**Table S1. Example isoform groups that are predicted with differential functionality.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gene name | GO term ID | GO term name | Isoform name | Fold change |
| Tpm1 | GO:0031032 | actomyosin structure organization | NM\_001164248.1 | 800.37 |
| NM\_001164249.1 | 33.95 |
| NM\_001164250.1 | 1.92 |
| NM\_001164251.1 | 128.06 |
| NM\_001164252.1 | 1.92 |
| NM\_001164253.1 | 1.69 |
| NM\_001164254.1 | 31.87 |
| NM\_001164255.1 | 10.00 |
| NM\_001164256.1 | 1.69 |
| NM\_024427.4 | 2.03 |
| Pde4dip | GO:0030239 | Myofibril assembly | NM\_001039376.2 | 1.99 |
| NM\_001110163.1 | 98.88 |
| NM\_177145.3 | 1.92 |
| NM\_178080.4 | 2.19 |
| Rtn4 | GO:0006749 | glutathione metabolic process | NM\_024226.4 | 61.92 |
| NM\_194051.3 | 1.57 |
| NM\_194052.3 | 1.69 |
| NM\_194053.3 | 1.49 |
| NM\_194054.3 | 1.07 |
| Rtn4 | GO:0022029 | telencephalon cell migration | NM\_024226.4 | 1.52 |
| NM\_194051.3 | 1.60 |
| NM\_194052.3 | 1.72 |
| NM\_194053.3 | 1.31 |
| NM\_194054.3 | 23.83 |