 | 86 | | X |
| Myelin basic protein isoform 4 | C-terminus | F.SWGGDRSRSGSPMARR.# | 1761.99 | 1761.84 | 85 | 85 | | X |
| Myelin basic protein isoform 5 | 137-146 | G.TLSKIFKLG.R | 1062.65 | 1062.64 | 9 | 99 | | X |
| Orphan G protein-coupled Receptor | 271-282 | A.ILLGVTSLFALL.W | 1259.17 | 1258.79 | 302 | 90 | | X |
| Peptidylprolyl isomerase A | 2-22 | M.(AcetylV)NPTVFFDITADDEPLGRVSF.E | 2380.49 | 2380.16 | 139 | 99 | X | |
| Ubiquitin | 57-76 (multiple) | L.SDYNIQKESTLHLVLRRLRGG.(I/M) | 2297.75 | 2298.25 | 218 | 97 | | X |
| Thymosin beta-4 | 8-21 | M.SD(AcetylK)PDMAEIEKFDK.S | 1693.99 | 1693.79 | 118 | 53 | X | |

(.) indicates a cleavage site; Pound (#) indicates the end of a precursor sequence; "X" indicates the MS/MS platforms used to identify the peptide; Obs. mass, observed monoisotopic mass; Theor. mass, theoretical monoisotopic mass; Putative PTM includes acetylation ("Acetyl")

