| Identified Proteins (1302) | Spectra assigned to the protein | NSAF |
|---------------------------|---------------------------------|------|
|                           | M W (kD) | M #1 10% FAT | M #2 60% FAT | M #3 10% FAT | M #4 60% FAT | M #5 10% FAT | M #6 60% FAT | Mean 10% FAT | SEM 10% FAT | Mean 60% FAT | SEM 60% FAT | Ratio 60% 10% |
| Cytochrome c oxidase subunit 5B, mitochondrial | 14 7 0 3 0 0 0 | 11.52 | 12.21 | 0.00 | 0.00 | 0.00 |
| Retinol dehydrogenase 11 | 35 0 0 3 0 3 0 | 2.82 | 2.45 | 0.00 | 0.00 | 0.00 |
| Mitochondrial import inner membrane translocase subunit Tim17-B | 18 0 0 1 0 2 0 | 2.77 | 2.83 | 0.00 | 0.00 | 0.00 |
| 60S ribosomal protein L19 | 23 1 0 1 0 3 0 | 3.61 | 2.63 | 0.00 | 0.00 | 0.00 |
| UPF0556 protein C19orf10 homolog | 18 4 0 2 0 0 0 | 5.37 | 5.41 | 0.00 | 0.00 | 0.00 |
| Polyribonucleotide nucleotidytransferase 1, mitochondrial | 86 0 0 2 0 4 0 | 1.16 | 1.19 | 0.00 | 0.00 | 0.00 |
| NFX1-type zinc finger-containing protein 1 | 219 0 0 0 0 3 0 | 0.23 | 0.40 | 0.00 | 0.00 | 0.00 |
| Acetyl-coenzyme A synthetase, cytoplasmic | 79 2 0 1 0 2 0 | 1.04 | 0.38 | 0.00 | 0.00 | 0.00 |
| Eukaryotic translation initiation factor 1 | 13 2 0 1 0 0 0 | 3.72 | 3.74 | 0.00 | 0.00 | 0.00 |
| Aminopeptidase B | 72 1 0 1 0 3 0 | 1.15 | 0.84 | 0.00 | 0.00 | 0.00 |
| ATP synthase subunit delta, mitochondrial | 18 2 0 3 0 0 0 | 4.46 | 4.07 | 0.00 | 0.00 | 0.00 |
| Acyl-CoA-binding protein | 10 3 0 2 0 0 0 | 8.05 | 7.41 | 0.00 | 0.00 | 0.00 |
| Proteasome subunit beta type-10 | 29 1 0 0 0 2 0 | 1.73 | 1.76 | 0.00 | 0.00 | 0.00 |
| Macrophage migration inhibitory factor | 13 3 0 1 0 0 0 | 4.97 | 5.72 | 0.00 | 0.00 | 0.00 |
| Bile salt sulfotransferase 1 | 33 0 0 2 0 0 0 | 0.97 | 1.67 | 0.00 | 0.00 | 0.00 |
| UV excision repair protein RAD23 homolog B | 44 2 0 1 0 0 0 | 1.10 | 1.11 | 0.00 | 0.00 | 0.00 |
| Metaxin-1 | 36 1 0 0 0 2 0 | 1.39 | 1.42 | 0.00 | 0.00 | 0.00 |
| Prostaglandin E synthase 2 | 43 1 0 0 0 3 0 | 1.56 | 1.82 | 0.00 | 0.00 | 0.00 |
| Cytochrome c oxidase subunit 6A1, mitochondrial | 12 3 0 0 0 0 0 | 4.05 | 7.02 | 0.00 | 0.00 | 0.00 |
| GTP cyclohydrolase 1 feedback regulatory protein | 10 4 0 0 0 0 0 | 6.49 | 11.23 | 0.00 | 0.00 | 0.00 |
| Adrenodoxin, mitochondrial | 20 1 0 2 0 0 0 | 2.40 | 2.39 | 0.00 | 0.00 | 0.00 |
| Cytochrome c oxidase subunit 6C | 8 2 0 1 0 0 0 | 6.05 | 6.08 | 0.00 | 0.00 | 0.00 |
| Leukotriene-B4 omega-hydroxylase 3 | 60 1 0 2 0 0 0 | 0.80 | 0.80 | 0.00 | 0.00 | 0.00 |
| Copper homeostasis protein cutC homolog | 29 2 0 1 0 0 0 | 1.67 | 1.68 | 0.00 | 0.00 | 0.00 |
| Dephospho-CoA kinase domain-containing protein | 26 0 0 1 0 2 0 | 1.92 | 1.96 | 0.00 | 0.00 | 0.00 |
| ER lumen protein retaining receptor 1 | 25 0 0 1 0 2 0 | 2.00 | 2.04 | 0.00 | 0.00 | 0.00 |
| Protein Name                                      | Accession | GI | GI | GI | GI | GI | GI | GI | GI | GI | GI | GI | GI | GI | GI |
|--------------------------------------------------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Golgi resident protein GCP60                      | 60        | 0  | 0  | 1  | 0  | 2  | 0  | 0  | 0.83| 0.85| 0.00| 0.00| 0.00| 0.00|
| NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 13 | 17        | 2  | 0  | 1  | 0  | 0  | 0  | 2.85| 2.86| 0.00| 0.00| 0.00| 0.00|
| 26S proteasome non-ATPase regulatory subunit 4    | 41        | 1  | 0  | 0  | 0  | 2  | 0  | 1.22| 1.24| 0.00| 0.00| 0.00| 0.00|
| Serine-threonine kinase receptor-associated protein | 38        | 1  | 0  | 0  | 2  | 0  | 0  | 1.32| 1.34| 0.00| 0.00| 0.00| 0.00|
| 5-formyltetrahydrofolate cyclo-ligase              | 23        | 2  | 0  | 0  | 0  | 0  | 0  | 1.41| 2.44| 0.00| 0.00| 0.00| 0.00|
| 60S ribosomal protein L35                         | 15        | 2  | 0  | 0  | 0  | 0  | 0  | 2.16| 3.74| 0.00| 0.00| 0.00| 0.00|
| Gamma-glutamylcyclotransferase                    | 21        | 0  | 0  | 0  | 3  | 0  | 0  | 2.43| 4.21| 0.00| 0.00| 0.00| 0.00|
| ATP synthase subunit f, mitochondrial             | 10        | 2  | 0  | 0  | 0  | 0  | 0  | 3.24| 5.62| 0.00| 0.00| 0.00| 0.00|
| 10 kDa heat shock protein, mitochondrial          | 11        | 2  | 0  | 0  | 0  | 0  | 0  | 2.95| 5.11| 0.00| 0.00| 0.00| 0.00|
| Casein kinase II subunit beta                     | 25        | 2  | 0  | 0  | 0  | 0  | 0  | 1.30| 2.25| 0.00| 0.00| 0.00| 0.00|
| Dolichol-phosphate mannosyltransferase            | 29        | 2  | 0  | 0  | 0  | 0  | 0  | 1.12| 1.94| 0.00| 0.00| 0.00| 0.00|
| Heat shock 70 kDa protein 1A                       | 70        | 0  | 0  | 0  | 2  | 0  | 0  | 0.49| 0.84| 0.00| 0.00| 0.00| 0.00|
| Guanylate kinase                                  | 22        | 2  | 0  | 0  | 0  | 0  | 0  | 1.47| 2.55| 0.00| 0.00| 0.00| 0.00|
| Probable carboxypeptidase PM20D1                   | 56        | 2  | 0  | 0  | 0  | 0  | 0  | 0.58| 1.00| 0.00| 0.00| 0.00| 0.00|
| 39S ribosomal protein L19, mitochondrial          | 34        | 0  | 0  | 0  | 2  | 0  | 0  | 1.00| 1.73| 0.00| 0.00| 0.00| 0.00|
| 39S ribosomal protein L21, mitochondrial          | 23        | 0  | 0  | 0  | 2  | 0  | 0  | 1.48| 2.56| 0.00| 0.00| 0.00| 0.00|
| Small nuclear ribonucleoprotein Sm D3             | 14        | 2  | 0  | 0  | 0  | 0  | 0  | 2.32| 4.01| 0.00| 0.00| 0.00| 0.00|
| Acyl-CoA desaturase 1                             | 41        | 3  | 0  | 3  | 0  | 0  | 0  | 6.08| 4.42| 0.43| 0.74| 0.07| 0.00|
| 60S ribosomal protein L23                         | 15        | 4  | 0  | 4  | 0  | 0  | 0  | 8.57| 7.43| 1.12| 1.93| 0.13| 0.00|
| Asparaginyl-tRNA synthetase, cytoplasmic          | 64        | 4  | 1  | 2  | 0  | 1  | 0  | 1.78| 1.15| 0.26| 0.45| 0.15| 0.00|
| D-dopachromde decarboxylase                       | 13        | 9  | 1  | 5  | 1  | 0  | 0  | 17.36| 16.86| 2.58| 2.23| 0.15| 0.00|
| ATP synthase subunit g, mitochondrial             | 11        | 9  | 2  | 5  | 0  | 0  | 0  | 20.51| 19.93| 3.05| 5.29| 0.15| 0.00|
| E3 UFM1-protein ligase 1                          | 90        | 3  | 0  | 1  | 0  | 3  | 1  | 1.28| 0.65| 0.20| 0.34| 0.15| 0.00|
| Tumor protein D54                                 | 24        | 2  | 0  | 4  | 0  | 1  | 1  | 4.72| 2.98| 0.73| 1.27| 0.16| 0.00|
| 26S proteasome non-ATPase regulatory subunit 8    | 30        | 2  | 1  | 2  | 0  | 2  | 0  | 3.28| 0.11| 0.56| 0.97| 0.17| 0.00|
| 60S ribosomal protein L15                         | 24        | 4  | 2  | 5  | 0  | 3  | 0  | 8.15| 1.79| 1.40| 2.42| 0.17| 0.00|
| T-complex protein 1 subunit zeta                  | 58        | 0  | 1  | 4  | 0  | 2  | 0  | 1.69| 1.65| 0.29| 0.50| 0.17| 0.00|
| DnaJ homolog subfamily A member 1                 | 45        | 3  | 0  | 2  | 0  | 1  | 1  | 2.17| 1.06| 0.39| 0.68| 0.18| 0.00|
| Ras-related protein Rab-2A                       | 24        | 4  | 0  | 3  | 2  | 4  | 0  | 7.53| 1.36| 1.40| 2.42| 0.19| 0.00|
| Phosphotriesterase-related protein                | 39        | 4  | 1  | 4  | 0  | 3  | 1  | 4.61| 0.59| 0.88| 0.76| 0.19| 0.00|
| Protein Name                                      | Value       | Value       | Value       | Value       | Value       | Value       | Value       | Value       | Value       | Value       |
|--------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 40S ribosomal protein S11                        | 18          | 2           | 0           | 1           | 1           | 2           | 0           | 4.58        | 1.67        | 0.93        | 1.61        | 0.20        |
| Cytochrome P450 2J5                              | 58          | 2           | 0           | 2           | 1           | 1           | 0           | 1.40        | 0.45        | 0.29        | 0.50        | 0.21        |
| Transcription elongation factor B polypeptide 2  | 13          | 2           | 1           | 2           | 0           | 0           | 1           | 6.25        | 2.02        | 1.29        | 2.24        | 0.21        |
| Glycerol kinase                                  | 61          | 1           | 0           | 3           | 1           | 1           | 0           | 1.33        | 0.89        | 0.27        | 0.48        | 0.21        |
| 40S ribosomal protein S19                        | 16          | 3           | 1           | 2           | 0           | 0           | 0           | 5.03        | 4.63        | 1.05        | 1.82        | 0.21        |
| Methylglutactyl-CoA hydratase, mitochondrial     | 33          | 2           | 0           | 2           | 0           | 1           | 1           | 2.46        | 0.80        | 0.53        | 0.92        | 0.22        |
| Protein LYRIC                                    | 64          | 2           | 0           | 2           | 0           | 1           | 1           | 1.27        | 0.41        | 0.27        | 0.48        | 0.22        |
| Peroxiredoxin-4                                  | 31          | 2           | 0           | 3           | 1           | 4           | 1           | 4.78        | 1.73        | 1.11        | 0.96        | 0.23        |
| Acetyl-CoA carboxylase 1                         | 265         | 23          | 8           | 38          | 4           | 31          | 9           | 5.68        | 1.34        | 1.36        | 0.53        | 0.24        |
| Nucleotide-binding protein-like                  | 34          | 1           | 0           | 2           | 1           | 1           | 0           | 1.91        | 0.78        | 0.49        | 0.85        | 0.26        |
| Eukaryotic initiation factor 4A-II               | 46          | 1           | 0           | 2           | 1           | 1           | 0           | 1.41        | 0.58        | 0.36        | 0.63        | 0.26        |
| Cysteine and histidine-rich domain-containing protein 1 | 37          | 2           | 1           | 2           | 0           | 0           | 0           | 1.74        | 1.51        | 0.45        | 0.79        | 0.26        |
| Ras GTPase-activating protein-binding protein 2  | 54          | 1           | 0           | 0           | 0           | 3           | 1           | 1.24        | 1.45        | 0.33        | 0.56        | 0.26        |
| 40S ribosomal protein S15a                       | 15          | 2           | 1           | 6           | 1           | 0           | 0           | 8.54        | 9.73        | 2.24        | 1.94        | 0.26        |
| Fatty acid-binding protein, liver                | 14          | 58          | 17          | 48          | 10          | 4           | 1           | 126.7       | 98.89       | 33.60       | 28.76       | 0.27        |
| Nicotinate phosphoribosyltransferase             | 58          | 0           | 0           | 2           | 0           | 2           | 1           | 1.14        | 0.99        | 0.30        | 0.52        | 0.27        |
| Prefoldin subunit 3                              | 22          | 2           | 0           | 1           | 0           | 1           | 1           | 2.97        | 1.26        | 0.80        | 1.38        | 0.27        |
| FAD-linked sulfhydryl oxidase ALR                | 23          | 2           | 0           | 1           | 0           | 1           | 1           | 2.84        | 1.20        | 0.76        | 1.32        | 0.27        |
| Elongation factor G, mitochondrial               | 84          | 2           | 0           | 1           | 0           | 1           | 1           | 0.78        | 0.33        | 0.21        | 0.36        | 0.27        |
| Profilin-1                                       | 15          | 4           | 2           | 3           | 0           | 0           | 0           | 7.51        | 6.72        | 2.24        | 3.88        | 0.30        |
| 26S proteasome non-ATPase regulatory subunit 3   | 61          | 1           | 0           | 3           | 1           | 3           | 1           | 1.89        | 0.95        | 0.56        | 0.49        | 0.30        |
| 60S ribosomal protein L31                        | 14          | 3           | 2           | 4           | 0           | 0           | 0           | 8.03        | 7.14        | 2.40        | 4.15        | 0.30        |
| 26S proteasome non-ATPase regulatory subunit 11  | 47          | 2           | 0           | 1           | 0           | 4           | 2           | 2.48        | 1.70        | 0.75        | 1.29        | 0.30        |
| Fatty acid synthase                              | 272         | 158         | 51          | 214         | 43          | 215         | 76          | 35.39       | 6.32        | 10.70       | 3.56        | 0.30        |
| Glucosidase 2 subunit beta                       | 59          | 5           | 1           | 3           | 2           | 2           | 0           | 2.76        | 1.23        | 0.85        | 0.85        | 0.31        |
| Glycerol-3-phosphate acyltransferase 1, mitochondrial | 94          | 3           | 1           | 5           | 2           | 5           | 1           | 2.27        | 0.63        | 0.72        | 0.30        | 0.32        |
| Pyruvate kinase isozymes R/L                     | 62          | 32          | 9           | 35          | 11          | 34          | 11          | 26.69       | 1.45        | 8.52        | 1.07        | 0.32        |
| 40S ribosomal protein S13                        | 17          | 6           | 3           | 6           | 0           | 1           | 1           | 12.35       | 8.10        | 4.00        | 4.51        | 0.32        |
| Cytochrome P450 3A11                              | 58          | 0           | 0           | 0           | 1           | 3           | 0           | 0.88        | 1.52        | 0.29        | 0.50        | 0.33        |
| Actin-related protein 2/3 complex subunit 1B     | 41          | 1           | 1           | 0           | 0           | 2           | 0           | 1.22        | 1.24        | 0.41        | 0.71        | 0.33        |
| Translation initiation factor eIF-2B subunit alpha | 34          | 0           | 0           | 1           | 1           | 2           | 0           | 1.47        | 1.50        | 0.49        | 0.85        | 0.34        |
| Eukaryotic translation initiation factor 4E       | 25          | 0           | 0           | 1           | 1           | 2           | 0           | 2.00        | 2.04        | 0.67        | 1.16        | 0.34        |
| Dynamin-2                                        | 98          | 1           | 1           | 0           | 2           | 0           | 0           | 0.51        | 0.52        | 0.17        | 0.30        | 0.34        |
| Protein Name                                      | Region | 2 | 0 | 1 | 2 | 3 | 0 | 2.69 | 1.42 | 0.91 | 1.57 | 0.34 |
|-------------------------------------------------|--------|---|---|---|---|---|---|------|------|------|------|------|
| Carbohydrate kinase domain-containing protein   |        | 37| 2 | 0 | 1 | 2 | 3 | 0    | 2.69 | 1.42 | 0.91 | 1.57 |
| Histone H1.0                                    |        | 21| 1 | 2 | 2 | 0 | 3 | 0    | 4.72 | 2.49 | 1.60 | 2.77 |
| Twinfilin-1                                     |        | 40| 2 | 0 | 0 | 1 | 1 | 0    | 1.24 | 1.22 | 0.42 | 0.73 |
| Protein SCO1 homolog, mitochondrial             |        | 32| 2 | 1 | 0 | 0 | 1 | 0    | 1.54 | 1.52 | 0.52 | 0.91 |
| Putative helicase MOV-10 kDa subunit            |        | 114|0 | 1 | 2 | 0 | 1 | 0    | 0.43 | 0.42 | 0.15 | 0.26 |
| Translocon-associated protein subunit gamma     |        | 21| 0 | 0 | 0 | 0 | 3 | 1    | 2.43 | 4.21 | 0.84 | 1.45 |
| Splicing factor U2AF 65 kDa subunit             |        | 54| 3 | 1 | 0 | 0 | 0 | 0    | 0.90 | 1.56 | 0.31 | 0.54 |
| Peroxisomal membrane protein 11A                |        | 28| 2 | 2 | 3 | 0 | 1 | 0    | 3.47 | 1.65 | 1.20 | 2.08 |
| Isobutyryl-CoA dehydrogenase, mitochondrial     |        | 45| 2 | 0 | 1 | 1 | 3 | 1    | 2.21 | 1.17 | 0.76 | 0.66 |
| 40S ribosomal protein S24                       |        | 15| 2 | 0 | 1 | 1 | 0 | 0    | 3.22 | 3.24 | 1.12 | 1.93 |
| 40S ribosomal protein S20                       |        | 13| 2 | 0 | 1 | 1 | 0 | 0    | 3.72 | 3.74 | 1.29 | 2.23 |
| Histone H4                                      |        | 11| 4 | 1 | 2 | 1 | 0 | 0    | 8.79 | 8.85 | 3.05 | 2.64 |
| Glutathione reductase, mitochondrial            |        | 54| 2 | 1 | 1 | 1 | 0 | 0    | 0.90 | 0.90 | 0.31 | 0.54 |
| Cytochrome c, somatic                           |        | 12| 5 | 2 | 4 | 1 | 0 | 0    | 12.07| 10.67| 4.19 | 4.20 |
| Bel-2-like protein 13                           |        | 47| 1 | 0 | 2 | 1 | 0 | 0    | 1.02 | 1.02 | 0.36 | 0.62 |
| Thioredoxin                                     |        | 12| 1 | 1 | 2 | 0 | 0 | 0    | 4.01 | 3.98 | 1.40 | 2.42 |
| Farnesyl pyrophosphate synthase                 |        | 41| 1 | 0 | 0 | 0 | 2 | 1    | 1.22 | 1.24 | 0.43 | 0.74 |
| Microtubule-associated protein RP/EB family     |        | 30| 1 | 0 | 0 | 0 | 2 | 1    | 1.67 | 1.70 | 0.59 | 1.01 |
| Phosphatidylinositol transfer protein beta isoform|      | 31| 0 | 0 | 1 | 0 | 2 | 1    | 1.61 | 1.65 | 0.57 | 0.98 |
| Plasma protease C1 inhibitor                    |        | 56| 2 | 0 | 0 | 0 | 1 | 1    | 0.88 | 0.87 | 0.31 | 0.54 |
| Alanine aminotransferase 2                      |        | 58| 1 | 0 | 2 | 0 | 0 | 1    | 0.83 | 0.82 | 0.30 | 0.52 |
| Ribonuclease UK114                              |        | 14| 20| 8 | 11| 3 | 0 | 0    | 35.69| 34.78| 13.18| 14.54|
| Glucose-6-phosphate isomerase                   |        | 63| 6 | 4 | 15| 4 | 12| 4    | 8.58 | 3.52 | 3.24 | 0.09 |
| Chloride intracellular channel protein 4        |        | 29| 5 | 2 | 4 | 1 | 2 | 1    | 6.17 | 2.46 | 2.34 | 0.98 |
| Acylamino-acid-releasing enzyme                 |        | 82| 3 | 1 | 2 | 2 | 3 | 0    | 1.60 | 0.38 | 0.61 | 0.61 |
| Rab GDP dissociation inhibitor alpha            |        | 51| 2 | 2 | 3 | 1 | 3 | 0    | 2.57 | 0.58 | 0.99 | 0.99 |
| Ras-related protein Rab-8A                     |        | 24| 1 | 2 | 4 | 0 | 3 | 1    | 5.46 | 3.08 | 2.13 | 2.10 |
| Rho GDP-dissociation inhibitor 1                |        | 23| 7 | 2 | 6 | 2 | 3 | 2    | 11.31| 4.20 | 4.44 | 0.12 |
| Ras-related protein Rab-1B                     |        | 22| 1 | 1 | 4 | 0 | 3 | 2    | 5.95 | 3.35 | 2.36 | 2.40 |
| NADP-dependent malic enzyme                    |        | 64| 16| 8 | 11| 5 | 25| 7    | 13.43| 5.95 | 5.33 | 1.24 |
| 40S ribosomal protein S18                      |        | 18| 4 | 1 | 4 | 1 | 0 | 1    | 7.15 | 6.19 | 2.84 | 0.08 |
| T-complex protein 1 subunit epsilon             |        | 60| 4 | 3 | 5 | 0 | 4 | 2    | 3.54 | 0.39 | 1.42 | 1.29 |
| Protein Name                                                                 | Signal Recognition Particle | ATP-Citrate synthase | Acetyl-CoA synthase | 3-Hydroxyisobutyryl-CoA dehydrogenase | Ubiquitine Biosynthesis Protein COQ7 Homolog | 1-Acyl-sn-Glycerol-3-Phosphate Acyltransferase Beta | 40S Ribosomal Protein S16 | 40S Ribosomal Protein S26 | Acetyl-CoA Thioesterase | Cytochrome C Oxidase Subunit 4 Isoform 1, Mitochondrial | Hexaprenyldihydroxybenzate Methyltransferase, Mitochondrial | GrpE Protein Homolog 1, Mitochondrial | Bisphosphoglycerate Mutase | Putative Deoxyribose-Phosphate Aldolase | Estradiol 17-Beta-Dehydrogenase 2 | Thioesterase Superfamily Member 4 | Ketoheoxokinase | Alpha-1-Antitrypsin 1-5 | Interferon-Inducible GTPase 1 | Aldehyde Dehydrogenase Family 16 Member A1 | Elongation Factor 1-Beta |
|------------------------------------------------------------------------------|-----------------------------|---------------------|--------------------|----------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------------------------|-----------------------------|-------------------------------|---------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Signal Recognition Particle 68 kDa Protein                                  | 71                          | 1                   | 1                  | 1                                      | 1                                             | 0                                             | 1.17                        | 0.85                        | 0.47                        | 0.41                                           | 0.40                        | 0.41                           |                           |                             |                             |                             |
| ATP-Citrate synthase                                                        | 120                         | 23                  | 10                 | 33                                     | 12                                            | 29                                            | 11                         | 11.60                       | 2.01                        | 4.68                                           | 0.43                        | 0.40                           |                           |                             |                             |                             |
| Acetyl-CoA synthase                                                         | 29                          | 3                   | 2                  | 2                                      | 2                                             | 5                                             | 0                          | 5.71                        | 2.81                        | 2.31                                           | 2.00                        | 0.41                           |                           |                             |                             |                             |
| Ubiquitine Biosynthesis Protein COQ7 Homolog                                 | 483                         | 1                   | 0                  | 0                                      | 1                                             | 4                                             | 4                          | 0.17                        | 0.22                        | 0.07                                           | 0.06                        | 0.41                           |                           |                             |                             |                             |
| 3-Hydroxyisobutyryl-CoA dehydrogenase                                        | 43                          | 5                   | 3                  | 4                                      | 2                                             | 6                                             | 1                          | 5.74                        | 1.34                        | 2.36                                           | 1.14                        | 0.41                           |                           |                             |                             |                             |
| Ubiquitine Biosynthesis Protein COQ7 Homolog                                 | 24                          | 1                   | 0                  | 1                                      | 1                                             | 1                                             | 1                          | 3.46                        | 2.52                        | 1.43                                           | 1.24                        | 0.41                           |                           |                             |                             |                             |
| 1-Acyl-sn-Glycerol-3-Phosphate Acyltransferase Beta                          | 31                          | 1                   | 2                  | 3                                      | 0                                             | 1                                             | 0                          | 2.61                        | 1.74                        | 1.08                                           | 1.88                        | 0.41                           |                           |                             |                             |                             |
| 40S Ribosomal Protein S16                                                    | 16                          | 3                   | 1                  | 2                                      | 1                                             | 0                                             | 0                          | 5.03                        | 4.63                        | 2.10                                           | 1.82                        | 0.42                           |                           |                             |                             |                             |
| Protein CDV3                                                                 | 30                          | 2                   | 0                  | 1                                      | 1                                             | 2                                             | 1                          | 2.75                        | 1.00                        | 1.14                                           | 0.99                        | 0.42                           |                           |                             |                             |                             |
| 40S Ribosomal Protein S26                                                    | 13                          | 2                   | 0                  | 3                                      | 2                                             | 0                                             | 0                          | 6.17                        | 5.63                        | 2.58                                           | 4.46                        | 0.42                           |                           |                             |                             |                             |
| Acetyl-CoA Thioesterase                                                     | 15                          | 2                   | 1                  | 3                                      | 1                                             | 0                                             | 0                          | 5.35                        | 4.88                        | 2.24                                           | 1.94                        | 0.42                           |                           |                             |                             |                             |
| Inositol Monophosphatase                                                     | 30                          | 1                   | 0                  | 2                                      | 1                                             | 2                                             | 1                          | 2.74                        | 0.97                        | 1.14                                           | 0.99                        | 0.42                           |                           |                             |                             |                             |
| Alpha-1-Antitrypsin 1-2                                                     | 46                          | 3                   | 1                  | 1                                      | 0                                             | 1                                             | 1                          | 1.77                        | 1.21                        | 0.75                                           | 0.65                        | 0.42                           |                           |                             |                             |                             |
| ATP-Binding Cassette Sub-Family E Member 1                                   | 67                          | 1                   | 1                  | 3                                      | 0                                             | 1                                             | 1                          | 1.21                        | 0.81                        | 0.51                                           | 0.44                        | 0.42                           |                           |                             |                             |                             |
| Thioredoxin-Like Protein 1                                                   | 32                          | 4                   | 1                  | 7                                      | 1                                             | 4                                             | 4                          | 7.64                        | 2.45                        | 3.24                                           | 2.90                        | 0.42                           |                           |                             |                             |                             |
| Vesicle-Associated Membrane Protein-Associated Protein B                     | 27                          | 2                   | 1                  | 3                                      | 0                                             | 0                                             | 1                          | 2.97                        | 2.71                        | 1.27                                           | 1.10                        | 0.43                           |                           |                             |                             |                             |
| Cytochrome C Oxidase Subunit 4 Isoform 1, Mitochondrial                      | 20                          | 4                   | 3                  | 8                                      | 2                                             | 0                                             | 0                          | 9.62                        | 9.56                        | 4.19                                           | 3.84                        | 0.44                           |                           |                             |                             |                             |
| Hexaprenyldihydroxybenzate Methyltransferase, Mitochondrial                 | 41                          | 2                   | 2                  | 2                                      | 1                                             | 3                                             | 0                          | 2.81                        | 0.80                        | 1.23                                           | 1.23                        | 0.44                           |                           |                             |                             |                             |
| GrpE Protein Homolog 1, Mitochondrial                                       | 24                          | 4                   | 2                  | 4                                      | 0                                             | 4                                             | 3                          | 8.19                        | 0.27                        | 3.59                                           | 3.33                        | 0.44                           |                           |                             |                             |                             |
| Bisphosphoglycerate Mutase                                                  | 30                          | 2                   | 0                  | 1                                      | 2                                             | 4                                             | 1                          | 3.88                        | 2.66                        | 1.70                                           | 1.68                        | 0.44                           |                           |                             |                             |                             |
| Putative Deoxyribose-Phosphate Aldolase                                     | 35                          | 1                   | 1                  | 2                                      | 1                                             | 4                                             | 1                          | 3.32                        | 2.28                        | 1.46                                           | 0.04                        | 0.44                           |                           |                             |                             |                             |
| Estradiol 17-Beta-Dehydrogenase 2                                           | 42                          | 3                   | 1                  | 2                                      | 1                                             | 2                                             | 1                          | 2.73                        | 0.65                        | 1.22                                           | 0.03                        | 0.45                           |                           |                             |                             |                             |
| Thioesterase Superfamily Member 4                                            | 26                          | 4                   | 1                  | 3                                      | 2                                             | 0                                             | 0                          | 4.33                        | 3.88                        | 1.93                                           | 1.93                        | 0.45                           |                           |                             |                             |                             |
| Ketoheoxokinase                                                             | 33                          | 24                  | 8                  | 17                                     | 7                                             | 22                                            | 12                         | 31.33                       | 5.85                        | 14.01                                          | 4.53                        | 0.45                           |                           |                             |                             |                             |
| Alpha-1-Antitrypsin 1-5                                                     | 46                          | 2                   | 2                  | 4                                      | 0                                             | 1                                             | 1                          | 2.46                        | 1.55                        | 1.11                                           | 1.10                        | 0.45                           |                           |                             |                             |                             |
| Interferon-Inducible GTPase 1                                                | 48                          | 4                   | 4                  | 2                                      | 0                                             | 3                                             | 0                          | 3.08                        | 1.04                        | 1.40                                           | 2.42                        | 0.45                           |                           |                             |                             |                             |
| Mesencephalic Astrocyte-Derived Neurotrophic Factor                         | 20                          | 4                   | 4                  | 6                                      | 1                                             | 1                                             | 0                          | 8.87                        | 5.94                        | 4.19                                           | 5.24                        | 0.47                           |                           |                             |                             |                             |
| Aldehyde Dehydrogenase Family 16 Member A1                                   | 85                          | 3                   | 1                  | 5                                      | 2                                             | 3                                             | 2                          | 2.11                        | 0.61                        | 1.00                                           | 0.36                        | 0.48                           |                           |                             |                             |                             |
| Elongation Factor 1-Beta                                                    | 25                          | 5                   | 2                  | 6                                      | 5                                             | 4                                             | 0                          | 9.79                        | 1.66                        | 4.69                                           | 5.06                        | 0.48                           |                           |                             |                             |                             |
| Protein Name                                      | Fold Change | Adj. P Value | Z Score | Log2 Fold Change | P Value |
|--------------------------------------------------|-------------|--------------|---------|------------------|---------|
| Long-chain-fatty-acid-CoA ligase 5                | 76          | 14           | 2       | 12               | 9       |
| 60S ribosomal protein L26                         | 17          | 5            | 0       | 2                | 4       |
| Stress-induced-phosphoprotein 1                   | 63          | 3            | 3       | 6                | 1       |
| Cytochrome P450 2D9                               | 57          | 6            | 3       | 5                | 3       |
| UPF0568 protein C14orf166 homolog                | 28          | 7            | 2       | 6                | 3       |
| Zinc finger ZZ-type and EF-hand domain-containing protein 1 | 328         | 0            | 0       | 0                | 1       |
| Transmembrane protein 126A                        | 22          | 0            | 0       | 0                | 1       |
| 39S ribosomal protein L18, mitochondrial           | 21          | 0            | 1       | 0                | 0       |
| Nuclear pore membrane glycoprotein 210            | 204         | 1            | 1       | 1                | 1       |
| rRNA 2'-O-methyltransferase fibrillarin           | 34          | 1            | 2       | 1                | 0       |
| Thioredoxin reductase 1, cytoplasmic              | 67          | 1            | 1       | 2                | 2       |
| Splicing factor, arginine/serine-rich 7           | 31          | 1            | 1       | 2                | 2       |
| Proteasome subunit alpha type-3                   | 28          | 1            | 2       | 2                | 1       |
| Coatomer subunit epsilon                          | 35          | 4            | 2       | 1                | 2       |
| GDP-L-fucose synthase                             | 36          | 2            | 1       | 1                | 1       |
| Splicing factor 3B subunit 3                      | 136         | 0            | 1       | 1                | 0       |
| 26S proteasome non-ATPase regulatory subunit 13   | 43          | 2            | 2       | 1                | 0       |
| Protein disulfide-isomerase A6                    | 48          | 9            | 5       | 3                | 2       |
| Lysyl-tRNA synthetase                             | 68          | 3            | 2       | 2                | 1       |
| Programmed cell death protein 6                   | 22          | 2            | 0       | 0                | 1       |
| Signal recognition particle receptor subunit alpha| 70          | 0            | 0       | 0                | 2       |
| Nucleolar protein 16                              | 21          | 0            | 0       | 0                | 0       |
| Mannose-binding protein C                         | 26          | 2            | 1       | 0                | 0       |
| 60S ribosomal protein L27                         | 16          | 3            | 2       | 1                | 0       |
| Threonine synthase-like 2                         | 54          | 2            | 3       | 4                | 0       |
| Cytochrome c oxidase subunit 5A, mitochondrial    | 16          | 2            | 2       | 2                | 0       |
| ATP-binding cassette subfamily A member 8-B       | 183         | 4            | 0       | 1                | 2       |
| Peptidyl-prolyl cis-trans isomerase FKBP3         | 25          | 2            | 1       | 1                | 0       |
| Alpha-soluble NSF attachment protein              | 33          | 2            | 2       | 3                | 0       |
| Lipopolysaccharide-responsive and beige-like anchor protein | 317         | 1            | 0       | 2                | 1       |
| Protein Name                                                                 | ID  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|----------------------------------------------------------------------------|-----|----|----|----|----|----|----|----|----|----|----|----|----|
| Histone H3.1                                                                | 15  | 1  | 1  | 3  | 1  | 0  | 0  | 0  | 4.27| 4.86| 2.24| 1.94| 0.52|
| Eukaryotic translation initiation factor 3 subunit L                        | 67  | 2  | 1  | 1  | 0  | 1  | 1  | 0.98| 0.41| 0.51| 0.44| 0.44| 0.53|
| Transmembrane emp24 domain-containing protein 5                              | 26  | 0  | 0  | 2  | 1  | 0  | 0  | 1.23| 2.12| 0.64| 1.12| 0.53|
| NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 5, mitochondrial | 22  | 0  | 1  | 2  | 0  | 0  | 0  | 1.45| 2.51| 0.76| 1.32| 0.53|
| 6-phosphogluconate dehydrogenase, decarboxylating                           | 53  | 3  | 1  | 1  | 0  | 2  | 2  | 1.86| 0.93| 0.98| 0.99| 0.53|
| Ras-related protein Rab-5A                                                  | 24  | 1  | 0  | 2  | 1  | 1  | 1  | 2.71| 1.10| 1.43| 1.24| 0.53|
| Ras-related protein Rab-21                                                  | 24  | 1  | 0  | 2  | 1  | 1  | 1  | 2.71| 1.10| 1.43| 1.24| 0.53|
| Atlastin-3                                                                  | 61  | 1  | 2  | 5  | 0  | 0  | 1  | 1.57| 2.07| 0.84| 0.83| 0.53|
| Fibrinogen beta chain                                                       | 55  | 6  | 7  | 12 | 4  | 7  | 2  | 7.41| 2.68| 3.99| 2.27| 0.54|
| Immunity-related GTPase family M protein                                    | 47  | 1  | 0  | 2  | 0  | 1  | 2  | 1.38| 0.56| 0.75| 1.29| 0.54|
| Pyridoxal-dependent decarboxylase domain-containing protein 1               | 87  | 2  | 0  | 0  | 0  | 0  | 1  | 0.37| 0.65| 0.20| 0.35| 0.54|
| Hemoglobin subunit beta-1                                                   | 16  | 78 | 40 | 58 | 27 | 6  | 7  | 143.2| 112.1| 77.91| 51.76| 0.54|
| Haptoglobin                                                                 | 39  | 6  | 4  | 6  | 4  | 5  | 1  | 7.13| 0.51| 3.89| 2.20| 0.55|
| Haloacid dehalogenase-like hydrolase domain-containing protein 3            | 28  | 2  | 3  | 4  | 2  | 5  | 1  | 6.47| 2.83| 3.62| 1.76| 0.56|
| Glycogen [starch] synthase, liver                                           | 81  | 4  | 1  | 4  | 2  | 5  | 4  | 2.64| 0.44| 1.49| 1.01| 0.56|
| Isochorismatase domain-containing protein 1                                  | 32  | 0  | 3  | 5  | 2  | 4  | 0  | 4.61| 4.03| 2.62| 2.40| 0.57|
| Epidermal growth factor receptor                                            | 135 | 13 | 9  | 9  | 2  | 11 | 7  | 4.01| 0.76| 2.28| 1.36| 0.57|
| Microsomal glutathione S-transferase 1                                      | 18  | 13 | 9  | 21 | 8  | 1  | 2  | 31.25| 26.69| 17.79| 10.43| 0.57|
| Fructose-bisphosphate aldolase A                                            | 39  | 1  | 0  | 4  | 4  | 4  | 1  | 3.79| 2.21| 2.17| 2.67| 0.57|
| Bifunctional ATP-dependent dihydroxyacetone kinase/ FAD-AMP lyase (cyclizing) | 60  | 40 | 18 | 36 | 23 | 38 | 22 | 31.14| 2.12| 17.90| 2.42| 0.57|
| Endonuclease G, mitochondrial                                               | 32  | 3  | 1  | 2  | 2  | 4  | 2  | 4.64| 1.69| 2.67| 0.95| 0.58|
| Membrane-associated progesterone receptor component 2                       | 23  | 3  | 1  | 4  | 3  | 2  | 1  | 6.36| 1.94| 3.68| 2.49| 0.58|
| Glycerol-3-phosphate dehydrogenase [NAD+], cytoplasmic                      | 38  | 16 | 9  | 16 | 8  | 18 | 11 | 21.59| 2.23| 12.59| 2.41| 0.58|
| Transmembrane protein 111                                                   | 30  | 3  | 1  | 1  | 2  | 3  | 1  | 3.85| 1.96| 2.26| 0.94| 0.59|
| Sorting nexin-2                                                             | 58  | 4  | 3  | 1  | 0  | 2  | 1  | 1.98| 1.28| 1.17| 1.32| 0.59|
| UPF0585 protein C16orf13 homolog                                             | 23  | 7  | 2  | 2  | 3  | 5  | 3  | 10.02| 5.40| 5.94| 1.36| 0.59|
| Protein Name                                      | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 | Value 8 | Value 9 | Value 10 | Value 11 |
|--------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|----------|
| 60S acidic ribosomal protein P1                  | 11.24   | 9.17    | 6.10    | 5.28    | 0.60    |         |         |         |         |           |          |
| Non-POU domain-containing octamer-binding protein| 55.2    | 2.0     | 2.0     | 0.3     | 0.2     | 2.10    | 0.59    | 1.25    | 1.08    | 0.60      |          |
| Solute carrier organic anion transporter family member 1A1 | 74.2    | 3.0     | 3.0     | 0.3     | 0.2     | 3.08    | 1.31    | 1.85    | 0.42    | 0.60      |          |
| Eukaryotic translation initiation factor 3 subunit H | 40.1    | 2.1     | 2.1     | 0.3     | 0.2     | 2.83    | 1.79    | 1.70    | 0.71    | 0.60      |          |
| Ester hydrolase C11orf54 homolog                 | 35.0    | 0.2     | 0.2     | 1.3     | 0.2     | 2.37    | 2.21    | 1.44    | 1.44    | 0.61      |          |
| Bile acid-CoA:amino acid N-acyltransferase       | 46.3    | 5.4     | 4.3     | 3.1     | 1.1     | 5.40    | 3.04    | 3.30    | 2.16    | 0.61      |          |
| Myb-binding protein 1A                           | 152.1   | 2.0     | 2.0     | 1.2     | 0.2     | 0.54    | 0.20    | 0.33    | 0.33    | 0.61      |          |
| Proteasome subunit alpha type-2                  | 26.1    | 12.6    | 8.1     | 5.7     | 5.1     | 16.96   | 4.78    | 10.47   | 1.02    | 0.62      |          |
| Threonyl-tRNA synthetase, cytoplasmic             | 83.2    | 2.3     | 2.5     | 2.5     | 2.1     | 1.99    | 0.98    | 1.23    | 0.03    | 0.62      |          |
| Metalloeductase STEAP4                           | 53.3    | 4.2     | 3.4     | 3.1     | 1.1     | 3.08    | 0.46    | 1.91    | 0.93    | 0.62      |          |
| 1,4-alpha-glucan-branching enzyme                | 80.9    | 3.7     | 3.7     | 1.8     | 5.8     | 6.19    | 2.45    | 3.85    | 1.76    | 0.62      |          |
| Protein transport protein Sec23B                 | 86.1    | 2.2     | 2.0     | 2.2     | 1.0     | 0.95    | 0.34    | 0.59    | 0.59    | 0.62      |          |
| Aspartyl aminopeptidase                          | 52.1    | 2.2     | 2.0     | 0.2     | 0.0     | 1.58    | 0.56    | 0.98    | 0.97    | 0.62      |          |
| Plasminogen activator inhibitor 1 RNA-binding protein | 45.2    | 2.5     | 2.5     | 2.3     | 2.3     | 3.62    | 1.59    | 2.27    | 0.06    | 0.63      |          |
| Peroxiredoxin-5, mitochondrial                   | 22.9    | 5.1     | 11.0    | 6.0     | 1.0     | 14.60   | 12.80   | 9.18    | 5.98    | 0.63      |          |
| Basigin                                          | 42.1    | 2.3     | 0.0     | 0.0     | 1.0     | 1.93    | 1.29    | 1.22    | 1.20    | 0.63      |          |
| Glucokinase regulatory protein                   | 65.5    | 3.6     | 4.0     | 7.4     | 4.0     | 4.55    | 0.88    | 2.89    | 0.49    | 0.63      |          |
| L-serine dehydratase/L-threonine deaminase       | 35.15   | 7.14    | 8.12    | 10.1    | 19.15   | 1.68    | 12.20   | 2.57    | 0.64    | 0.64      |          |
| Translationally-controlled tumor protein          | 19.5    | 4.4     | 4.2     | 4.2     | 2.4     | 11.20   | 1.43    | 7.15    | 2.99    | 0.64      |          |
| Heme-binding protein 1                           | 21.3    | 7.10    | 10.4    | 8.2     | 16.38   | 8.34    | 10.46   | 5.93    | 0.64    | 0.64      |          |
| 26S proteasome non-ATPase regulatory subunit 6   | 46.2    | 2.1     | 2.0     | 0.0     | 1.0     | 2.03    | 0.66    | 1.30    | 1.32    | 0.64      |          |
| Galectin-9                                       | 40.2    | 1.2     | 0.0     | 1.0     | 2.0     | 1.77    | 0.57    | 1.13    | 1.15    | 0.64      |          |
| Na(+)/H(+)-exchange regulatory cofactor NHE-RF1  | 39.2    | 1.2     | 3.4     | 4.1     | 3.39    | 1.59    | 2.17    | 1.47    | 0.64    | 0.64      |          |
| Biliverdin reductase A                           | 34.1    | 1.3     | 0.1     | 2.2     | 2.38    | 1.59    | 1.53    | 1.55    | 0.64    | 0.64      |          |
| Heat shock protein 105 kDa                       | 96.1    | 3.0     | 0.1     | 1.2     | 0.84    | 0.56    | 0.54    | 0.55    | 0.64    | 0.64      |          |
| Tubulin beta-2C chain                            | 50.13   | 10.17   | 11.12   | 12.13   | 2.60    | 8.58    | 4.99    | 0.64    | 0.64    | 0.64      |          |
| Pre-mRNA-processing-splicing factor 8            | 274.3   | 2.3     | 3.3     | 2.0     | 0.48    | 0.09    | 0.31    | 0.28    | 0.64    | 0.64      |          |
| 60S acidic ribosomal protein P2                  | 12.5    | 8.3     | 3.0     | 0.0     | 17.38   | 16.13   | 11.18   | 10.56   | 0.64    | 0.64      |          |
| Ras-related protein Rab-1A                      | 23.11   | 10.7    | 4.14    | 6.22    | 8.25    | 14.79   | 6.64    | 0.64    | 0.64    | 0.64      |          |
| Arylacetamide deacetylase                       | 45.6    | 5.8     | 4.8     | 3.69    | 1.92    | 4.52    | 1.04    | 0.65    |        |           |          |
| Protein Name                                    | Accession | 54  | 26  | 9   | 15  | 17  | 18  | 11  | 17.90 | 5.13 | 11.65 | 3.80 | 0.65 |
|------------------------------------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-------|------|-------|------|------|
| Fumarate hydratase, mitochondrial              |           | 46  | 11  | 5   | 13  | 9   | 8   | 6   | 11.34 | 2.34 | 7.39  | 2.23 | 0.65 |
| Probable imidazolonepropionase                 |           | 98  | 5   | 3   | 6   | 3   | 5   | 4   | 2.67  | 0.23 | 1.74  | 0.35 | 0.65 |
| Coatomer subunit gamma                         |           | 58  | 1   | 1   | 3   | 1   | 4   | 3   | 2.28  | 1.35 | 1.49  | 1.07 | 0.65 |
| Cytochrome P450 4A12A                          |           | 50  | 10  | 7   | 14  | 11  | 14  | 6   | 12.46 | 2.41 | 8.14  | 2.55 | 0.65 |
| Homogentisate 1,2-dioxygenase                  |           | 20  | 4   | 1   | 1   | 3   | 6   | 3   | 9.14  | 6.47 | 5.99  | 3.01 | 0.66 |
| 2-oxo-4-hydroxy-4-carboxy-5-ureido imidazoline decarboxylase |           | 24  | 0   | 1   | 1   | 2   | 0   | 2.08 | 2.13  | 1.40 | 1.21  | 0.67 | 0.67 |
| Ribonuclease inhibitor                         |           | 33  | 3   | 3   | 7   | 3   | 4   | 3   | 6.92  | 2.93 | 4.65  | 0.13 | 0.67 |
| Mitochondrial 2-oxoglutarate/malate carrier protein |           | 96  | 4   | 4   | 4   | 4   | 9   | 3   | 2.93  | 1.60 | 1.95  | 0.26 | 0.66 |
| Programmed cell death 6-interacting protein    |           | 26  | 1   | 2   | 0   | 0   | 2   | 0   | 1.93  | 1.96 | 1.29  | 2.24 | 0.67 |
| Isopentenyl-diphosphate Delta-isomerase 1       |           | 24  | 0   | 1   | 1   | 2   | 0   | 2.08 | 2.13  | 1.40 | 1.21  | 0.67 | 0.67 |
| Ras-related protein R-Ras                      |           | 38  | 2   | 2   | 0   | 0   | 1   | 0   | 1.30  | 1.28 | 0.88  | 1.53 | 0.68 |
| Nucleophosmin                                  |           | 36  | 1   | 2   | 1   | 0   | 1   | 0   | 1.37  | 0.05 | 0.93  | 1.62 | 0.68 |
| Aflatoxin B1 aldehyde reductase member 2       |           | 40  | 2   | 2   | 1   | 1   | 3   | 1   | 2.48  | 1.32 | 1.70  | 0.71 | 0.68 |
| Histone H1.2                                   |           | 108 | 3   | 2   | 0   | 2   | 3   | 0   | 0.92  | 0.80 | 0.62  | 0.54 | 0.67 |
| Glutamyl aminopeptidase                        |           | 106 | 2   | 1   | 0   | 1   | 1   | 0   | 0.47  | 0.46 | 0.32  | 0.27 | 0.68 |
| Inter-alpha-trypsin inhibitor heavy chain H2   |           | 38  | 2   | 2   | 0   | 0   | 1   | 0   | 1.30  | 1.28 | 0.88  | 1.53 | 0.68 |
| Poly(rC)-binding protein 2                     |           | 40  | 2   | 2   | 1   | 1   | 3   | 1   | 2.48  | 1.32 | 1.70  | 0.71 | 0.68 |
| PDZ and LIM domain protein 1                   |           | 36  | 1   | 2   | 1   | 0   | 1   | 0   | 1.37  | 0.05 | 0.93  | 1.62 | 0.68 |
| Vesicular integral-membrane protein VIP36      |           | 36  | 1   | 0   | 0   | 0   | 1   | 2   | 1.39  | 1.42 | 0.95  | 0.83 | 0.68 |
| Eukaryotic translation initiation factor 3 subunit I |           | 48  | 1   | 0   | 0   | 1   | 2   | 1   | 1.05  | 1.06 | 0.71  | 0.62 | 0.68 |
| Secernin-3                                     |           | 48  | 1   | 0   | 0   | 1   | 2   | 1   | 1.05  | 1.06 | 0.71  | 0.62 | 0.68 |
| Lysosome-associated membrane glycoprotein 2    |           | 46  | 1   | 1   | 0   | 0   | 2   | 1   | 1.09  | 1.11 | 0.75  | 0.65 | 0.68 |
| Vimentin                                       |           | 54  | 1   | 1   | 0   | 0   | 2   | 1   | 0.93  | 0.94 | 0.64  | 0.55 | 0.68 |
| Mitochondrial import inner membrane translocase subunit TIM44 |           | 31  | 1   | 1   | 0   | 0   | 2   | 1   | 0.98  | 1.00 | 0.67  | 0.58 | 0.68 |
| Cation-dependent mannose-6-phosphate receptor  |           | 35  | 1   | 2   | 2   | 1   | 3   | 1   | 2.83  | 1.49 | 1.94  | 0.81 | 0.69 |
| Ribose-phosphate pyrophosphokinase 1           |           | 55  | 0   | 0   | 2   | 2   | 1   | 0   | 0.89  | 0.87 | 0.61  | 1.06 | 0.69 |
| Alanine--glyoxylate aminotransferase 2-like 1  |           | 64  | 0   | 1   | 2   | 1   | 1   | 0   | 0.76  | 0.75 | 0.52  | 0.45 | 0.69 |
| Eukaryotic translation initiation factor 2A    |           | 64  | 0   | 1   | 2   | 1   | 1   | 0   | 0.76  | 0.75 | 0.52  | 0.45 | 0.69 |
| Heterogeneous nuclear ribonucleoprotein L      |           | 27  | 0   | 2   | 2   | 0   | 1   | 0   | 1.81  | 1.77 | 1.24  | 2.15 | 0.69 |
| THO complex subunit 4                          |           | 32  | 0   | 1   | 1   | 0   | 2   | 1   | 1.56  | 1.59 | 1.07  | 0.93 | 0.69 |
| Protein Name                                      | Rank | Cell Type | Mitochondrial | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------------------------------------------|------|-----------|---------------|---|---|---|---|---|---|---|---|---|
| Trans-2-enoyl-CoA reductase, mitochondrial       | 40   | 0         | 1             | 1 | 0 | 2 | 1 | 1.25| 1.28 | 0.86 | 0.74 | 0.69 |
| Leukotriene A-4 hydrolase                        | 69   | 3         | 4             | 3 | 1 | 3 | 1 | 2.14 | 0.07 | 1.47 | 1.25 | 0.69 |
| EH domain-containing protein 3                   | 61   | 3         | 3             | 2 | 1 | 1 | 1 | 0   | 1.60 | 0.78 | 1.10 | 1.26 | 0.69 |
| Thioredoxin domain-containing protein 12         | 19   | 3         | 1             | 0 | 1 | 0 | 0 | 2.56 | 4.43 | 1.77 | 1.53 | 0.69 |
| Trans-2,3-enoyl-CoA reductase                    | 36   | 5         | 4             | 3 | 2 | 4 | 2 | 5.47 | 1.40 | 3.77 | 1.58 | 0.69 |
| Actin-related protein 2/3 complex subunit 2      | 34   | 2         | 4             | 3 | 0 | 4 | 2 | 4.36 | 1.57 | 3.01 | 2.96 | 0.69 |
| Myosin-11                                       | 227  | 3         | 2             | 0 | 0 | 0 | 0 | 0.21 | 0.37 | 0.15 | 0.26 | 0.69 |
| Eukaryotic translation initiation factor 6       | 27   | 2         | 1             | 2 | 2 | 2 | 1 | 3.64 | 0.12 | 2.51 | 1.05 | 0.69 |
| Elongation factor 1-delta                        | 31   | 3         | 2             | 4 | 3 | 5 | 3 | 6.37 | 1.77 | 4.40 | 1.01 | 0.69 |
| Poly(rC)-binding protein 1                       | 37   | 3         | 3             | 4 | 2 | 5 | 3 | 5.33 | 1.48 | 3.69 | 0.85 | 0.69 |
| Selenide, water dikinase                          | 48   | 7         | 6             | 6 | 3 | 5 | 3 | 6.13 | 0.90 | 4.24 | 1.78 | 0.69 |
| Signal transducer and activator of transcription 3| 88   | 3         | 4             | 4 | 1 | 2 | 1 | 1.66 | 0.51 | 1.15 | 0.98 | 0.69 |
| Heme oxygenase 1                                 | 33   | 2         | 2             | 1 | 0 | 0 | 0 | 1.47 | 1.47 | 1.02 | 1.76 | 0.69 |
| Sedoheptulokinase                                | 51   | 2         | 2             | 1 | 0 | 0 | 0 | 0.95 | 0.95 | 0.66 | 1.14 | 0.69 |
| Ubiquitin-conjugating enzyme E2 L3               | 18   | 5         | 4             | 4 | 2 | 0 | 0 | 8.05 | 7.12 | 5.59 | 5.59 | 0.69 |
| Fumarylacetoacetate hydrolase domain-containing protein 1 | 25   | 4         | 4             | 3 | 0 | 2 | 2 | 5.87 | 1.86 | 4.09 | 4.03 | 0.70 |
| Brain protein 44                                  | 14   | 1         | 1             | 2 | 1 | 0 | 0 | 3.44 | 3.42 | 2.40 | 2.07 | 0.70 |
| Legumain                                         | 49   | 1         | 2             | 2 | 0 | 0 | 0 | 0.98 | 0.98 | 0.69 | 1.19 | 0.70 |
| Inorganic pyrophosphatase                        | 33   | 17        | 10            | 18 | 13 | 20 | 14 | 27.35| 3.12 | 19.14| 3.59 | 0.70 |
| Actin-related protein 2/3 complex subunit 3      | 21   | 1         | 0             | 3 | 2 | 2 | 2 | 4.67 | 2.26 | 3.27 | 2.83 | 0.70 |
| 2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial | 45   | 5         | 5             | 4 | 4 | 10 | 4 | 7.00 | 3.80 | 4.92 | 0.60 | 0.70 |
| 39S ribosomal protein L22, mitochondrial          | 24   | 0         | 1             | 2 | 0 | 1 | 1 | 2.04 | 1.99 | 1.43 | 1.24 | 0.70 |
| Proteasome activator complex subunit 2           | 27   | 3         | 3             | 6 | 1 | 3 | 4 | 7.23 | 2.94 | 5.09 | 3.00 | 0.70 |
| NADH-cytochrome b5 reductase 3                   | 34   | 19        | 16            | 30 | 13 | 28 | 23 | 37.12| 8.61 | 26.18| 8.49 | 0.71 |
| Glucose-6-phosphatase                            | 40   | 1         | 1             | 3 | 0 | 2 | 3 | 2.45 | 1.19 | 1.74 | 2.02 | 0.71 |
| ADP-ribosylation factor GTase-activating protein 2| 57   | 2         | 1             | 1 | 0 | 0 | 1 | 0.85 | 0.85 | 0.60 | 0.52 | 0.71 |
| Clathrin interactor 1                            | 69   | 2         | 1             | 1 | 0 | 0 | 1 | 0.70 | 0.71 | 0.50 | 0.43 | 0.71 |
| 39S ribosomal protein L12, mitochondrial         | 22   | 2         | 0             | 0 | 0 | 1 | 2 | 2.25 | 2.21 | 1.60 | 2.77 | 0.71 |
| Heterogeneous nuclear ribonucleoproteins C1/C2   | 34   | 1         | 0             | 2 | 1 | 0 | 1 | 1.41 | 1.41 | 1.01 | 0.87 | 0.71 |
| Propionyl-CoA carboxylase alpha chain, mitochondrial | 80   | 7         | 5             | 9 | 8 | 10 | 5 | 5.34 | 1.06 | 3.82 | 1.04 | 0.72 |
| 2-hydroxyacyl-CoA lyase 1                        | 64   | 8         | 6             | 8 | 3 | 3 | 4 | 4.82 | 2.10 | 3.46 | 1.19 | 0.72 |
| Protein description                                                      | Value1 | Value2 | Value3 | Value4 | Value5 | Value6 | Value7 | Value8 | Value9 | Value10 | Value11 |
|-------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform | 36     | 0      | 0      | 2      | 0      | 1      | 2      | 1.36   | 1.33   | 0.98    | 1.69    | 0.72    |
| Protein ETHE1, mitochondrial                                           | 28     | 3      | 3      | 2      | 2      | 5      | 2      | 5.91   | 2.91   | 4.25    | 1.00    | 0.72    |
| 60S ribosomal protein L14                                               | 24     | 5      | 2      | 4      | 4      | 4      | 3      | 8.87   | 1.13   | 6.39    | 2.10    | 0.72    |
| Protein disulfide-isomerase A5                                          | 59     | 4      | 6      | 5      | 1      | 1      | 0      | 2.74   | 1.67   | 1.99    | 2.74    | 0.73    |
| Thyroid hormone-inducible hepatic protein                              | 17     | 2      | 1      | 3      | 2      | 5      | 4      | 9.72   | 4.77   | 7.09    | 4.83    | 0.73    |
| Glyceraldehyde-3-phosphate dehydrogenase                               | 36     | 62     | 39     | 77     | 58     | 72     | 51     | 96.01  | 10.59  | 70.05   | 13.79   | 0.73    |
| GTP-binding protein SARIb                                              | 22     | 6      | 6      | 8      | 7      | 10     | 4      | 17.94  | 4.98   | 13.10   | 3.25    | 0.73    |
| Putative adenosylhomocysteinase 2                                      | 59     | 1      | 0      | 2      | 0      | 0      | 2      | 0.82   | 0.81   | 0.60    | 1.03    | 0.73    |
| 5'(3')-deoxyribonucleotidase, cytosolic type                           | 23     | 4      | 2      | 4      | 3      | 2      | 2      | 7.07   | 2.28   | 5.17    | 1.20    | 0.73    |
| Glycine N-acyltransferase-like protein Keg1                             | 34     | 2      | 3      | 6      | 2      | 2      | 2      | 4.77   | 3.18   | 3.50    | 0.82    | 0.73    |
| Ubiquitin                                                               | 9      | 14     | 13     | 12     | 6      | 15     | 10     | 74.80  | 10.64  | 54.93   | 19.86   | 0.73    |
| Putative ATP-dependent Clp protease proteolytic subunit, mitochondrial | 30     | 2      | 1      | 2      | 2      | 3      | 2      | 3.84   | 1.09   | 2.85    | 1.02    | 0.74    |
| Methionyl-tRNA synthetase, cytoplasmic                                  | 101    | 2      | 1      | 2      | 2      | 3      | 2      | 1.14   | 0.32   | 0.85    | 0.30    | 0.74    |
| 2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial            | 50     | 3      | 0      | 4      | 2      | 3      | 5      | 3.27   | 0.49   | 2.43    | 2.66    | 0.74    |
| Malate dehydrogenase, mitochondrial                                   | 36     | 22     | 20     | 30     | 18     | 25     | 17     | 34.99  | 5.07   | 25.99   | 1.72    | 0.74    |
| T-complex protein 1 subunit gamma                                       | 61     | 3      | 4      | 4      | 4      | 4      | 0      | 2.96   | 0.50   | 2.20    | 1.90    | 0.74    |
| Choline dehydrogenase, mitochondrial                                   | 66     | 9      | 5      | 5      | 7      | 4      | 1      | 4.45   | 1.91   | 3.31    | 2.31    | 0.75    |
| Plastin-2                                                               | 70     | 2      | 3      | 4      | 1      | 1      | 1      | 1.62   | 1.02   | 1.21    | 0.82    | 0.75    |
| Heat shock protein HSP 90-alpha                                        | 85     | 9      | 9      | 12     | 8      | 15     | 9      | 6.97   | 1.93   | 5.21    | 0.44    | 0.75    |
| Mimitin, mitochondrial                                                 | 20     | 1      | 3      | 0      | 0      | 3      | 0      | 3.36   | 3.91   | 2.52    | 4.36    | 0.75    |
| Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial| 32     | 4      | 5      | 11     | 6      | 10     | 7      | 12.82  | 5.84   | 9.61    | 1.84    | 0.75    |
| Serotransferrin                                                        | 77     | 10     | 3      | 7      | 7      | 8      | 8      | 5.32   | 0.99   | 4.00    | 1.82    | 0.75    |
| Tubulin beta-5 chain                                                   | 50     | 3      | 0      | 2      | 2      | 2      | 3      | 2.29   | 0.55   | 1.72    | 1.60    | 0.75    |
| Protein Name                                                                 | Count | Freq 1 | Freq 2 | Freq 3 | Freq 4 | Freq 5 | Freq 6 | Freq 7 | Freq 8 | Freq 9 | Freq 10 | Mean | Stdev | P-value |
|-----------------------------------------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|---------|
| Voltage-dependent anion-selective channel protein 2                          | 32    | 5      | 1      | 1      | 3      | 5      | 4      | 5.69   | 3.64   | 4.29   | 2.53   | 0.75  |       |         |
| 3 beta-hydroxysteroid dehydrogenase type 5                                   | 42    | 1      | 2      | 5      | 1      | 1      | 2      | 2.69   | 2.60   | 2.03   | 0.73   | 0.76  |       |         |
| Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 2               | 70    | 2      | 1      | 0      | 2      | 2      | 0      | 0.95   | 0.82   | 0.72   | 0.72   | 0.76  |       |         |
| Mitochondrial ornithine transporter 1                                        | 33    | 8      | 8      | 17     | 6      | 15     | 15     | 19.87  | 7.03   | 15.10  | 7.82   | 0.76  |       |         |
| Sepiapterin reductase                                                         | 28    | 11     | 10     | 10     | 6      | 9      | 6      | 17.53  | 1.42   | 13.35  | 4.02   | 0.76  |       |         |
| AP-1 complex subunit sigma-1A                                                | 19    | 0      | 0      | 1      | 2      | 3      | 1      | 3.52   | 4.12   | 2.69   | 2.65   | 0.76  |       |         |
| T-complex protein 1 subunit eta                                              | 60    | 3      | 2      | 6      | 3      | 2      | 3      | 3.97   | 1.61   | 2.28   | 0.52   | 0.77  |       |         |
| Transcriptional activator protein Pur-beta                                    | 34    | 2      | 1      | 1      | 2      | 1      | 0      | 1.92   | 0.81   | 1.48   | 1.48   | 0.77  |       |         |
| Complement component C8 gamma chain                                          | 23    | 2      | 0      | 2      | 4      | 4      | 2      | 5.75   | 2.70   | 4.44   | 4.37   | 0.77  |       |         |
| Signal peptidase complex subunit 2                                          | 25    | 1      | 0      | 1      | 2      | 2      | 1      | 2.65   | 1.24   | 2.04   | 2.01   | 0.77  |       |         |
| 28S ribosomal protein S26, mitochondrial                                     | 23    | 1      | 1      | 1      | 1      | 2      | 1      | 2.88   | 1.35   | 2.22   | 0.06   | 0.77  |       |         |
| Bifunctional UDP-N-acetylglucosamine 2-epimerase/N-acetylmannosamine kinase | 79    | 1      | 1      | 1      | 1      | 2      | 1      | 0.84   | 0.39   | 0.65   | 0.02   | 0.77  |       |         |
| Platelet-activating factor acetylhydrolase IB subunit beta                  | 26    | 1      | 1      | 1      | 1      | 2      | 1      | 2.54   | 1.19   | 1.97   | 0.05   | 0.77  |       |         |
| 26S protease regulatory subunit 4                                            | 49    | 5      | 3      | 4      | 5      | 3      | 1      | 4.00   | 0.92   | 3.10   | 2.03   | 0.77  |       |         |
| 40S ribosomal protein S3a                                                    | 30    | 6      | 8      | 7      | 4      | 7      | 3      | 10.93  | 1.10   | 8.47   | 4.36   | 0.77  |       |         |
| Beta-lactamase-like protein 2                                                | 33    | 4      | 4      | 3      | 2      | 5      | 3      | 5.99   | 1.69   | 4.65   | 1.53   | 0.78  |       |         |
| Ras-related protein Rab-18                                                  | 23    | 2      | 1      | 3      | 3      | 7      | 5      | 8.66   | 6.02   | 6.73   | 4.64   | 0.78  |       |         |
| 40S ribosomal protein S14                                                    | 16    | 5      | 4      | 3      | 2      | 0      | 0      | 8.06   | 7.64   | 6.29   | 6.29   | 0.78  |       |         |
| Far upstream element-binding protein 2                                       | 77    | 2      | 1      | 1      | 1      | 1      | 1      | 0.85   | 0.36   | 0.66   | 0.02   | 0.78  |       |         |
| F-actin-capping protein subunit beta                                         | 31    | 2      | 1      | 2      | 2      | 2      | 0      | 0.07   | 2.07   | 1.80   | 1.62   | 1.62  | 0.78  |         |
| NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 4                 | 15    | 2      | 2      | 2      | 1      | 0      | 0      | 4.29   | 3.71   | 3.35   | 3.36   | 0.78  |       |         |
| Calmodulin                                                                  | 17    | 5      | 4      | 7      | 5      | 0      | 0      | 11.33  | 10.18  | 8.88   | 7.83   | 0.78  |       |         |
| Transhyretin                                                                | 16    | 3      | 1      | 4      | 4      | 1      | 1      | 8.09   | 4.47   | 6.33   | 5.39   | 0.78  |       |         |
| 3-oxo-5-beta-steroid 4-dehydrogenase                                        | 37    | 3      | 2      | 2      | 1      | 3      | 3      | 3.55   | 0.85   | 2.78   | 1.46   | 0.78  |       |         |
| Quinone oxidoreductase-like protein 2                                        | 38    | 3      | 2      | 3      | 2      | 2      | 2      | 3.43   | 0.65   | 2.69   | 0.07   | 0.78  |       |         |
| Surfeit locus protein 1                                                      | 35    | 1      | 1      | 1      | 0      | 2      | 2      | 1.89   | 0.89   | 1.48   | 1.51   | 0.78  |       |         |
| Hydroxy steroid dehydrogenase-like protein 2                                | 54    | 1      | 1      | 2      | 1      | 1      | 1      | 1.21   | 0.49   | 0.95   | 0.03   | 0.79  |       |         |
| Cytochrome b5                                                                | 15    | 12     | 10     | 12     | 6      | 0      | 2      | 25.72  | 22.28  | 20.23  | 13.27  | 0.79  |       |         |
| UPF0480 protein C15orf24 homolog                                            | 26    | 0      | 0      | 2      | 1      | 2      | 2      | 2.53   | 2.20   | 2.00   | 2.03   | 0.79  |       |         |
| Protein Name                                      | Value1 | Value2 | Value3 | Value4 | Value5 | Value6 | Value7 | Value8 | Value9 | Value10 | Value11 | Value12 | Value13 |
|--------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| Peroxisomal coenzyme A diphosphatase NUDT7       | 27     | 10     | 14     | 11     | 15     | 22.46  | 8.58   | 17.71  | 4.28   | 0.79    | 0.79    | 0.79    | 0.79    |
| Selenium-binding protein 1                       | 53     | 21     | 22     | 31     | 15     | 26     | 22     | 24.08  | 4.42   | 19.00   | 4.16    | 0.79    | 0.79    |
| Proteasome subunit alpha type-7                   | 28     | 8      | 6      | 8      | 10     | 17.68  | 6.76   | 13.97  | 3.64   | 0.79    | 0.79    | 0.79    | 0.79    |
| UDP-glucuronosyltransferase 1-6                   | 60     | 11     | 7      | 9      | 9      | 8      | 7.91   | 0.90   | 6.25   | 0.67    | 0.79    | 0.79    | 0.79    |
| Cleavage and polyadenylation specificity factor subunit 5 | 26     | 6      | 6      | 2      | 2      | 0      | 2      | 4.97   | 5.72   | 3.93    | 0.11    | 0.79    | 0.79    |
| Eukaryotic translation initiation factor 4H       | 27     | 3      | 2      | 1      | 3      | 5      | 2      | 5.54   | 3.84   | 4.41    | 1.02    | 0.80    | 0.80    |
| Plastin-3                                        | 71     | 3      | 5      | 6      | 3      | 4      | 2      | 2.99   | 1.00   | 2.38    | 1.06    | 0.80    | 0.80    |
| 26S proteasome non-ATPase regulatory subunit 2    | 100    | 7      | 6      | 8      | 6      | 11     | 8      | 4.28   | 1.17   | 3.42    | 0.69    | 0.80    | 0.80    |
| Agmatinase, mitochondrial                        | 38     | 5      | 5      | 7      | 6      | 10     | 6      | 9.54   | 3.57   | 7.63    | 0.89    | 0.80    | 0.80    |
| H-2 class I histocompatibility antigen, Q8 alpha chain | 37     | 0      | 0      | 3      | 1      | 1      | 2      | 1.75   | 1.97   | 1.40    | 1.42    | 0.80    | 0.80    |
| Isoamyl acetate-hydrolyzing esterase 1 homolog   | 28     | 4      | 4      | 6      | 3      | 3      | 3      | 7.55   | 2.45   | 6.07    | 0.98    | 0.80    | 0.80    |
| B-cell receptor-associated protein 31            | 28     | 3      | 2      | 5      | 3      | 5      | 5      | 7.62   | 2.10   | 6.13    | 2.98    | 0.80    | 0.80    |
| Cytochrome P450 2F2                               | 56     | 12     | 10     | 7      | 6      | 8      | 5      | 7.89   | 2.29   | 6.36    | 2.30    | 0.81    | 0.81    |
| SAM domain and HD domain-containing protein 1    | 73     | 1      | 1      | 1      | 3      | 3      | 3      | 0      | 1.14   | 0.83    | 0.92    | 1.05    | 0.81    |
| Elongation factor 1-gamma                        | 50     | 3      | 3      | 3      | 2      | 3      | 2      | 2.95   | 0.10   | 2.38    | 0.56    | 0.81    | 0.81    |
| Protein canopy homolog 2                         | 21     | 2      | 2      | 3      | 2      | 4      | 3      | 7.06   | 2.55   | 5.70    | 1.58    | 0.81    | 0.81    |
| 60 kDa heat shock protein, mitochondrial         | 61     | 48     | 51     | 65     | 42     | 55     | 38     | 45.07  | 6.38   | 36.51   | 4.92    | 0.81    | 0.81    |
| Calnexin                                         | 67     | 4      | 4      | 7      | 4      | 7      | 6      | 4.41   | 1.31   | 3.58    | 0.99    | 0.81    | 0.81    |
| Methylmalonyl-CoA mutase, mitochondrial          | 83     | 5      | 5      | 6      | 2      | 7      | 7      | 3.56   | 0.69   | 2.90    | 1.62    | 0.81    | 0.81    |
| Eukaryotic translation initiation factor 5A-1     | 17     | 3      | 3      | 6      | 4      | 0      | 0      | 8.49   | 8.44   | 6.90    | 6.16    | 0.81    | 0.81    |
| Alpha-mannosidase 2                              | 132    | 2      | 2      | 1      | 2      | 2      | 0      | 0.62   | 0.23   | 0.51    | 0.44    | 0.81    | 0.81    |
| Ubiquitin-conjugating enzyme E2 K                | 22     | 2      | 4      | 1      | 0      | 2      | 0      | 3.74   | 1.36   | 3.05    | 5.29    | 0.82    | 0.82    |
| Phosphate carrier protein, mitochondrial         | 40     | 7      | 9      | 9      | 9      | 13     | 5      | 11.95  | 4.16   | 9.74    | 2.73    | 0.82    | 0.82    |
| Vacular protein sorting-associated protein 13C   | 420    | 4      | 3      | 6      | 1      | 3      | 6      | 0.50   | 0.16   | 0.41    | 0.32    | 0.82    | 0.82    |
| Cytochrome P450 2D10                             | 57     | 4      | 4      | 8      | 3      | 6      | 7      | 5.16   | 1.66   | 4.22    | 2.00    | 0.82    | 0.82    |
| Cytosol aminopeptidase                           | 56     | 21     | 19     | 21     | 14     | 19     | 15     | 17.82  | 0.48   | 14.59   | 2.30    | 0.82    | 0.82    |
| Nicotinate-nucleotide pyrophosphorylase [carboxylating] | 32     | 4      | 9      | 10     | 4      | 10     | 6      | 12.32  | 5.42   | 10.11   | 3.94    | 0.82    | 0.82    |
| Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 2 | 69     | 13     | 12     | 12     | 7      | 8      | 7      | 7.80   | 1.69   | 6.40    | 2.04    | 0.82    | 0.82    |
| Protein/Activity                                                                 | 165 | 573 | 426 | 562 | 441 | 464 | 395 | 158.4 | 13.3  | 130.1 | 4.1  | 0.82 |
|---------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-----|------|
| Carbamoyl-phosphate synthase (ammonia), mitochondrial                          |     |     |     |     |     |     |     |       |       |       |     |      |
| Translin                                                                        | 26  | 2   | 2   | 1   | 1   | 2   | 1   | 3.17  | 1.15  | 2.61  | 1.09 | 0.82 |
| Coatamer subunit beta'                                                          | 102 | 7   | 2   | 4   | 4   | 3   | 5   | 2.24  | 0.97  | 1.85  | 0.80 | 0.83 |
| Translocon-associated protein subunit alpha                                     | 32  | 1   | 3   | 2   | 2   | 0   | 2   | 2.57  | 0.91  | 2.12  | 2.40 | 0.83 |
| 60S ribosomal protein L27a                                                       | 17  | 1   | 2   | 3   | 2   | 1   | 0   | 4.77  | 3.18  | 3.95  | 3.42 | 0.83 |
| 60S ribosomal protein L32                                                        | 16  | 4   | 3   | 1   | 1   | 0   | 0   | 5.05  | 6.34  | 4.19  | 4.81 | 0.83 |
| Chaperone activity of bc1 complex-like, mitochondrial                          |     |     |     |     |     |     |     |       |       |       |     |      |
| 5-hydroxyisoureate hydrolase                                                    |     |     |     |     |     |     |     |       |       |       |     |      |
| NADH-ubiquinone oxidoreductase chain 1                                           | 36  | 2   | 1   | 2   | 2   | 1   | 1   | 2.26  | 0.73  | 1.88  | 0.79 | 0.83 |
| Xylose ketase                                                                  | 60  | 2   | 0   | 3   | 4   | 0   | 0   | 1.34  | 1.22  | 1.12  | 1.93 | 0.84 |
| Superoxide dismutase [Cu-Zn]                                                    |     |     |     |     |     |     |     |       |       |       |     |      |
| NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 10                   | 21  | 15  | 12  | 9   | 7   | 17  | 14  | 32.17 | 10.63 | 26.88 | 9.33 | 0.84 |
| Glycine N-acyltransferse                                                        | 34  | 12  | 11  | 17  | 13  | 17  | 13  | 22.19 | 4.42  | 18.55 | 2.01 | 0.84 |
| 60S ribosomal protein L22                                                       | 15  | 2   | 3   | 3   | 1   | 0   | 0   | 5.35  | 4.88  | 4.47  | 5.13 | 0.84 |
| ADP-ribosylation factor 4                                                        | 20  | 1   | 1   | 3   | 2   | 1   | 1   | 4.05  | 2.70  | 3.39  | 1.42 | 0.84 |
| Non-specific lipid-transfer protein                                             | 59  | 51  | 39  | 54  | 38  | 42  | 41  | 40.70 | 3.91  | 34.09 | 2.24 | 0.84 |
| 40S ribosomal protein S3                                                        | 27  | 14  | 12  | 13  | 18  | 27  | 14  | 33.08 | 15.55 | 27.73 | 5.57 | 0.84 |
| 14-3-3 protein beta/alpha                                                       | 28  | 8   | 5   | 4   | 6   | 4   | 2   | 9.34  | 3.96  | 7.84  | 3.64 | 0.84 |
| Methyltransferase-like protein 7B                                               | 28  | 12  | 12  | 13  | 6   | 11  | 11  | 21.03 | 1.10  | 17.68 | 6.00 | 0.84 |
| Alpha-enolase                                                                  | 47  | 54  | 53  | 42  | 25  | 63  | 51  | 55.65 | 12.81 | 46.90 | 17.46 | 0.84 |
| Sarcoplasmic/endoplasmic reticulum calcium ATPase 2                            |     |     |     |     |     |     |     |       |       |       |     |      |
| Thiosulfate sulfurtransferase                                                    | 33  | 14  | 11  | 16  | 12  | 12  | 11  | 20.79 | 2.32  | 17.54 | 0.75 | 0.84 |
| Tripeptidyl-peptidase 2                                                         | 140 | 3   | 2   | 2   | 2   | 6   | 5   | 1.30  | 0.78  | 1.11  | 0.67 | 0.85 |
| UTP-1-glucose-1-phosphate uridylyltransferase                                   | 57  | 13  | 13  | 11  | 7   | 20  | 16  | 12.74 | 4.56  | 10.82 | 4.35 | 0.85 |
| GMP synthase [glutamine-hydrolyzing]                                           | 77  | 4   | 1   | 1   | 1   | 0   | 2   | 1.05  | 1.32  | 0.89  | 0.41 | 0.85 |
| Catechol O-methyltransferase                                                    | 29  | 20  | 16  | 14  | 13  | 17  | 13  | 28.84 | 5.31  | 24.64 | 2.77 | 0.85 |
| Isochorismatase domain-containing protein 2A, mitochondrial                   | 22  | 18  | 16  | 13  | 12  | 15  | 10  | 34.27 | 5.79  | 29.33 | 6.55 | 0.86 |
| Alpha-amino adipic semialdehyde synthase, mitochondrial                       | 103 | 17  | 12  | 15  | 13  | 19  | 17  | 8.13  | 1.22  | 6.97  | 1.52 | 0.86 |
| Acetyl-CoA acetyltransferase, cytosolic                                        | 41  | 8   | 7   | 10  | 9   | 11  | 8   | 11.61 | 2.09  | 9.97  | 1.25 | 0.86 |
| Phenazine biosynthesis-like domain-containing protein 2 | 32  | 3   | 1   | 6   | 5   | 2   | 3   | 5.57  | 3.02  | 4.79  | 3.14 | 0.86 |
| Protein                                         | 58   | 2    | 1    | 2    | 3    | 2    | 1    | 1.69 | 0.06 | 1.46 | 0.99 | 0.86 |
|------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Rho GDP-dissociation inhibitor 2               | 23   | 9    | 5    | 4    | 7    | 5    | 3    | 12.81| 5.56 | 11.04| 4.21 | 0.86 |
| Glycine N-methyltransferase                    | 33   | 19   | 18   | 24   | 17   | 21   | 18   | 31.74| 3.44 | 27.36| 1.43 | 0.86 |
| Monocarboxylate transporter 1                  | 53   | 1    | 1    | 2    | 2    | 3    | 2    | 1.87 | 0.99 | 1.61 | 0.57 | 0.86 |
| Malate dehydrogenase, cytoplasmic              | 37   | 17   | 12   | 19   | 19   | 23   | 18   | 26.20| 4.88 | 22.59| 5.42 | 0.86 |
| Triosephosphate isomerase                      | 27   | 14   | 11   | 18   | 14   | 15   | 14   | 28.48| 3.33 | 24.63| 3.62 | 0.87 |
| Methylcrotonoyl-CoA carboxylase subunit alpha, mitochondrial | 79   | 9    | 5    | 7    | 4    | 7    | 10   | 4.77 | 0.69 | 4.13 | 2.22 | 0.87 |
| Hypoxanthine-guanine phosphoribosyltransferase | 25   | 3    | 2    | 2    | 2    | 1    | 1    | 3.90 | 1.90 | 3.39 | 1.11 | 0.87 |
| Prostaglandin reductase 2                      | 38   | 2    | 1    | 3    | 3    | 1    | 1    | 2.56 | 1.22 | 2.23 | 1.51 | 0.87 |
| PEST proteolytic signal-containing nuclear protein | 19  | 0    | 0    | 1    | 0    | 5    | 5    | 5.31 | 7.13 | 4.62 | 8.01 | 0.87 |
| Fructose-1,6-bisphosphatase 1                  | 37   | 33   | 37   | 44   | 34   | 68   | 51   | 64.65| 26.05| 56.39| 14.22| 0.87 |
| Putative L-aspartate dehydrogenase             | 30   | 12   | 10   | 14   | 13   | 18   | 14   | 24.12| 5.78 | 21.05| 3.95 | 0.87 |
| Dihydroteridine reductase                      | 26   | 9    | 6    | 14   | 9    | 13   | 15   | 22.69| 5.07 | 19.80| 9.62 | 0.87 |
| Sodium/potassium-transporting ATPase subunit alpha-1 | 113 | 7    | 11   | 13   | 9    | 12   | 7    | 4.64 | 1.41 | 4.06 | 0.82 | 0.87 |
| Argininosuccinate lyase                        | 52   | 30   | 25   | 31   | 24   | 39   | 35   | 31.60| 5.75 | 27.62| 6.81 | 0.87 |
| Voltage-dependent anion-selective channel protein 1 | 32  | 15   | 11   | 13   | 12   | 16   | 14   | 22.57| 3.04 | 19.74| 2.97 | 0.87 |
| Staphylococcal nuclease domain-containing protein1 | 102 | 13   | 11   | 9    | 9    | 10   | 7    | 5.14 | 1.00 | 4.49 | 0.91 | 0.87 |
| 40S ribosomal protein S2                       | 31   | 7    | 6    | 5    | 7    | 8    | 4    | 10.62| 2.74 | 9.30 | 2.31 | 0.88 |
| Ubiquitin carboxyl-terminal hydrolase isozyme L3 | 26   | 2    | 1    | 1    | 3    | 4    | 2    | 4.48 | 3.07 | 3.93 | 1.93 | 0.88 |
| Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial | 43   | 1    | 1    | 2    | 3    | 4    | 2    | 2.70 | 1.85 | 2.38 | 1.17 | 0.88 |
| Hypoxia up-regulated protein 1                 | 111  | 20   | 14   | 13   | 14   | 14   | 12   | 6.93 | 1.64 | 6.13 | 0.37 | 0.88 |
| Dipeptidyl peptidase 4                         | 87   | 5    | 1    | 4    | 8    | 5    | 3    | 2.64 | 0.39 | 2.34 | 2.07 | 0.89 |
| Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial | 49   | 7    | 5    | 6    | 2    | 6    | 9    | 6.35 | 0.55 | 5.62 | 3.84 | 0.89 |
| Glycogen phosphorylase, liver form             | 97   | 40   | 23   | 23   | 29   | 32   | 29   | 16.07| 4.41 | 14.24| 2.02 | 0.89 |
| Aspartyl-tRNA synthetase, cytoplasmic          | 57   | 4    | 4    | 5    | 2    | 4    | 5    | 3.73 | 0.41 | 3.31 | 1.44 | 0.89 |
| Acyl-coenzyme A synthetase ACSM1, mitochondrial | 65   | 14   | 10   | 8    | 13   | 14   | 8    | 9.11 | 2.81 | 8.09 | 1.81 | 0.89 |
| Protein Name                                                  | Values |
|--------------------------------------------------------------|--------|
| Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform | 65 1 2 3 2 3 2 1.77 0.89 1.57 0.04 0.89 |
| Hemoglobin subunit alpha                                      | 15 20 17 23 18 4 5 50.59 32.32 44.98 23.80 0.89 |
| Valacyclovir hydrolase                                        | 33 7 10 7 7 16 9 15.06 8.37 13.43 2.44 0.89 |
| Phytanoyl-CoA dioxygenase, peroxisomal                       | 39 3 1 2 3 2 2 2.94 0.70 2.62 1.29 0.89 |
| Protein transport protein Sec61 subunit alpha isoform 1       | 52 3 2 2 2 2 2 2.20 0.53 1.97 0.05 0.89 |
| Phytanoyl-CoA dioxygenase domain-containing protein 1         | 33 3 2 2 2 2 2 3.47 0.83 3.10 0.08 0.89 |
| Phospholysine phosphohistidine inorganic pyrophosphate phosphatase | 29 3 3 2 1 2 2 3.95 0.94 3.53 1.74 0.89 |
| Phosphoglucomutase-1                                          | 62 11 14 14 4 9 11 8.94 1.72 7.99 4.23 0.89 |
| 40S ribosomal protein S6                                       | 29 0 3 4 0 3 3 3.96 3.49 3.55 3.08 0.90 |
| Fructose-bisphosphate aldolase B                              | 40 49 50 69 51 65 57 74.97 13.32 67.37 6.71 0.90 |
| Pyridoxal kinase                                              | 35 2 0 3 3 2 3 3.26 0.73 2.94 2.55 0.90 |
| Phospholysine phosphohistidine inorganic pyrophosphate phosphatase, mitochondrial | 53 2 1 4 3 1 2 2.14 1.35 1.93 0.95 0.90 |
| Elongation factor 1-alpha 1                                   | 50 51 40 52 42 55 55 51.81 3.70 46.82 9.70 0.90 |
| Early endosome antigen 1                                      | 161 7 6 4 5 5 3 1.63 0.47 1.47 0.45 0.90 |
| Transgelin-2                                                  | 22 2 1 2 3 4 3 6.01 2.82 5.44 2.74 0.91 |
| Ferritin light chain 1                                         | 21 14 15 24 22 25 18 49.26 14.88 44.59 8.36 0.91 |
| GTP-binding nuclear protein Ran                               | 24 3 3 5 5 8 6 11.01 5.53 9.98 3.47 0.91 |
| Cytochrome P450 2D26                                          | 57 6 7 4 5 7 3 4.91 1.46 4.46 1.71 0.91 |
| Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial | 73 7 7 10 4 5 8 4.90 1.54 4.45 1.55 0.91 |
| Apoptosis-inducing factor 1, mitochondrial                    | 67 5 5 10 15 12 4 6.63 2.79 6.05 4.51 0.91 |
| ADP-ribosylation factor-like protein 1                        | 20 2 1 3 3 3 3 6.56 1.49 5.99 3.01 0.91 |
| Protein disulfide-isomerase A3                                | 57 23 20 14 14 13 10 14.33 4.59 13.08 4.26 0.91 |
| Liver carboxylesterase 31-like                                | 63 2 2 2 3 3 5 3 2.37 1.45 2.17 0.50 0.91 |
| Argininosuccinate synthase                                    | 47 98 84 98 81 85 82 97.78 4.90 89.51 2.69 0.92 |
| Superoxide dismutase [Mn], mitochondrial                     | 25 8 7 7 9 12 8 17.81 5.87 16.35 2.04 0.92 |
| Regucalcin                                                    | 33 26 18 38 34 28 29 45.55 8.60 41.85 12.75 0.92 |
| Cytochrome P450 2C29                                          | 56 10 9 6 9 12 7 8.25 2.93 7.59 0.86 0.92 |
| Dual specificity protein phosphatase 3                        | 20 3 2 1 4 6 3 8.33 6.51 7.66 2.52 0.92 |
| Collagen alpha-1(XIV) chain                                   | 193 2 3 3 2 4 3 0.77 0.28 0.71 0.16 0.92 |
| Protein Name                                      | Value1 | Value2 | Value3 | Value4 | Value5 | Value6 | Value7 | Value8 | Value9 | Value10 | Value11 | Value12 | Value13 | Value14 |
|--------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Nitrilase homolog 1                              | 36     | 3      | 2      | 4      | 5      | 2      | 1      | 4.07   | 1.24   | 3.75   | 2.88   | 0.92   |        |        |
| Protein NipSnap homolog 1                        | 33     | 7      | 5      | 3      | 6      | 9      | 6      | 9.52   | 4.83   | 8.78   | 1.02   | 0.92   |        |        |
| Peptidyl-prolyl cis-trans isomerase A             | 18     | 11     | 15     | 15     | 8      | 0      | 0      | 23.19  | 20.71  | 21.43  | 20.99  | 0.92   |        |        |
| Translocation protein SEC63 homolog              | 88     | 4      | 3      | 2      | 2      | 2      | 3      | 3      | 1.68   | 0.56   | 1.55   | 0.36   | 0.92   |        |
| ADP-ribosylation factor 1                         | 21     | 1      | 3      | 7      | 3      | 0      | 1      | 6.08   | 8.61   | 5.63   | 2.70   | 0.92   |        |        |
| Sulfotransferase 1A                               | 34     | 10     | 9      | 9      | 9      | 9      | 7      | 13.49  | 0.83   | 12.49  | 1.42   | 0.93   |        |        |
| Annexin A6                                       | 76     | 10     | 10     | 10     | 13     | 10     | 4      | 6.47   | 0.22   | 6.00   | 2.96   | 0.93   |        |        |
| Electron transfer flavoprotein subunit alpha, mitochondrial | 35     | 27     | 16     | 24     | 23     | 21     | 25     | 33.64  | 3.54   | 31.23  | 7.47   | 0.93   |        |        |
| T-complex protein 1 subunit beta                  | 57     | 2      | 2      | 5      | 4      | 2      | 2      | 2.56   | 1.41   | 2.38   | 0.99   | 0.93   |        |        |
| 60S ribosomal protein L17                         | 21     | 2      | 3      | 4      | 4      | 4      | 2      | 7.82   | 2.77   | 7.26   | 2.28   | 0.93   |        |        |
| Glutathione S-transferase Mu 2                    | 26     | 5      | 4      | 2      | 1      | 2      | 3      | 5.65   | 3.21   | 5.25   | 2.99   | 0.93   |        |        |
| NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial | 53     | 3      | 4      | 2      | 1      | 5      | 4      | 3.12   | 1.54   | 2.91   | 1.70   | 0.93   |        |        |
| 60S ribosomal protein L3                          | 46     | 3      | 3      | 2      | 4      | 6      | 3      | 3.97   | 2.39   | 3.70   | 0.59   | 0.93   |        |        |
| Abhydrolase domain-containing protein 14B         | 22     | 11     | 11     | 10     | 6      | 7      | 8      | 20.76  | 4.14   | 19.35  | 5.74   | 0.93   |        |        |
| ESI protein homolog, mitochondrial                | 28     | 9      | 9      | 11     | 5      | 7      | 10     | 15.72  | 3.02   | 14.66  | 5.10   | 0.93   |        |        |
| Dehydrogenase/reductase SDR family member 4       | 28     | 4      | 5      | 7      | 6      | 9      | 7      | 11.76  | 4.72   | 10.98  | 2.10   | 0.93   |        |        |
| Glutamine synthetase                             | 42     | 6      | 5      | 6      | 8      | 9      | 6      | 8.24   | 2.33   | 7.70   | 1.79   | 0.93   |        |        |
| Coatomer subunit beta                            | 107    | 7      | 6      | 8      | 6      | 4      | 5      | 2.89   | 0.87   | 2.70   | 0.21   | 0.94   |        |        |
| Fumarlacetoacetase                               | 46     | 23     | 26     | 24     | 24     | 27     | 17     | 26.40  | 3.07   | 24.72  | 4.68   | 0.94   |        |        |
| MOSC domain-containing protein 1, mitochondrial   | 38     | 4      | 1      | 7      | 8      | 9      | 9      | 8.67   | 3.48   | 8.13   | 5.97   | 0.94   |        |        |
| Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial | 68     | 3      | 2      | 4      | 6      | 4      | 2      | 2.65   | 0.45   | 2.49   | 1.69   | 0.94   |        |        |
| 60S ribosomal protein L18                        | 22     | 3      | 4      | 4      | 2      | 3      | 3      | 7.43   | 1.11   | 6.97   | 2.30   | 0.94   |        |        |
| Macrophage mannose receptor 1                    | 165    | 3      | 4      | 4      | 2      | 3      | 3      | 0.99   | 0.15   | 0.93   | 0.31   | 0.94   |        |        |
| Adenylate kinase 2, mitochondrial                 | 26     | 9      | 9      | 16     | 12     | 15     | 15     | 25.23  | 7.26   | 23.67  | 6.50   | 0.94   |        |        |
| Myosin-9                                         | 226    | 57     | 64     | 67     | 55     | 57     | 45     | 13.10  | 0.98   | 12.33  | 1.89   | 0.94   |        |        |
| ADP/ATP translocase 2                            | 33     | 25     | 27     | 47     | 37     | 43     | 40     | 57.13  | 17.58  | 53.80  | 11.55  | 0.94   |        |        |
| Alcohol dehydrogenase 1                          | 40     | 23     | 33     | 31     | 28     | 37     | 22     | 37.40  | 9.60   | 35.23  | 6.28   | 0.94   |        |        |
| Thioredoxin-dependent peroxide reductase, mitochondrial | 28     | 8      | 5      | 5      | 11     | 11     | 6      | 14.16  | 5.75   | 13.34  | 5.66   | 0.94   |        |        |
| Arginase-1                                        | 35     | 52     | 53     | 61     | 49     | 47     | 43     | 74.69  | 7.72   | 70.45  | 5.76   | 0.94   |        |        |
| SEC14-like protein 4                              | 46     | 7      | 1      | 2      | 3      | 0      | 4      | 3.16   | 3.82   | 2.98   | 1.76   | 0.94   |        |        |
| Complement C3                                     | 186    | 25     | 30     | 24     | 18     | 18     | 13     | 5.88   | 0.84   | 5.56   | 2.30   | 0.94   |        |        |
| Glyoxalase domain-containing protein 4            | 33     | 3      | 3      | 3      | 4      | 6      | 4      | 6.01   | 2.82   | 5.69   | 0.97   | 0.95   |        |        |
| Protein Name                                           | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 | Value 8 | Value 9 | Value 10 | Value 11 | Rating |
|--------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|--------|
| Eukaryotic initiation factor 4A-I                      | 10      | 11      | 11      | 11      | 14      | 10      | 12.51   | 2.64    | 11.84   | 0.33      | 0.95      |        |
| 40S ribosomal protein S10                              | 19      | 6       | 5       | 10      | 6       | 4       | 7       | 17.09   | 7.37    | 16.18     | 3.09      | 0.95   |
| Electron transfer flavoprotein subunit beta            | 28      | 29      | 30      | 30      | 21      | 29      | 29      | 51.47   | 1.23    | 48.74     | 9.57      | 0.95   |
| NADH dehydrogenase [ubiquinone] flavoprotein 2,        | 27      | 5       | 3       | 3       | 5       | 4       | 3       | 7.29    | 1.86    | 6.92      | 2.07      | 0.95   |
| mitochondrial                                           |         |         |         |         |         |         |         |         |         |           |           |        |
| AP-2 complex subunit alpha-2                           | 104     | 4       | 2       | 3       | 3       | 4       | 5       | 1.74    | 0.31    | 1.65      | 0.80      | 0.95   |
| Cytochrome b-c1 complex subunit Rieske,                | 29      | 5       | 11      | 11      | 6       | 8       | 5       | 13.53   | 4.90    | 12.86     | 5.44      | 0.95   |
| mitochondrial                                           |         |         |         |         |         |         |         |         |         |           |           |        |
| PCTP-like protein                                       | 33      | 1       | 3       | 7       | 4       | 3       | 3       | 5.42    | 4.39    | 5.15      | 1.02      | 0.95   |
| 17-beta-hydroxysteroid dehydrogenase 13                | 34      | 4       | 3       | 4       | 3       | 3       | 4       | 5.28    | 0.68    | 5.03      | 1.02      | 0.95   |
| Protein NipSnap homolog 3A                             | 28      | 4       | 3       | 4       | 3       | 3       | 4       | 6.41    | 0.83    | 6.10      | 1.23      | 0.95   |
| Proteasome subunit beta type-7                         | 30      | 2       | 4       | 5       | 3       | 5       | 4       | 6.57    | 2.89    | 6.25      | 1.08      | 0.95   |
| Fibrinogen gamma chain                                 | 49      | 4       | 7       | 1       | 2       | 10      | 5       | 5.12    | 4.82    | 4.87      | 2.61      | 0.95   |
| Proteasome subunit alpha type-1                        | 30      | 8       | 5       | 6       | 4       | 8       | 11      | 12.04   | 2.17    | 11.47     | 6.85      | 0.95   |
| Alpha-methylacyl-CoA racemase                          | 42      | 6       | 5       | 3       | 3       | 3       | 3       | 4.67    | 1.98    | 4.45      | 1.34      | 0.95   |
| Estradiol 17-beta-dehydrogenase 12                     | 35      | 4       | 5       | 3       | 7       | 9       | 3       | 7.59    | 4.84    | 7.25      | 2.77      | 0.96   |
| Alpha-2-macroglobulin                                  | 166     | 18      | 22      | 17      | 14      | 17      | 12      | 5.13    | 0.20    | 4.91      | 1.54      | 0.96   |
| ATP synthase subunit O, mitochondrial                  | 23      | 20      | 22      | 21      | 20      | 24      | 18      | 46.39   | 5.94    | 44.37     | 3.51      | 0.96   |
| Ras-related protein Rab-7a                            | 23      | 5       | 6       | 4       | 3       | 4       | 3       | 9.25    | 1.18    | 8.85      | 3.71      | 0.96   |
| Adenosine kinase                                       | 40      | 19      | 16      | 16      | 17      | 16      | 14      | 20.88   | 2.03    | 19.98     | 1.46      | 0.96   |
| Indolethylamine N-methyltransferase                    | 29      | 31      | 28      | 28      | 23      | 28      | 29      | 49.13   | 2.92    | 47.06     | 6.56      | 0.96   |
| Bile acyl-CoA synthetase                               | 76      | 8       | 8       | 8       | 4       | 8       | 10      | 5.17    | 0.17    | 4.96      | 2.16      | 0.96   |
| Enoyl-CoA hydratase domain-containing protein 2,       | 32      | 5       | 4       | 4       | 6       | 5       | 3       | 7.18    | 1.06    | 6.89      | 2.30      | 0.96   |
| mitochondrial                                           |         |         |         |         |         |         |         |         |         |           |           |        |
| ATP synthase subunit alpha, mitochondrial              | 60      | 60      | 65      | 50      | 35      | 60      | 57      | 46.49   | 5.87    | 44.64     | 13.46     | 0.96   |
| 10-formyltetrahydrofolate dehydrogenase                | 99      | 90      | 71      | 88      | 84      | 79      | 82      | 42.47   | 1.77    | 40.80     | 4.09      | 0.96   |
| Vesicle-associated membrane protein-associated protein A| 28      | 3       | 2       | 5       | 8       | 7       | 4       | 8.83    | 3.78    | 8.49      | 5.45      | 0.96   |
| Dihydrolipoyl dehydrogenase, mitochondrial             | 54      | 9       | 10      | 10      | 10      | 9       | 6       | 8.49    | 0.37    | 8.16      | 2.00      | 0.96   |
| Filamin-A                                              | 281     | 5       | 9       | 13      | 3       | 5       | 9       | 1.33    | 0.77    | 1.28      | 0.64      | 0.96   |
| Dihydropyrimidine dehydrogenase [NADP+]                | 111     | 14      | 11      | 14      | 11      | 10      | 13      | 5.59    | 0.86    | 5.38      | 0.68      | 0.96   |
| Transitional endoplasmic reticulum ATPase              | 89      | 24      | 22      | 23      | 17      | 18      | 21      | 11.93   | 1.45    | 11.49     | 1.64      | 0.96   |
| Alcohol dehydrogenase [NADP+]                          | 37      | 9       | 10      | 9       | 9       | 11      | 8       | 12.87   | 1.98    | 12.41     | 1.12      | 0.96   |
| Protein                                           | 47 | 11 | 9 | 10 | 9 | 8 | 10.10 | 1.15 | 9.77 | 0.87 | 0.97 |
|--------------------------------------------------|----|----|---|----|---|---|-------|-----|-----|-----|-----|
| Serine protease inhibitor A3K                    |    |    |   |    |   |   |       |     |     |     |     |
| S-formylglutathione hydrolase                    | 31 | 10 | 6 | 8  | 9 | 10| 11    | 14.83| 2.19 | 14.34| 4.48 | 0.97 |
| L-gulonolactone oxidase                        | 50 | 4  | 5 | 6  | 4 | 5 | 5     | 4.91 | 0.94 | 4.77 | 0.66 | 0.97 |
| Protein DJ-1                                    | 20 | 11 | 8 | 9  | 10| 11| 11    | 25.44| 3.46 | 24.75| 4.43 | 0.97 |
| 60S ribosomal protein L6                        | 34 | 6  | 7 | 5  | 10| 11| 4     | 10.70| 5.08 | 10.45| 4.29 | 0.98 |
| Polyadenylate-binding protein 1                 | 71 | 5  | 5 | 7  | 5 | 3 | 4     | 3.43 | 1.28 | 3.35 | 0.33 | 0.98 |
| Aldehyde dehydrogenase, mitochondrial           | 57 | 44 | 44| 36 | 33| 53| 49    | 38.39| 8.64 | 37.75| 8.16 | 0.98 |
| Hydroxyacylglutathione hydrolase, mitochondrial| 34 | 11 | 8 | 4  | 9 | 7 | 4     | 10.62| 5.06 | 10.45| 3.75 | 0.98 |
| SEC14-like protein 2                            | 46 | 7  | 9 | 4  | 6 | 13| 8     | 8.66 | 5.24 | 8.52 | 1.74 | 0.98 |
| Sterol 26-hydroxylase, mitochondrial            | 61 | 4  | 3 | 6  | 4 | 7 | 9     | 4.58 | 1.33 | 4.52 | 2.85 | 0.99 |
| Exportin-1                                      | 123| 0  | 1 | 0  | 1 | 2 | 0     | 0.28 | 0.48 | 0.27 | 0.24 | 0.99 |
| Proteasome subunit alpha type-5                 | 26 | 4  | 5 | 8  | 5 | 6 | 7     | 11.32| 3.63 | 11.18| 2.61 | 0.99 |
| Ornithine carboxamoyltransferase, mitochondrial | 40 | 34 | 41| 34 | 27| 36| 31    | 42.63| 2.85 | 42.12| 8.91 | 0.99 |
| NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial | 30 | 8  | 6 | 7  | 6 | 4 | 6     | 10.31| 3.17 | 10.22| 0.28 | 0.99 |
| Carbonyl reductase [NADPH] 1                    | 31 | 9  | 6 | 6  | 8 | 7 | 7     | 11.63| 2.44 | 11.54| 1.64 | 0.99 |
| 6-phosphogluconolactonase                       | 27 | 5  | 3 | 8  | 5 | 4 | 8     | 10.24| 3.48 | 10.17| 5.06 | 0.99 |
| Glutathione S-transferase A3                     | 25 | 51 | 41| 58 | 61| 47| 47    | 102.0| 7.91 | 101.4| 20.12| 0.99 |
| 60S ribosomal protein L21                       | 19 | 6  | 8 | 8  | 7 | 11| 9     | 21.67| 7.20 | 21.56| 3.24 | 0.99 |
| Mitochondrial import receptor subunit TOM70     | 68 | 1  | 1 | 0  | 3 | 3 | 0     | 0.99 | 1.15 | 0.99 | 1.13 | 1.00 |
| 78 kDa glucose-regulated protein                 | 72 | 50 | 63| 52 | 53| 69| 49    | 39.06| 8.50 | 38.97| 4.44 | 1.00 |
| Peroxiredoxin-6                                 | 25 | 43 | 44| 44 | 39| 42| 41    | 84.49| 1.04 | 84.48| 5.38 | 1.00 |
| Protein transport protein Sec23A                 | 86 | 8  | 8 | 8  | 7 | 10| 10    | 4.97 | 0.83 | 4.97 | 1.05 | 1.00 |
| L-lactate dehydrogenase A chain                 | 36 | 38 | 35| 35 | 34| 31| 31    | 47.25| 3.78 | 47.26| 1.80 | 1.00 |
| Adenosylhomocysteinemase Phosphoenolpyruvate carboxykinase, cytosolic [GTP] | 48 | 41 | 34| 32 | 36| 43| 42    | 39.70| 7.08 | 39.82| 5.54 | 1.00 |
| Adenosylhomocysteinemase Phosphoenolpyruvate carboxykinase, mitochondrial [GTP] | 69 | 13 | 8 | 11| 17| 8 | 6     | 7.57 | 1.63 | 7.60 | 4.19 | 1.00 |
| Phenylalanine-4-hydroxylase                     | 52 | 9  | 9 | 13 | 14| 9 | 7     | 9.73 | 1.93 | 9.78 | 3.35 | 1.00 |
| Protein NDRG2                                   | 41 | 14 | 15| 9  | 8 | 10| 9     | 13.18| 3.12 | 13.26| 4.55 | 1.01 |
| Titin                                           | 3906| 0  | 1 | 1  | 2 | 2 | 0     | 0.01 | 0.01 | 0.01 | 0.01 | 1.01 |
| DNA-(apurinic or apyrimidinic site) lyase        | 35 | 1  | 0 | 0  | 2 | 1 | 0     | 0.95 | 0.82 | 0.96 | 1.66 | 1.01 |
| Cation transport regulator-like protein 2       | 20 | 0  | 0 | 0  | 1 | 2 | 1     | 1.70 | 2.94 | 1.72 | 1.49 | 1.01 |
| Eukaryotic translation initiation factor 1A     | 17 | 0  | 0 | 0  | 1 | 2 | 1     | 2.00 | 3.46 | 2.02 | 1.75 | 1.01 |
| Protein Name                                                                 | Accession Number | Reference Number | Description                               | Score | Score | Score | Score | Score | Score | Score |
|----------------------------------------------------------------------------|------------------|------------------|-------------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Eukaryotic translation elongation factor 1 epsilon-1                        | 20               | 0                | 0                                         | 1     | 2     | 1     | 1.70  | 2.94  | 1.72  | 1.49  |
| 28S ribosomal protein S10, mitochondrial                                   | 19               | 0                | 0                                         | 1     | 2     | 1     | 1.79  | 3.10  | 1.81  | 1.57  |
| Selenide, water dikinase 1                                                 | 43               | 0                | 1                                         | 0     | 0     | 2     | 1     | 0.79  | 1.37  | 0.80  | 0.69  |
| Zinc-binding alcohol dehydrogenase domain-containing protein 2            | 41               | 1                | 2                                         | 0     | 0     | 1     | 0     | 0.81  | 0.70  | 0.82  | 1.42  |
| Cytochrome P450 2C70                                                      | 56               | 1                | 2                                         | 0     | 0     | 1     | 0     | 0.59  | 0.51  | 0.60  | 1.04  |
| MIF4G domain-containing protein                                            | 25               | 1                | 2                                         | 0     | 0     | 1     | 0     | 1.33  | 1.15  | 1.34  | 2.33  |
| Catalase                                                                  | 60               | 38               | 41                                         | 36    | 31    | 37    | 36    | 30.31 | 1.44  | 30.66 | 4.30  |
| 3-hydroxyanthranilate 3,4-dioxygenase                                      | 33               | 22               | 22                                         | 29    | 25    | 20    | 22    | 35.12 | 6.03  | 35.59 | 2.29  |
| Tetratricopeptide repeat protein 39C                                       | 65               | 0                | 1                                         | 1     | 2     | 3     | 1     | 1.03  | 1.20  | 1.04  | 0.44  |
| Glutathione S-transferase A4                                               | 26               | 3                | 5                                         | 3     | 7     | 7     | 1     | 8.29  | 4.71  | 8.41  | 5.86  |
| Talin-1                                                                   | 270              | 27               | 29                                         | 27    | 23    | 38    | 38    | 5.61  | 1.36  | 5.70  | 1.59  |
| HIV Tat-specific factor 1 homolog                                         | 86               | 0                | 0                                         | 1     | 2     | 1     | 0     | 0.38  | 0.33  | 0.39  | 0.67  |
| Adapter molecule crk                                                       | 34               | 2                | 1                                         | 0     | 2     | 1     | 0     | 1.45  | 1.43  | 1.48  | 1.48  |
| Mitochondrial import receptor subunit TOM22 homolog                       | 16               | 1                | 2                                         | 2     | 6     | 10    | 5     | 13.63 | 15.86 | 13.87 | 6.67  |
| Vitamin D-binding protein                                                  | 54               | 1                | 1                                         | 0     | 1     | 2     | 1     | 0.93  | 0.94  | 0.95  | 0.03  |
| Adenyl cyclase-associated protein 1                                        | 52               | 1                | 2                                         | 0     | 0     | 2     | 1     | 0.97  | 0.98  | 0.98  | 0.97  |
| 3-ketoacyl-CoA thiolase, mitochondrial                                     | 42               | 71               | 57                                         | 55    | 56    | 57    | 66    | 71.35 | 9.98  | 72.71 | 8.76  |
| Transcriptional activator protein Pur-alpha                                | 35               | 3                | 2                                         | 0     | 3     | 4     | 2     | 3.33  | 3.00  | 3.40  | 0.79  |
| Kinesin-1 heavy chain                                                      | 110              | 2                | 2                                         | 0     | 1     | 2     | 1     | 0.60  | 0.52  | 0.62  | 0.26  |
| Cullin-3                                                                  | 89               | 0                | 0                                         | 1     | 2     | 2     | 1     | 0.56  | 0.57  | 0.57  | 0.56  |
| Heterogeneous nuclear ribonucleoprotein H                                  | 49               | 0                | 0                                         | 1     | 2     | 2     | 1     | 1.02  | 1.04  | 1.04  | 1.03  |
| Protein disulfide-isomerase                                                | 57               | 46               | 55                                         | 45    | 36    | 36    | 34    | 36.40 | 3.72  | 37.25 | 9.82  |
| Enoyl-CoA hydratase, mitochondrial                                         | 31               | 16               | 19                                         | 22    | 17    | 19    | 20    | 30.10 | 4.52  | 30.80 | 3.22  |
| Actin-related protein 3                                                    | 47               | 0                | 2                                         | 1     | 0     | 2     | 1     | 1.06  | 1.09  | 1.09  | 1.07  |
| Ras-related protein Rab-5C                                                | 23               | 1                | 3                                         | 2     | 2     | 4     | 2     | 5.05  | 3.46  | 5.17  | 1.21  |
| Peptidyl-tRNA hydrolase 2, mitochondrial                                   | 20               | 2                | 3                                         | 4     | 6     | 4     | 1     | 8.21  | 2.91  | 8.42  | 6.27  |
| NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial             | 51               | 1                | 2                                         | 1     | 1     | 2     | 1     | 1.30  | 0.61  | 1.33  | 0.56  |
| 26S protease regulatory subunit 6B                                          | 47               | 1                | 3                                         | 3     | 3     | 2     | 0     | 2.09  | 1.01  | 2.14  | 1.85  |
| Heterogeneous nuclear ribonucleoprotein M                                  | 78               | 3                | 2                                         | 2     | 5     | 4     | 2     | 1.90  | 0.69  | 1.95  | 1.10  |
| Secernin-2                                                                | 47               | 2                | 2                                         | 1     | 2     | 2     | 1     | 1.75  | 0.64  | 1.80  | 0.59  |
| Cytochrome P450 3A13                                                       | 57               | 2                | 3                                         | 1     | 1     | 2     | 1     | 1.44  | 0.53  | 1.49  | 1.01  |
| UPF0465 protein C5orf33 homolog                                            | 51               | 2                | 4                                         | 1     | 0     | 2     | 1     | 1.61  | 0.59  | 1.66  | 2.05  |
| Protein                                                                 | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 | Value 8 | Value 9 | Value 10 | Value 11 |
|------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|
| Aminoacyl tRNA synthetase complex-interacting multifunctional protein 2 | 35      | 0       | 1       | 2       | 2       | 2       | 1       | 0       | 1.40    | 1.37      | 1.44      |
| Peptidyl-prolyl cis-trans isomerase FKBP4                               | 52      | 0       | 1       | 2       | 2       | 1       | 0       | 0.94    | 0.92    | 0.97      | 0.97      |
| Septin-2                                                                | 42      | 3       | 2       | 1       | 3       | 4       | 3       | 3.16    | 1.88    | 3.25      | 0.74      |
| Transmembrane emp24 domain-containing protein 10                        | 25      | 5       | 7       | 6       | 8       | 12      | 8       | 15.23   | 8.06    | 15.68     | 1.42      |
| Major vault protein                                                     | 96      | 6       | 3       | 5       | 11      | 6       | 3       | 2.91    | 0.37    | 2.99      | 2.40      |
| Eukaryotic translation initiation factor 3 subunit B                   | 91      | 5       | 4       | 1       | 3       | 2       | 1       | 1.44    | 1.11    | 1.48      | 0.83      |
| 3,2-trans-enzyme-CoA isomerase, mitochondrial                          | 32      | 6       | 9       | 7       | 8       | 10      | 6       | 11.84   | 3.61    | 12.20     | 2.16      |
| Ras GTase-activating-like protein IQGAP1                                | 189     | 4       | 7       | 4       | 3       | 3       | 1       | 0.95    | 0.12    | 0.98      | 0.81      |
| Heat shock protein 75 kDa, mitochondrial                               | 80      | 7       | 10      | 6       | 6       | 7       | 4       | 4.10    | 0.46    | 4.23      | 1.87      |
| T-complex protein 1 subunit theta                                       | 60      | 2       | 4       | 2       | 1       | 2       | 1       | 1.64    | 0.05    | 1.69      | 1.44      |
| OCIA domain-containing protein 1                                        | 28      | 3       | 4       | 2       | 2       | 4       | 3       | 5.30    | 1.94    | 5.48      | 1.81      |
| Lysosome membrane protein 2                                             | 54      | 2       | 0       | 0       | 2       | 2       | 2       | 1.23    | 1.07    | 1.27      | 1.10      |
| Ras-related protein Rab-10                                             | 23      | 1       | 0       | 0       | 1       | 2       | 2       | 2.18    | 2.22    | 2.26      | 2.29      |
| 40S ribosomal protein S25                                               | 14      | 3       | 1       | 0       | 2       | 0       | 0       | 3.47    | 6.02    | 3.59      | 3.59      |
| V-type proton ATPase subunit E 1                                       | 26      | 2       | 1       | 0       | 1       | 1       | 1       | 1.90    | 1.87    | 1.97      | 0.05      |
| Cytochrome c oxidase subunit 2                                         | 26      | 6       | 6       | 6       | 8       | 12      | 10      | 15.26   | 7.16    | 15.78     | 4.33      |
| Ras suppressor protein 1                                                | 32      | 2       | 1       | 0       | 1       | 0       | 0       | 1.01    | 1.76    | 1.05      | 0.91      |
| SWI/SNF complex subunit SMARCC2                                        | 133     | 12      | 16      | 19      | 19      | 15      | 15      | 19.76   | 1.87    | 20.44     | 6.30      |
| Glycine dehydrogenase [decarboxylating], mitochondrial                | 113     | 3       | 3       | 3       | 4       | 2       | 1       | 1.15    | 0.22    | 1.19      | 0.67      |
| Histone H2A type 2-A                                                   | 14      | 3       | 2       | 0       | 1       | 0       | 0       | 3.47    | 6.02    | 3.59      | 3.60      |
| Sodium-coupled neutral amino acid transporter 3                        | 56      | 2       | 2       | 0       | 0       | 1       | 1       | 0.88    | 0.87    | 0.91      | 0.90      |
| Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial   | 58      | 26      | 30      | 22      | 25      | 22      | 15      | 19.76   | 1.87    | 20.44     | 6.30      |
| 60S ribosomal protein L28                                               | 16      | 2       | 2       | 0       | 0       | 0       | 0       | 2.03    | 3.51    | 2.10      | 3.63      |
| Probable ATP-dependent RNA helicase DDX5                                | 69      | 2       | 2       | 0       | 0       | 0       | 0       | 0.47    | 0.81    | 0.49      | 0.84      |
| 60S ribosomal protein L7a                                               | 30      | 7       | 8       | 4       | 4       | 7       | 6       | 9.87    | 3.04    | 10.22     | 3.37      |
| 60S ribosomal protein L5                                                | 34      | 3       | 6       | 7       | 6       | 7       | 5       | 8.21    | 3.41    | 8.50      | 0.65      |
| Acyl-protein thioesterase 2                                             | 25      | 2       | 1       | 1       | 2       | 3       | 3       | 3.97    | 2.10    | 4.12      | 2.16      |
| Ubiquitin-like modifier-activating enzyme 1                            | 118     | 12      | 16      | 19      | 19      | 15      | 11      | 6.38    | 1.38    | 6.61      | 1.60      |
| Long-chain specific acyl-CoA dehydrogenase, mitochondrial              | 48      | 7       | 7       | 7       | 8       | 6       | 5       | 6.81    | 0.39    | 7.07      | 1.46      |
| Protein Name                                                                 | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 | Value 8 | Value 9 | Value 10 | Value 11 | Value 12 |
|----------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|
| Alanyl-tRNA synthetase, cytoplasmic                                         | 107     | 8       | 7       | 7       | 9       | 4       | 3       | 2.89    | 0.89    | 3.00      | 1.40      | 1.04      |
| 39S ribosomal protein L10, mitochondrial                                    | 29      | 2       | 2       | 1       | 1       | 1       | 1       | 2.25    | 0.95    | 2.34      | 0.98      | 1.04      |
| LIM and SH3 domain protein 1                                               | 30      | 1       | 2       | 1       | 0       | 2       | 2       | 2.20    | 1.03    | 2.29      | 1.98      | 1.04      |
| Peroxisomal 2,4-dienoyl-CoA reductase                                       | 31      | 6       | 5       | 5       | 6       | 6       | 6       | 9.00    | 1.14    | 9.35      | 1.09      | 1.04      |
| Ribosome-recycling factor, mitochondrial                                   | 29      | 2       | 0       | 1       | 3       | 0       | 0       | 1.67    | 1.68    | 1.73      | 3.00      | 1.04      |
| 60S ribosomal protein L24                                                  | 18      | 3       | 3       | 3       | 3       | 4       | 4       | 9.14    | 1.90    | 9.49      | 1.92      | 1.04      |
| Tetratricopeptide repeat protein 38                                         | 52      | 0       | 0       | 1       | 1       | 2       | 2       | 0.96    | 0.98    | 1.00      | 1.01      | 1.04      |
| Aldo-keto reductase family 1 member C13                                     | 37      | 12      | 13      | 11      | 10      | 9       | 9       | 14.13   | 1.69    | 14.70     | 2.62      | 1.04      |
| Proteasome activator complex subunit 1                                     | 29      | 2       | 5       | 7       | 5       | 3       | 2       | 6.72    | 4.28    | 6.99      | 2.91      | 1.04      |
| 2-oxoglutarate dehydrogenase, mitochondrial                                 | 116     | 11      | 17      | 17      | 14      | 14      | 14.59   | 3.82    | 3.82    | 0.69      | 1.04      |           |
| Aspartate aminotransferase, cytoplasmic                                     | 46      | 15      | 10      | 13      | 17      | 13      | 14      | 14.59   | 1.19    | 15.19     | 3.88      | 1.04      |
| Nucleolin                                                                  | 77      | 4       | 5       | 4       | 3       | 2       | 2       | 2.11    | 0.68    | 2.20      | 0.97      | 1.04      |
| Short-chain specific acyl-CoA dehydrogenase, mitochondrial                 | 45      | 4       | 5       | 5       | 4       | 3       | 3       | 4.35    | 0.96    | 4.52      | 1.04      | 1.04      |
| MOSC domain-containing protein 2, mitochondrial                            | 38      | 9       | 8       | 8       | 8       | 9       | 9       | 10.77   | 0.73    | 11.22     | 1.09      | 1.04      |
| Glutathione S-transferase Mu 1                                             | 26      | 46      | 44      | 52      | 50      | 43      | 47      | 88.67   | 6.09    | 92.37     | 6.24      | 1.04      |
| Peptidyl-prolyl cis-trans isomerase F, mitochondrial                      | 22      | 3       | 4       | 2       | 1       | 0       | 0       | 3.66    | 3.37    | 3.81      | 4.77      | 1.04      |
| Acyl-protein thioesterase 1                                               | 25      | 6       | 6       | 4       | 3       | 5       | 6       | 9.84    | 2.04    | 10.25     | 3.67      | 1.04      |
| Acyl-coenzyme A thioesterase 12                                           | 62      | 1       | 0       | 1       | 2       | 0       | 0       | 0.52    | 0.45    | 0.54      | 0.94      | 1.04      |
| Constitutive coactivator of PPAR-gamma-like protein 1                      | 122     | 0       | 2       | 3       | 3       | 1       | 3       | 0.81    | 0.70    | 0.84      | 0.44      | 1.04      |
| Histidine triad nucleotide-binding protein 1                              | 14      | 3       | 3       | 3       | 3       | 0       | 0       | 6.89    | 5.97    | 7.19      | 6.22      | 1.04      |
| Adenylate kinase isoenzyme 4, mitochondrial                                | 25      | 4       | 2       | 2       | 3       | 3       | 4       | 5.91    | 1.99    | 6.16      | 2.20      | 1.04      |
| Cathepsin D                                                                | 45      | 8       | 7       | 5       | 5       | 2       | 3       | 5.41    | 3.19    | 5.64      | 2.16      | 1.04      |
| 40S ribosomal protein S15                                                  | 17      | 4       | 4       | 5       | 5       | 0       | 0       | 8.50    | 7.48    | 8.88      | 7.83      | 1.04      |
| WD repeat-containing protein 1                                             | 66      | 1       | 2       | 1       | 0       | 0       | 0       | 0.49    | 0.42    | 0.51      | 0.88      | 1.04      |
| Myosin light polypeptide 6                                                 | 17      | 1       | 2       | 1       | 0       | 0       | 0       | 1.89    | 1.64    | 1.97      | 3.42      | 1.04      |
| Magnesium-dependent phosphatase 1                                         | 19      | 1       | 2       | 1       | 0       | 0       | 0       | 1.69    | 1.47    | 1.77      | 3.06      | 1.04      |
| Thiopurine S-methyltransferase                                            | 28      | 3       | 4       | 5       | 3       | 5       | 6       | 7.62    | 2.10    | 7.96      | 3.03      | 1.04      |
| NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 12             | 17      | 1       | 0       | 2       | 3       | 0       | 0       | 2.83    | 2.81    | 2.96      | 5.12      | 1.04      |
| Gene Name                                                                 | Rows  | Columns |
|--------------------------------------------------------------------------|-------|---------|
| Tropomyosin alpha-3 chain                                                | 33    | 2       |
| Tubulin alpha-1C chain                                                  | 50    | 13      |
| Histidine triad nucleotide-binding protein 2, mitochondrial             | 17    | 1       |
| Solute carrier family 2, facilitated glucose transporter member 2       | 57    | 3       |
| Ras-related C3 botulinum toxin substrate 1                              | 21    | 2       |
| 4-trimethylamino butyraldehyde dehydrogenase                           | 54    | 4       |
| Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase                        | 45    | 29      |
| 4-hydroxyphenylpyruvate dioxygenase                                      | 45    | 29      |
| T-complex protein 1 subunit delta                                       | 58    | 3       |
| Endoplasmic reticulum resident protein 29                               | 29    | 3       |
| Fibronectin                                                             | 272   | 9       |
| Tubulin beta-2A chain                                                  | 50    | 3       |
| 25-hydroxycholesterol 7-alpha-hydroxylase                               | 58    | 0       |
| Peroxiredoxin-1                                                         | 22    | 39      |
| Cytoskeleton-associated protein 5                                        | 226   | 0       |
| Mitochondrial glutamate carrier 1                                       | 35    | 5       |
| Microsomal triglyceride transfer protein large subunit                  | 99    | 24      |
| Estradiol 17-beta-dehydrogenase 11                                      | 33    | 2       |
| Translational activator of cytochrome c oxidase 1                       | 32    | 1       |
| Hepatoma-derived growth factor                                           | 26    | 1       |
| 26S proteasome non-ATP-ase regulatory subunit 7                         | 37    | 2       |
| Cell division control protein 42 homolog                                | 21    | 4       |
| Transketolase                                                           | 68    | 20      |
| 1,5-anhydro-D-fructose reductase                                        | 34    | 2       |
| Peroxisomal sarcosine oxidase                                           | 44    | 3       |
| Calcium-binding protein p22                                              | 22    | 1       |
| Phosphomannomutase 2                                                    | 28    | 3       |
| Malonyl-CoA decarboxylase, mitochondrial                                | 55    | 0       |
| Protein Name                                    | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 | Value 8 | Value 9 | Value 10 | Value 11 | Value 12 |
|------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|----------|
| Poly [ADP-ribose] polymerase 9                  | 97      | 0       | 0       | 2       | 1       | 1       | 2       | 0.50    | 0.49    | 0.53      | 0.54      | 1.06     |
| Mitochondrial antiviral-signaling protein       | 53      | 2       | 1       | 3       | 2       | 0       | 2       | 1.51    | 1.38    | 1.61      | 0.57      | 1.06     |
| Phosphoglycerate kinase 1                       | 45      | 17      | 24      | 23      | 23      | 31      | 26      | 25.98   | 8.48    | 27.66     | 2.48      | 1.06     |
| Proteasome subunit alpha type-4                 | 29      | 2       | 2       | 3       | 1       | 0       | 2       | 2.77    | 2.53    | 2.95      | 1.05      | 1.06     |
| Urocate hydratase                               | 75      | 28      | 29      | 21      | 25      | 22      | 19      | 15.50   | 2.43    | 16.52     | 3.07      | 1.07     |
| Muringoglobin-2                                  | 162     | 3       | 3       | 5       | 1       | 1       | 5       | 0.90    | 0.58    | 0.96       | 0.66      | 1.07     |
| Protein disulfide-isomerase A4                  | 72      | 15      | 17      | 12      | 9       | 13      | 15      | 9.10    | 1.09    | 9.72       | 3.01      | 1.07     |
| Succinate-semialdehyde dehydrogenase, mitochondrial | 56      | 1       | 1       | 2       | 0       | 1       | 3       | 1.16    | 0.47    | 1.24       | 1.44      | 1.07     |
| Heat shock cognate 71 kDa protein               | 71      | 37      | 51      | 30      | 34      | 45      | 31      | 25.96   | 6.08    | 27.75      | 7.31      | 1.07     |
| Delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial | 62      | 25      | 24      | 27      | 24      | 26      | 32      | 20.61   | 0.90    | 22.05      | 4.46      | 1.07     |
| Proline synthetase co-transcribed bacterial homolog protein | 30      | 8       | 7       | 8       | 12      | 11      | 9       | 14.81   | 3.37    | 15.89      | 4.18      | 1.07     |
| 14-3-3 protein zeta/delta                       | 28      | 7       | 7       | 5       | 10      | 11      | 7       | 13.58   | 5.88    | 14.57      | 2.94      | 1.07     |
| Enoyl-CoA hydratase domain-containing protein 3, mitochondrial | 32      | 4       | 9       | 10      | 11      | 9       | 4       | 11.79   | 4.95    | 12.67      | 5.50      | 1.08     |
| ATP synthase subunit d, mitochondrial            | 19      | 17      | 17      | 16      | 18      | 22      | 22      | 47.61   | 10.03   | 51.22      | 8.57      | 1.08     |
| Pyruvate kinase isozymes M1/M2                  | 58      | 0       | 0       | 2       | 1       | 0       | 1       | 0.55    | 0.95    | 0.59       | 0.51      | 1.08     |
| Proteasome subunit beta type-4                  | 29      | 9       | 8       | 8       | 11      | 9       | 8       | 14.70   | 1.36    | 15.83      | 2.82      | 1.08     |
| 3-hydroxisobutyrate dehydrogenase, mitochondrial | 35      | 7       | 8       | 11      | 12      | 9       | 8       | 12.62   | 2.68    | 13.59      | 3.16      | 1.08     |
| Histidine ammonia-lyase                         | 72      | 14      | 17      | 12      | 16      | 20      | 15      | 10.53   | 3.23    | 11.34      | 0.48      | 1.08     |
| Succinyl-CoA ligase [ADP-forming] subunit beta, mitochondrial | 50      | 12      | 7       | 6       | 9       | 10      | 13      | 9.20    | 3.09    | 9.93       | 3.41      | 1.08     |
| Sorbitol dehydrogenase                         | 38      | 19      | 23      | 24      | 24      | 22      | 21      | 28.01   | 3.21    | 30.45      | 1.31      | 1.09     |
| NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial | 80      | 6       | 9       | 8       | 6       | 7       | 7       | 4.30    | 0.58    | 4.68       | 0.95      | 1.09     |
| Aconitate hydratase, mitochondrial              | 85      | 19      | 24      | 18      | 28      | 31      | 20      | 13.20   | 4.69    | 14.39      | 2.08      | 1.09     |
| Glyoxylate reductase/hydroxyacetone reductase   | 35      | 7       | 10      | 14      | 7       | 6       | 11      | 12.53   | 5.73    | 13.67      | 3.31      | 1.09     |
| Cysteine-rich protein 2                         | 23      | 6       | 6       | 4       | 6       | 7       | 6       | 12.17   | 3.63    | 13.33      | 0.36      | 1.09     |
| Bleomycin hydrolase                            | 53      | 1       | 0       | 2       | 0       | 0       | 3       | 0.91    | 0.90    | 0.99       | 1.72      | 1.10     |
| Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1 | 69      | 11      | 16      | 16      | 12      | 11      | 12      | 8.99    | 1.83    | 9.86       | 1.59      | 1.10     |
| Protein Description | Values | Values | Values | Values | Values | Values | Values | Values | Values | Values | Values | Values | Values |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Liver carboxylesterase | 63     | 26     | 25     | 25     | 26     | 22     | 26     | 18.95  | 1.14   | 20.82  | 0.89   | 1.10   |
| Succinyl-CoA ligase [GDP-forming] subunit alpha, mitochondrial | 36     | 11     | 9      | 11     | 14     | 13     | 14     | 15.96  | 2.13   | 17.54  | 4.32   |
| Kynurenine/alpha-aminoadipate aminotransferase, mitochondrial | 48     | 5      | 8      | 4      | 4      | 6      | 4      | 5.14   | 1.20   | 5.66   | 2.37   |
| Isocitrate dehydrogenase [NADP], mitochondrial | 51     | 7      | 5      | 4      | 6      | 6      | 7      | 5.48   | 1.53   | 6.03   | 1.15   |
| Heat shock 70 kDa protein 4 | 94     | 7      | 9      | 8      | 5      | 4      | 6      | 3.29   | 0.99   | 3.62   | 1.10   |
| Tetratricopeptide repeat protein 36 | 20     | 7      | 6      | 3      | 6      | 5      | 4      | 12.31  | 4.94   | 13.57  | 2.63   |
| Phosphoglycerate mutase 1 | 29     | 10     | 9      | 19     | 14     | 11     | 19     | 22.48  | 7.77   | 24.80  | 9.46   |
| ATP synthase subunit beta, mitochondrial | 56     | 79     | 88     | 71     | 66     | 74     | 84     | 65.54  | 4.30   | 72.46  | 11.46  |
| 14-3-3 protein gamma | 28     | 6      | 4      | 6      | 8      | 4      | 5      | 9.32   | 1.76   | 10.32  | 3.67   |
| Transcription factor BTF3 homolog 4 | 17     | 1      | 1      | 2      | 7      | 8      | 4      | 10.83  | 11.49  | 12.02  | 8.87   |
| Carnitine O-palmitoyltransferase 2, mitochondrial | 74     | 10     | 12     | 13     | 11     | 8      | 10     | 6.83   | 1.46   | 7.59   | 0.53   |
| Glutamate dehydrogenase 1, mitochondrial | 61     | 59     | 53     | 49     | 44     | 36     | 56     | 38.52  | 8.48   | 42.79  | 6.12   |
| Peptide methionine sulfoxide reductase | 26     | 12     | 11     | 9      | 12     | 7      | 7      | 17.58  | 4.45   | 19.56  | 4.75   |
| ATP synthase subunit b, mitochondrial | 29     | 22     | 25     | 21     | 16     | 17     | 23     | 33.81  | 3.58   | 37.64  | 8.62   |
| Maleylacetacetate isomerase | 24     | 48     | 48     | 43     | 52     | 46     | 47     | 93.56  | 6.84   | 104.3  | 4.19   |
| Retinol dehydrogenase 7 | 36     | 8      | 7      | 8      | 10     | 11     | 12     | 12.34  | 2.81   | 13.77  | 3.89   |
| Carboxyl reductase family member 4 | 25     | 8      | 5      | 2      | 5      | 3      | 4      | 8.50   | 6.22   | 9.52   | 0.94   |
| Medium-chain specific acyl-CoA dehydrogenase, mitochondrial | 46     | 8      | 7      | 12     | 14     | 7      | 8      | 9.56   | 2.54   | 10.71  | 4.04   |
| Isovaleryl-CoA dehydrogenase, mitochondrial | 46     | 6      | 5      | 8      | 6      | 2      | 6      | 5.63   | 3.11   | 6.30   | 0.73   |
| Major urinary protein 3 | 21     | 4      | 6      | 4      | 9      | 13     | 8      | 16.65  | 12.92  | 18.67  | 3.78   |
| Amine oxidase [flavin-containing] B | 59     | 7      | 5      | 7      | 5      | 2      | 7      | 4.39   | 2.31   | 4.93   | 1.15   |
| Cytochrome c1, heme protein, mitochondrial | 35     | 5      | 10     | 6      | 5      | 12     | 10     | 10.88  | 5.75   | 12.21  | 4.37   |
| Eukaryotic translation initiation factor 3 subunit A | 162    | 8      | 7      | 11     | 9      | 9      | 14     | 2.83   | 0.42   | 3.17   | 1.23   |
| Membrane-associated progesterone receptor component 1 | 22     | 12     | 15     | 9      | 10     | 14     | 13     | 26.18  | 6.45   | 29.44  | 5.93   |
| Trifunctional enzyme subunit beta, mitochondrial | 51     | 20     | 19     | 9      | 16     | 16     | 14     | 14.50  | 5.47   | 16.33  | 2.20   |
| Filamin-B | 278    | 20     | 19     | 21     | 26     | 19     | 20     | 3.53   | 0.07   | 3.98   | 0.65   |
| Aldehyde dehydrogenase X, mitochondrial | 58     | 3      | 4      | 5      | 3      | 5      | 7      | 3.68   | 1.02   | 4.14   | 1.97   |
| Protein Name                                      | IP   | T1   | T2   | T3   | T4   | T5   | T6   | T7   | T8   | T9   | T10  | T11  | 1.13 |
|--------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Mitochondrial inner membrane protein             | 84   | 7    | 8    | 7    | 8    | 8    | 8    | 4.30 | 0.48 | 4.87 | 0.13 | 1.13 |
| Pyridoxine-5'-phosphate oxidase                  | 30   | 2    | 4    | 4    | 5    | 4    | 2    | 5.47 | 1.94 | 6.20 | 2.47 | 1.13 |
| Probable N-acetyltransferase CML2                | 26   | 8    | 7    | 9    | 10   | 6    | 8    | 14.43| 2.44 | 16.37| 2.89 | 1.13 |
| Succinyl-CoA ligase [GDP-forming] subunit beta, mitochondrial | 47   | 10   | 13   | 12   | 11   | 11   | 12   | 11.50| 1.00 | 13.05| 1.14 | 1.13 |
| S-adenosylmethionine synthetase isoform type-1   | 44   | 11   | 17   | 10   | 13   | 18   | 13   | 14.63| 5.43 | 16.62| 2.48 | 1.14 |
| 60S ribosomal protein L10a                        | 25   | 5    | 12   | 10   | 9    | 15   | 12   | 19.82| 10.45| 22.52| 3.87 | 1.14 |
| Epoxide hydrolase 2                               | 63   | 27   | 36   | 37   | 31   | 35   | 41   | 25.75| 4.25 | 29.26| 4.80 | 1.14 |
| Apolipoprotein O-like                             | 29   | 3    | 5    | 1    | 2    | 5    | 3    | 5.16 | 3.57 | 5.87 | 2.63 | 1.14 |
| Importin subunit beta-1                          | 97   | 2    | 1    | 2    | 6    | 5    | 3    | 1.54 | 0.94 | 1.75 | 1.30 | 1.14 |
| UDP-glucuronosyltransferase 1-1                   | 60   | 5    | 2    | 5    | 6    | 2    | 5    | 3.25 | 1.34 | 3.70 | 1.78 | 1.14 |
| 14-3-3 protein epsilon                            | 29   | 13   | 16   | 16   | 13   | 13   | 14   | 23.68| 2.40 | 26.98| 1.34 | 1.14 |
| 14-3-3 protein theta                              | 28   | 3    | 2    | 3    | 5    | 4    | 4    | 5.87 | 1.22 | 6.70 | 2.78 | 1.14 |
| Dimethylamine monoxygenase [N-oxide-forming] 5    | 60   | 10   | 9    | 14   | 15   | 8    | 11   | 8.69 | 2.24 | 9.93 | 2.52 | 1.14 |
| Alcohol dehydrogenase class-3                    | 40   | 6    | 7    | 5    | 7    | 8    | 7    | 7.82 | 2.16 | 8.94 | 0.24 | 1.14 |
| Peroxiredoxin-2                                  | 22   | 5    | 6    | 10   | 11   | 5    | 5    | 14.79| 6.02 | 16.94| 7.14 | 1.15 |
| Estradiol 17 beta-dehydrogenase 5                 | 37   | 41   | 38   | 43   | 44   | 38   | 52   | 53.95| 1.60 | 61.84| 11.32| 1.15 |
| Quinone oxidoreductase                           | 35   | 5    | 6    | 8    | 10   | 6    | 5    | 8.87 | 1.99 | 10.17| 3.67 | 1.15 |
| Eukaryotic translation initiation factor 3 subunit| 43   | 4    | 5    | 3    | 2    | 3    | 4    | 3.81 | 0.63 | 4.36 | 1.82 | 1.15 |
| 60S acidic ribosomal protein P0                   | 34   | 15   | 16   | 14   | 10   | 13   | 18.72| 3.34 | 21.51| 1.91 | 1.15 |
| Eukaryotic translation initiation factor 5B       | 138  | 4    | 7    | 5    | 7    | 8    | 5    | 2.03 | 0.82 | 2.34 | 0.37 | 1.15 |
| Ubiquitin thioesterase OTUB1                      | 31   | 5    | 6    | 1    | 3    | 2    | 0    | 4.23 | 3.25 | 4.87 | 4.87 | 1.15 |
| UDP-glucuronosyltransferase 2B5                   | 61   | 6    | 6    | 9    | 6    | 5    | 10   | 5.34 | 1.52 | 6.18 | 2.13 | 1.16 |
| NAD(P) transhydrogenase, mitochondrial            | 114  | 10   | 10   | 8    | 10   | 8    | 9    | 3.73 | 0.48 | 4.33 | 0.15 | 1.16 |
| ATP-binding cassette subfamily A member 6         | 183  | 8    | 10   | 13   | 10   | 7    | 11   | 2.49 | 0.79 | 2.89 | 0.24 | 1.16 |
| Nucleoside diphosphate kinase A                   | 17   | 6    | 3    | 3    | 6    | 0    | 1    | 8.54 | 8.58 | 9.91 | 7.37 | 1.16 |
| ATP-dependent RNA helicase DDX1                   | 83   | 2    | 3    | 4    | 3    | 3    | 4    | 1.77 | 0.57 | 2.06 | 0.42 | 1.16 |
| 3'(2'),5'-bisphosphate nucleotidase 1             | 33   | 3    | 4    | 4    | 3    | 2    | 3    | 4.44 | 1.35 | 5.15 | 0.83 | 1.16 |
| ATP synthase subunit gamma, mitochondrial         | 33   | 11   | 13   | 12   | 15   | 9    | 10   | 16.35| 0.98 | 19.02| 4.29 | 1.16 |
| Very long-chain acyl-CoA synthetase               | 70   | 20   | 25   | 25   | 24   | 15   | 18   | 13.97| 3.08 | 16.25| 2.37 | 1.16 |
| Protein Name                                                                 | 97  | 31  | 32  | 30  | 29  | 33  | 44  | 15.89  | 1.31  | 18.51  | 4.73  | 1.16  |
|-----------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|---------|------|---------|------|-------|
| Dimethylglycine dehydrogenase, mitochondrial                                |     |     |     |     |     |     |     |         |      |         |      |       |
| Heterogeneous nuclear ribonucleoprotein K                                  | 51  | 4   | 4   | 5   | 7   | 7   | 7   | 5.17    | 1.64  | 6.03    | 1.81  | 1.17  |
| Alpha-1-antitrypsin 1-3                                                    | 46  | 7   | 8   | 9   | 9   | 9   | 11  | 8.91     | 1.34  | 10.40   | 1.98  | 1.17  |
| NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 8               | 20  | 4   | 5   | 6   | 6   | 6   | 7   | 13.12    | 2.98  | 15.37   | 2.94  | 1.17  |
| 3 beta-hydroxysteroid dehydrogenase/Delta 5--4-isomerase type 3            | 42  | 2   | 1   | 1   | 4   | 4   | 3   | 2.77    | 1.90  | 3.25    | 1.85  | 1.17  |
| Melanoma inhibitory activity protein 3                                      | 214 | 5   | 7   | 9   | 6   | 3   | 6   | 1.29     | 0.66  | 1.51    | 0.12  | 1.17  |
| Heterogeneous nuclear ribonucleoproteins A2/B1                              | 37  | 7   | 3   | 6   | 11  | 10  | 12  | 10.25    | 3.15  | 12.04   | 6.97  | 1.17  |
| Polyphemus tract-binding protein 1                                           | 56  | 4   | 4   | 3   | 3   | 1   | 2   | 2.32     | 1.30  | 2.72    | 0.86  | 1.18  |
| Lactoylglutathione lyase                                                    | 21  | 19  | 19  | 20  | 23  | 22  | 27  | 47.65    | 5.05  | 56.11   | 11.13 | 1.18  |
| Sideroflexin-2                                                              | 36  | 3   | 1   | 2   | 3   | 3   | 5   | 3.65     | 0.87  | 4.30    | 2.96  | 1.18  |
| Glutathione S-transferase omega-1                                            | 27  | 2   | 3   | 4   | 3   | 2   | 3   | 4.82     | 1.96  | 5.68    | 0.15  | 1.18  |
| S-methyl-5′-thioadenosine phosphorylase                                      | 31  | 3   | 2   | 3   | 3   | 2   | 4   | 4.21     | 0.80  | 4.97    | 1.78  | 1.18  |
| Receptor expression-enhancing protein 6                                     | 22  | 2   | 5   | 3   | 2   | 2   | 1   | 5.19     | 1.15  | 6.14    | 4.72  | 1.18  |
| Catenin beta-1                                                              | 85  | 4   | 1   | 1   | 5   | 2   | 2   | 1.35     | 0.87  | 1.60    | 1.22  | 1.18  |
| Mitochondrial carrier homolog 2                                             | 33  | 4   | 2   | 3   | 4   | 1   | 3   | 3.93     | 2.21  | 4.64    | 1.53  | 1.18  |
| Citrate synthase, mitochondrial                                            | 52  | 5   | 7   | 5   | 3   | 5   | 7   | 4.73     | 0.16  | 5.59    | 2.34  | 1.18  |
| Tryptophan 2,3-dioxygenase                                                  | 48  | 2   | 2   | 6   | 3   | 1   | 5   | 3.02     | 2.60  | 3.58    | 1.74  | 1.18  |
| Glutathione S-transferase Mu 7                                               | 26  | 2   | 2   | 4   | 3   | 2   | 4   | 5.01     | 2.04  | 5.93    | 2.12  | 1.18  |
| Aspartate aminotransferase, mitochondrial                                   | 47  | 24  | 29  | 19  | 21  | 21  | 23  | 22.32    | 2.78  | 26.44   | 4.34  | 1.18  |
| Proteasome subunit beta type-3                                              | 23  | 2   | 5   | 7   | 4   | 6   | 8   | 10.69    | 5.63  | 12.67   | 5.02  | 1.18  |
| 26S proteasome non-ATPase regulatory subunit 1                              | 106 | 4   | 3   | 2   | 1   | 2   | 5   | 1.23     | 0.52  | 1.46    | 1.01  | 1.19  |
| C-1-tetrahydrofolate synthase, cytoplasmal                                  | 101 | 20  | 23  | 18  | 23  | 18  | 18  | 9.08     | 0.56  | 10.77   | 1.19  | 1.19  |
| Uricase                                                                     | 35  | 27  | 22  | 22  | 29  | 23  | 31  | 33.70    | 3.74  | 39.99   | 7.65  | 1.19  |
| Microtubule-associated protein 4                                             | 117 | 10  | 11  | 7   | 12  | 9   | 7   | 3.65     | 0.69  | 4.35    | 1.06  | 1.19  |
| Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 48 kDa subunit| 49  | 2   | 4   | 4   | 3   | 1   | 1   | 2.31     | 1.46  | 2.75    | 1.54  | 1.19  |
| ADP-ribosylation factor 6                                                   | 20  | 5   | 4   | 2   | 3   | 0   | 1   | 5.65     | 6.13  | 6.75    | 3.78  | 1.19  |
| Dynamin-like 120 kDa protein, mitochondrial                                 | 111 | 2   | 2   | 1   | 3   | 3   | 2   | 0.90     | 0.47  | 1.07    | 0.25  | 1.20  |
| Protein Name | Gene Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--------------|-----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| Fatty-acid amide hydrolase | | 63 | 2 | 4 | 1 | 1 | 3 | 2 | 1.58 | 0.83 | 1.89 | 1.21 | 1.20 |
| Prohibitin-2 | | 33 | 14 | 10 | 12 | 16 | 8 | 13 | 16.79 | 4.17 | 20.13 | 4.59 | 1.20 |
| ATP-dependent RNA helicase DDX3X | | 73 | 3 | 1 | 2 | 3 | 2 | 4 | 1.57 | 0.38 | 1.88 | 1.11 | 1.20 |
| Stress-70 protein, mitochondrial | | 74 | 31 | 31 | 24 | 37 | 34 | 35 | 19.77 | 3.99 | 23.71 | 2.27 | 1.20 |
| Serum albumin | | 69 | 27 | 26 | 31 | 37 | 21 | 28 | 18.68 | 3.00 | 22.43 | 4.09 | 1.20 |
| Delta-aminolevulinic acid dehydratase | | 36 | 5 | 5 | 5 | 10 | 8 | 6 | 8.24 | 2.67 | 9.91 | 3.62 | 1.20 |
| Phenazine biosynthesis-like domain-containing protein 1 | | 32 | 10 | 14 | 17 | 16 | 11 | 14 | 19.38 | 5.35 | 23.40 | 1.58 | 1.21 |
| Pyruvate carboxylase, mitochondrial | | 130 | 63 | 71 | 52 | 67 | 49 | 53 | 20.64 | 2.54 | 24.96 | 3.12 | 1.21 |
| UMP-CMP kinase | | 22 | 5 | 8 | 9 | 6 | 5 | 8 | 14.07 | 4.76 | 17.06 | 2.94 | 1.21 |
| GTP:AMP phosphotransferase mitochondrial | | 62 | 2 | 2 | 3 | 4 | 1 | 1 | 1.57 | 0.75 | 1.91 | 1.22 | 1.21 |
| Peroxisomal 3,2-trans-enoyl-CoA isomerase | | 43 | 2 | 3 | 3 | 3 | 1 | 1 | 2.26 | 1.08 | 2.75 | 1.32 | 1.22 |
| 40S ribosomal protein S17 | | 16 | 3 | 5 | 3 | 2 | 0 | 0 | 6.03 | 5.22 | 7.34 | 7.92 | 1.22 |
| Apolipoprotein A-I-binding protein | | 31 | 6 | 5 | 3 | 4 | 3 | 5 | 6.33 | 2.68 | 7.70 | 1.07 | 1.22 |
| Eukaryotic translation initiation factor 3 subunit E | | 52 | 1 | 0 | 1 | 5 | 3 | 1 | 1.60 | 1.16 | 1.95 | 2.55 | 1.22 |
| Elongation factor Tu, mitochondrial | | 50 | 5 | 6 | 4 | 3 | 3 | 5 | 3.92 | 0.91 | 4.78 | 1.57 | 1.22 |
| 60S ribosomal protein L18a | | 21 | 0 | 0 | 3 | 3 | 3 | 4 | 4.70 | 4.08 | 5.74 | 5.17 | 1.22 |
| Nuclease-sensitive element-binding protein 1 | | 36 | 3 | 3 | 2 | 2 | 1 | 2 | 2.71 | 1.32 | 3.31 | 0.77 | 1.22 |
| 2,4-dienoyl-CoA reductase, mitochondrial | | 36 | 16 | 21 | 26 | 19 | 18 | 30 | 27.22 | 6.63 | 33.27 | 9.33 | 1.22 |
| Xanthine dehydrogenase/oxidase | | 147 | 6 | 9 | 9 | 5 | 3 | 7 | 1.98 | 0.94 | 2.43 | 0.69 | 1.23 |
| Hydroxyacid oxidase 1 | | 41 | 2 | 2 | 1 | 3 | 2 | 1 | 2.01 | 0.73 | 2.47 | 1.20 | 1.23 |
| High mobility group protein B1 | | 25 | 0 | 2 | 4 | 1 | 2 | 4 | 3.91 | 3.83 | 4.82 | 3.28 | 1.23 |
| Methylcrotonoyl-CoA carboxylase beta chain, mitochondrial | | 61 | 5 | 3 | 3 | 5 | 3 | 5 | 2.95 | 0.90 | 3.64 | 1.01 | 1.23 |
| Purine nucleoside phosphorylase | | 32 | 7 | 14 | 12 | 9 | 8 | 9 | 13.77 | 3.75 | 16.99 | 4.37 | 1.23 |
| Aldehyde dehydrogenase family 8 member A1 | | 54 | 14 | 7 | 5 | 12 | 8 | 13 | 8.20 | 4.13 | 10.13 | 3.21 | 1.24 |
| Dipeptidyl peptidase 3 | | 83 | 1 | 0 | 1 | 3 | 3 | 3 | 1.00 | 0.73 | 1.24 | 1.08 | 1.24 |
| Vinculin | | 117 | 8 | 9 | 8 | 10 | 5 | 6 | 2.92 | 0.65 | 3.62 | 0.83 | 1.24 |
| Selenium-binding protein 2 | | 53 | 0 | 1 | 3 | 4 | 2 | 1 | 1.54 | 1.39 | 1.91 | 1.63 | 1.24 |
| Integrin alpha-1 | | 131 | 1 | 2 | 1 | 1 | 3 | 3 | 0.63 | 0.46 | 0.79 | 0.41 | 1.24 |
| Bifunctional aminoacyl-tRNA synthetase | | 170 | 13 | 15 | 12 | 11 | 12 | 18 | 3.56 | 0.17 | 4.42 | 1.16 | 1.24 |
| Protein Name                                    | Expression Levels |
|------------------------------------------------|-------------------|
| Peroxisomal acyl-coenzyme A oxidase 1          | 75 36 37 32 46 44 51 24.55 4.87 30.50 5.50 1.24 |
| Leucine-rich PPR motif-containing protein, mitochondrial | 157 6 6 8 9 7 10 2.19 0.30 2.72 0.73 1.24 |
| Translocon-associated protein subunit delta     | 19 1 3 4 4 5 5 8.68 5.56 10.80 2.96 1.24 |
| Prostaglandin E synthase 3                      | 19 1 1 2 3 2 2 4.32 1.53 5.38 2.65 1.24 |
| Histone H2B type 1-C/E/G                        | 14 4 5 1 1 0 0 5.77 7.24 7.19 9.52 1.25 |
| Aldose 1-epimerase                              | 38 4 3 3 5 3 4 4.31 0.72 5.38 1.33 1.25 |
| Peroxisomal bifunctional enzyme                 | 78 15 25 22 18 23 29 12.63 2.94 15.78 4.01 1.25 |
| Guanine nucleotide-binding protein subunit beta-2-like 1 | 35 7 7 4 5 4 6 7.01 2.36 8.76 1.46 1.25 |
| Haloacid dehalogenase-like hydrolase domain-containing protein 2 | 29 2 1 1 2 2 3 2.84 1.03 3.55 1.86 1.25 |
| Ubiquinone biosynthesis protein COQ9, mitochondrial | 35 2 3 1 0 2 3 2.35 0.86 2.94 2.55 1.25 |
| UDP-glucuronosyltransferase 3A2                | 60 3 2 1 2 1 2 1 2 1.36 0.93 1.70 0.05 1.25 |
| Proliferation-associated protein 2G4           | 44 0 2 2 0 3 4 1.88 1.76 2.36 2.40 1.25 |
| Formimidoyltransferase-cyclodeaminase           | 59 18 20 12 13 14 20 12.22 2.56 15.33 3.71 1.25 |
| Heat shock protein HSP 90-beta                 | 83 32 39 32 43 31 33 18.74 0.30 23.55 2.54 1.26 |
| Omega-amidase NIT2                             | 31 7 4 4 9 8 10 10.10 3.58 12.69 5.50 1.26 |
| Proteasome subunit beta type-5                  | 29 1 1 5 5 4 6 5.65 3.49 7.10 4.78 1.26 |
| Murinogoglobin-1                                | 165 20 26 16 19 16 18 5.16 0.66 6.49 1.25 1.26 |
| Heterogeneous nuclear ribonucleoprotein A3     | 40 2 5 6 6 6 6 5.75 2.88 7.25 0.84 1.26 |
| UDP-glucose:glycoprotein glucosyltransferase 1  | 176 8 12 14 16 11 12 3.07 0.80 3.86 0.61 1.26 |
| 40S ribosomal protein S9                       | 23 5 3 4 7 5 7 9.99 1.47 12.63 5.27 1.26 |
| Alpha-tocopherol transfer protein              | 32 10 12 10 9 8 13 14.30 1.35 18.14 3.69 1.27 |
| Ribosome-binding protein 1                     | 173 21 32 25 23 18 23 6.04 0.81 7.67 1.44 1.27 |
| Calcium-binding mitochondrial carrier protein  | 74 19 25 23 35 24 21 14.63 2.03 18.58 4.61 1.27 |
| Aralar2                                         |                  |
| Peptidyl-prolyl cis-trans isomerase B           | 24 7 10 11 15 13 13 21.24 6.74 26.98 5.39 1.27 |
| Glutathione S-transferase kappa 1              | 26 15 12 9 16 12 16 22.72 5.80 28.86 4.93 1.27 |
| Bile salt export pump                          | 147 11 23 15 12 14 14 4.46 0.71 5.67 1.97 1.27 |
| Canalicul multisppecific organic anion transporter 1 | 174 10 10 7 8 6 10 2.16 0.56 2.74 0.38 1.27 |
| Calcium-binding mitochondrial carrier protein  | 75 0 1 2 4 2 0 0.88 0.76 1.12 1.39 1.27 |
| Aralar1                                         |                  |
| Protein Name                                                                 | 285  | 21  | 25  | 22  | 21  | 8    | 16   | 2.90  | 1.28  | 3.69  | 0.73  | 1.27  | 48  | 6    | 10   | 9    | 3    | 4    | 10   | 6.43  | 2.38  | 8.20  | 4.39  | 1.28  |
|-------------------------------------------------------------------------------|------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Spectrin alpha chain, brain                                                 |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Cytochrome b-c1 complex subunit 2, mitochondrial                           |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| COP9 signalosome complex subunit 8                                          |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Alpha-actinin-4                                                             |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Estradiol 17-beta-dehydrogenase 8                                            |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Ribosome maturation protein SBDS                                             |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Kynurenine--oxoglutarate transaminase 1                                     |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Vesicle-trafficking protein SEC22b                                           |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Apolipoprotein E                                                             |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Transmembrane emp24 domain-containing protein 9                             |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| 40S ribosomal protein S4, X isoform                                          |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Inorganic pyrophosphatase 2, mitochondrial                                  |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Sarcosine dehydrogenase, mitochondrial                                      |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Prohibitin                                                                   |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Synaptosomal-associated protein 23                                           |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Parahemoglobin                                                               |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Isocitrate dehydrogenase [NADP] cytoplasmal                                 |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Vacular protein sorting-associated protein 29                               |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Peroxinsomal membrane protein 2                                              |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Short/branched chain specific acyl-CoA dehydrogenase, mitochondrial         |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Phosphatidyethanolamine-binding protein 1                                    |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Splicing factor, arginine/serine-rich 3                                      |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Aspartyl/asparaginyl beta-hydroxylase                                        |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial                         |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Calreticulin                                                                 |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Cytochrome b5 type B                                                         |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Phenylalanyl-tRNA synthetase alpha chain                                     |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial                 |      |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |      |      |      |      |      |      |
| Protein Name                                                                 | Protein Entry | Exp. 1 | Exp. 2 | Exp. 3 | Exp. 4 | Exp. 5 | Exp. 6 | Exp. 7 | Exp. 8 | Exp. 9 | Exp. 10 | Exp. 11 | Exp. 12 |
|------------------------------------------------------------------------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Electron transfer flavoprotein-ubiquinone oxidoreductase, mitochondrial     | 68            | 13     | 14     | 11     | 15     | 11     | 15     | 8.43   | 0.80   | 11.03  | 0.63   | 1.31   |        |
| Propionyl-CoA carboxylase beta chain, mitochondrial                         | 58            | 4      | 3      | 3      | 8      | 4      | 3      | 3.11   | 0.56   | 4.09   | 2.46   | 1.31   |        |
| Coatomer subunit delta                                                      | 57            | 1      | 1      | 2      | 2      | 1      | 2      | 1.14   | 0.46   | 1.50   | 0.53   | 1.31   |        |
| GTP-binding protein SAR1a                                                    | 22            | 1      | 2      | 2      | 1      | 1      | 2      | 2.96   | 1.20   | 3.88   | 1.39   | 1.31   |        |
| F-actin-capping protein subunit alpha-2                                      | 33            | 3      | 2      | 4      | 5      | 1      | 3      | 3.92   | 2.17   | 5.15   | 2.30   | 1.31   |        |
| 60S ribosomal protein L9                                                      | 22            | 10     | 11     | 7      | 13     | 12     | 13     | 21.71  | 6.31   | 28.67  | 3.11   | 1.32   |        |
| C-Jun-amino-terminal kinase-interacting protein 4                            | 146           | 1      | 3      | 2      | 3      | 4      | 3      | 0.80   | 0.55   | 1.05   | 0.03   | 1.32   |        |
| Peroxisomal multifunctional enzyme type 2                                    | 79            | 13     | 17     | 20     | 19     | 19     | 30     | 10.79  | 2.41   | 14.31  | 4.98   | 1.33   |        |
| Keratin, type II cytoskeletal 5                                              | 62            | 6      | 4      | 3      | 6      | 2      | 4      | 2.89   | 1.61   | 3.84   | 0.89   | 1.33   |        |
| Hydroxymethylglutaryl-CoA synthase, mitochondrial                           | 57            | 53     | 78     | 50     | 46     | 44     | 64     | 42.18  | 2.94   | 56.21  | 14.40  | 1.33   |        |
| Acyl-CoA synthetase family member 2, mitochondrial                          | 68            | 8      | 15     | 14     | 11     | 7      | 11     | 6.94   | 2.53   | 9.25   | 1.62   | 1.33   |        |
| Acyl-CoA-binding domain-containing protein 5                                  | 57            | 1      | 1      | 0      | 3      | 2      | 0      | 0.88   | 0.89   | 1.18   | 1.35   | 1.34   |        |
| Ribosylhydronicotinamide dehydrogenase [quinone]                            | 26            | 6      | 11     | 5      | 6      | 6      | 5      | 10.73  | 1.36   | 14.34  | 6.07   | 1.34   |        |
| Glutaminase liver isoform, mitochondrial                                     | 66            | 6      | 9      | 5      | 5      | 3      | 4      | 3.45   | 1.06   | 4.62   | 1.97   | 1.34   |        |
| Myosin-XVIIIa                                                                | 233           | 2      | 5      | 3      | 4      | 5      | 4      | 0.71   | 0.35   | 0.95   | 0.12   | 1.34   |        |
| Cytoplasmic aconitate hydratase                                              | 98            | 26     | 26     | 16     | 31     | 26     | 31     | 11.41  | 3.14   | 15.31  | 1.73   | 1.34   |        |
| Mitochondrial dicarboxylate carrier                                          | 32            | 6      | 7      | 5      | 5      | 3      | 6      | 7.12   | 2.19   | 9.58   | 1.60   | 1.35   |        |
| Vacular protein sorting-associated protein 35                                | 92            | 3      | 1      | 2      | 4      | 2      | 4      | 1.24   | 0.30   | 1.67   | 0.98   | 1.35   |        |
| Flavin reductase                                                            | 22            | 11     | 13     | 8      | 12     | 8      | 10     | 20.08  | 3.72   | 27.04  | 2.92   | 1.35   |        |
| 60S ribosomal protein L23a                                                   | 18            | 2      | 7      | 12     | 10     | 10     | 14     | 21.87  | 14.37  | 29.49  | 10.79  | 1.35   |        |
| Cytochrome P450 1A2                                                          | 58            | 4      | 4      | 3      | 7      | 6      | 6      | 3.70   | 1.43   | 5.00   | 1.35   | 1.35   |        |
| Actin, cytoplasmic 1                                                         | 42            | 36     | 48     | 35     | 48     | 29     | 34     | 38.92  | 3.34   | 52.54  | 8.56   | 1.35   |        |
| Spectrin beta chain, brain 1                                                 | 274           | 12     | 21     | 13     | 7      | 6      | 12     | 1.84   | 0.63   | 2.48   | 1.30   | 1.35   |        |
| Acyl-CoA dehydrogenase family member 11                                      | 87            | 4      | 5      | 3      | 4      | 3      | 4      | 1.88   | 0.31   | 2.54   | 0.31   | 1.35   |        |
| Afadin                                                                       | 207           | 1      | 5      | 5      | 3      | 4      | 5      | 0.79   | 0.49   | 1.07   | 0.30   | 1.35   |        |
| Gene Name                                                                 | Gene ID | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 |
|--------------------------------------------------------------------------|---------|----|----|----|----|----|----|----|----|----|----|----|
| Proline dehydrogenase, mitochondrial                                     | 57      | 5  | 3  | 2  | 4  | 3  | 6  | 2.88| 1.31| 3.91| 1.49| 1.36|
| Proteasome subunit beta type-8                                            | 30      | 0  | 2  | 2  | 4  | 4  | 2  | 3.33| 3.40| 4.52| 1.89| 1.36|
| Abhydrolase domain-containing protein 11                                  | 34      | 0  | 2  | 1  | 1  | 2  | 1  | 1.47| 1.50| 2.00| 0.84| 1.36|
| Voltage-dependent anion-selective channel protein 3                       | 31      | 2  | 3  | 5  | 5  | 3  | 5  | 5.26| 2.30| 7.16| 1.99| 1.36|
| Glutathione S-transferase theta-2                                         | 28      | 3  | 6  | 5  | 3  | 2  | 4  | 5.80| 2.50| 7.90| 2.72| 1.36|
| ATP-binding cassette sub-family F member 1                                | 95      | 1  | 2  | 0  | 0  | 2  | 2  | 0.53| 0.54| 0.72| 0.63| 1.37|
| AP-2 complex subunit beta                                                | 105     | 3  | 4  | 1  | 3  | 2  | 1  | 0.94| 0.47| 1.29| 0.72| 1.37|
| Regulator of microtubule dynamics protein 1                              | 35      | 3  | 5  | 1  | 2  | 2  | 1  | 2.82| 1.40| 3.86| 2.97| 1.37|
| Ethanolamine-phosphate cytidylyltransferase                              | 45      | 1  | 4  | 2  | 2  | 3  | 2  | 2.20| 1.16| 3.02| 1.26| 1.37|
| Leucine-rich repeat-containing protein 59                                  | 35      | 5  | 6  | 7  | 6  | 4  | 9  | 7.45| 1.92| 10.27| 2.84| 1.38|
| Trifunctional enzyme subunit alpha, mitochondrial                        | 83      | 32 | 41 | 24 | 37 | 35 | 43 | 18.03| 3.89| 24.86| 2.45| 1.38|
| Prelycysteine oxidase                                                     | 56      | 1  | 2  | 1  | 1  | 1  | 1  | 0.88| 0.03| 1.21| 0.51| 1.38|
| CCR4-NOT transcription complex subunit 1                                 | 267     | 1  | 2  | 1  | 1  | 1  | 1  | 0.18| 0.01| 0.25| 0.11| 1.38|
| Proteasome subunit alpha type-6                                           | 27      | 0  | 2  | 3  | 3  | 3  | 3  | 3.66| 3.17| 5.06| 1.16| 1.38|
| Ubiquitin carboxyl-terminal hydrolase 24                                 | 294     | 1  | 3  | 1  | 0  | 1  | 1  | 0.17| 0.01| 0.23| 0.26| 1.38|
| Clathrin heavy chain 1                                                    | 192     | 43 | 57 | 35 | 48 | 37 | 48 | 9.81| 1.09| 13.56| 1.24| 1.38|
| Citrate lyase subunit beta-like protein, mitochondrial                   | 38      | 3  | 2  | 2  | 5  | 1  | 1  | 2.57| 1.25| 3.55| 2.73| 1.38|
| Glutathione peroxidase 1                                                  | 22      | 28 | 34 | 21 | 32 | 29 | 38 | 58.25| 11.24| 80.64| 9.29| 1.38|
| UPF0317 protein C14orf159 homolog, mitochondrial                         | 66      | 2  | 1  | 1  | 3  | 0  | 0  | 0.73| 0.74| 1.02| 1.16| 1.39|
| Neutral alpha-glucosidase AB                                              | 107     | 10 | 12 | 10 | 15 | 7  | 9  | 4.12| 0.68| 5.71| 1.31| 1.39|
| 26S protease regulatory subunit 6A                                        | 49      | 0  | 1  | 2  | 2  | 1  | 1  | 1.00| 0.98| 1.38| 0.58| 1.39|
| Prolyl endopeptidase                                                      | 81      | 2  | 3  | 2  | 2  | 2  | 3  | 1.21| 0.04| 1.69| 0.39| 1.39|
| Prolow-density lipoprotein receptor-related protein 1                     | 505     | 2  | 2  | 1  | 6  | 11 | 11 | 0.47| 0.56| 0.65| 0.48| 1.39|
| Retinoid-inducible serine carboxypeptidase                                | 51      | 1  | 3  | 2  | 1  | 0  | 0  | 0.94| 0.94| 1.32| 1.51| 1.40|
| Biphenyl dehydrogenase                                                   | 64      | 1  | 4  | 2  | 0  | 0  | 0  | 0.75| 0.75| 1.05| 1.82| 1.40|
| Calpain small subunit 1                                                  | 28      | 2  | 4  | 3  | 2  | 1  | 2  | 3.47| 1.65| 4.85| 2.03| 1.40|
| DnaJ homolog subfamily C member 3                                         | 57      | 1  | 0  | 1  | 2  | 1  | 2  | 0.86| 0.03| 1.20| 1.04| 1.40|
| Cytoplasmic dynein 1 heavy chain 1                                       | 532     | 8  | 12 | 17 | 19 | 22 | 32 | 1.46| 0.69| 2.03| 1.04| 1.40|
| Solute carrier organic anion transporter family member 1B2               | 77      | 19 | 21 | 6  | 16 | 12 | 13 | 7.89| 4.14| 11.02| 2.47| 1.40|
| Protein Name                                      | Value1 | Value2 | Value3 | Value4 | Value5 | Value6 | Value7 | Value8 | Value9 | Value10 | Value11 | Value12 |
|--------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| Lipoma-preferred partner homolog                 | 66     | 1      | 1      | 1      | 1      | 1      | 2      | 0.74   | 0.02   | 1.04    | 0.48    | 1.40    |
| Guanidinoacetate N-methyltransferase             | 26     | 1      | 3      | 5      | 3      | 3      | 6      | 5.65   | 3.67   | 7.92    | 3.67    | 1.40    |
| Glutathione S-transferase theta-1                | 27     | 5      | 5      | 3      | 3      | 2      | 6.66   | 2.04   | 9.37   | 5.49    | 1.41    |
| Serine/arginine repetitive matrix protein 2      | 295    | 0      | 0      | 1      | 0      | 2      | 4      | 0.17   | 0.17   | 0.24    | 0.41    | 1.41    |
| Peroxisomal trans-2-enoyl-CoA reductase          | 32     | 8      | 7      | 9      | 13     | 6      | 11     | 11.72  | 1.98   | 16.51   | 4.90    | 1.41    |
| Mannosyl-oligosaccharide glucosidase             | 92     | 1      | 0      | 2      | 3      | 0      | 0      | 0.52   | 0.52   | 0.74    | 0.83    | 1.41    |
| 3-hydroxyacyl-CoA dehydrogenase type-2           | 27     | 17     | 28     | 17     | 22     | 21     | 25     | 33.46  | 5.37   | 47.32   | 5.78    | 1.41    |
| Hydroxymethylglutaryl-CoA lyase, mitochondrial   | 34     | 4      | 3      | 1      | 5      | 3      | 3      | 3.88   | 2.22   | 5.49    | 1.65    | 1.42    |
| Phospholipid hydroperoxide glutathione peroxidase, mitochondrial | 22 | 0 | 2 | 3 | 1 | 0 | 1 | 2.17 | 3.76 | 3.09 | 1.29 | 1.42 |
| Eukaryotic translation initiation factor 4 gamma 1 | 176 | 7 | 12 | 12 | 10 | 9 | 16 | 2.60 | 0.66 | 3.69 | 0.99 | 1.42 |
| Rab GDP dissociation inhibitor beta              | 51     | 6      | 8      | 3      | 6      | 7      | 8      | 5.18   | 2.15   | 7.36    | 1.27    | 1.42    |
| Transmembrane emp24 domain-containing protein 2  | 23     | 2      | 3      | 2      | 3      | 4      | 5      | 5.75   | 2.70   | 8.19    | 2.83    | 1.42    |
| Ubiquitin carboxy-terminal hydrolase 47          | 157    | 1      | 2      | 2      | 0      | 0      | 2      | 0.31   | 0.30   | 0.44    | 0.38    | 1.43    |
| Aspartoacylase-2                                 | 35     | 2      | 3      | 3      | 4      | 3      | 4      | 3.75   | 0.85   | 5.36    | 0.92    | 1.43    |
| NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial | 22 | 1 | 2 | 1 | 3 | 3 | 2 | 3.78 | 2.75 | 5.41 | 1.26 | 1.43 |
| Coiled-coil-helix-coiled-helix domain-containing protein 3, mitochondrial | 26 | 1 | 3 | 1 | 2 | 3 | 2 | 3.20 | 2.33 | 4.58 | 1.07 | 1.43 |
| Carnitine O-palmitoyltransferase 1, liver isoform | 88     | 10     | 14     | 7      | 16     | 11     | 9      | 5.23   | 1.31   | 7.51    | 1.92    | 1.44    |
| Ras-related protein Rab-11B                      | 24     | 2      | 2      | 3      | 4      | 3      | 5      | 5.47   | 1.24   | 7.85    | 3.42    | 1.44    |
| 40S ribosomal protein SA                         | 33     | 5      | 7      | 5      | 8      | 3      | 3      | 6.42   | 1.54   | 9.22    | 3.91    | 1.44    |
| T-complex protein 1 subunit alpha               | 60     | 5      | 5      | 4      | 8      | 4      | 5      | 3.55   | 0.45   | 5.10    | 1.39    | 1.44    |
| Peroxisomal acyl-coenzyme A oxidase 2           | 77     | 7      | 7      | 2      | 5      | 4      | 6      | 2.77   | 1.59   | 3.98    | 0.67    | 1.44    |
| Protein transport protein Sec31A                | 134    | 10     | 11     | 6      | 10     | 5      | 8      | 2.56   | 0.94   | 3.68    | 0.50    | 1.44    |
| Sulfite oxidase, mitochondrial                   | 61     | 7      | 10     | 5      | 8      | 6      | 7      | 4.84   | 0.85   | 6.96    | 1.15    | 1.44    |
| Arylamine N-acetyltransferase 2                  | 34     | 1      | 1      | 1      | 3      | 3      | 3      | 2.45   | 1.78   | 3.52    | 1.77    | 1.44    |
| 60S ribosomal protein L8                         | 28     | 5      | 4      | 4      | 8      | 4      | 6      | 7.60   | 0.97   | 10.95   | 3.59    | 1.44    |
| Cofilin-1                                        | 19     | 7      | 8      | 8      | 10     | 6      | 11     | 18.05  | 2.02   | 26.05   | 4.67    | 1.44    |
| Protein Name                                      | Value1 | Value2 | Value3 | Value4 | Value5 | Value6 | Value7 | Value8 | Value9 | Value10 | Value11 | Value12 | Value13 |
|--------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|----------|----------|---------|
| Elongation factor 2                              | 95     | 21     | 29     | 17     | 29     | 23     | 27     | 10.55  | 1.90   | 15.23   | 0.22     | 1.44     |         |
| Transforming protein RhoA                        | 22     | 0      | 4      | 3      | 3      | 3.77   | 3.51   | 5.44   | 4.81   |         | 1.44     |         |         |
| Glutamate--cysteine ligase regulatory subunit    | 31     | 0      | 4      | 3      | 2      | 2      | 1      | 2.64   | 2.38   | 3.81    | 2.45     | 1.44     |         |
| Major urinary protein 6                          | 21     | 1      | 4      | 6      | 8      | 8      | 9      | 11.80  | 8.70   | 17.11   | 6.73     | 1.45     |         |
| Acetyl-CoA acetyltransferase, mitochondrial       | 45     | 16     | 25     | 18     | 18     | 17     | 28     | 18.56  | 1.10   | 26.95   | 6.40     | 1.45     |         |
| Glutaryl-CoA dehydrogenase, mitochondrial        | 49     | 7      | 7      | 6      | 12     | 7      | 9      | 6.70   | 0.75   | 9.73    | 2.56     | 1.45     |         |
| Serum paraoxonase/arylesterase 1                 | 40     | 2      | 3      | 2      | 3      | 1      | 1      | 2.03   | 0.66   | 2.95    | 1.42     | 1.45     |         |
| 5-oxoprolinase                                   | 138    | 6      | 7      | 5      | 8      | 4      | 6      | 1.78   | 0.32   | 2.59    | 0.31     | 1.46     |         |
| Eukaryotic translation initiation factor 4B      | 69     | 1      | 3      | 3      | 3      | 1      | 1      | 1.17   | 0.78   | 1.71    | 0.82     | 1.46     |         |
| 40S ribosomal protein S5                         | 23     | 2      | 2      | 2      | 3      | 1      | 2      | 3.53   | 1.14   | 5.17    | 1.20     | 1.46     |         |
| Molybdenum cofactor biosynthesis protein 1       | 70     | 0      | 1      | 3      | 3      | 2      | 3      | 1.17   | 1.05   | 1.71    | 0.86     | 1.46     |         |
| Protein-glutamine gamma-glutamyltransferase 2    | 77     | 5      | 4      | 3      | 5      | 2      | 5      | 2.12   | 0.94   | 3.10    | 0.43     | 1.47     |         |
| Cytochrome b-c1 complex subunit 1, mitochondrial | 53     | 3      | 5      | 5      | 5      | 2      | 4      | 3.06   | 1.32   | 4.49    | 0.44     | 1.47     |         |
| Glutamate--cysteine ligase catalytic subunit     | 73     | 5      | 9      | 6      | 6      | 6      | 9      | 3.82   | 0.44   | 5.61    | 1.29     | 1.47     |         |
| Ras GDP-activating-like protein IQGAP2            | 181    | 26     | 44     | 28     | 33     | 21     | 29     | 6.77   | 0.76   | 9.95    | 2.02     | 1.47     |         |
| 26S protease regulatory subunit 7                 | 49     | 2      | 1      | 2      | 3      | 1      | 3      | 1.66   | 0.54   | 2.44    | 1.23     | 1.47     |         |
| 3-ketoacyl-CoA thiolase A, peroxisomal            | 44     | 15     | 21     | 15     | 17     | 18     | 30     | 17.91  | 2.55   | 26.46   | 8.52     | 1.48     |         |
| Inter-alpha-trypsin inhibitor heavy chain H1     | 101    | 3      | 2      | 1      | 1      | 1      | 4      | 0.81   | 0.55   | 1.19    | 0.81     | 1.48     |         |
| von Willebrand factor A domain-containing protein 5A | 87     | 1      | 2      | 3      | 2      | 1      | 3      | 0.93   | 0.62   | 1.38    | 0.38     | 1.48     |         |
| 40S ribosomal protein S7                         | 22     | 5      | 11     | 7      | 15     | 13     | 10     | 18.80  | 10.03  | 27.80   | 5.63     | 1.48     |         |
| Complement component 1 Q subcomponent-binding protein, mitochondrial | 31     | 0      | 0      | 4      | 4      | 1      | 3      | 2.60   | 3.19   | 3.86    | 3.41     | 1.48     |         |
| Ceruloplasmin                                    | 121    | 2      | 4      | 4      | 5      | 1      | 1      | 0.94   | 0.59   | 1.39    | 0.85     | 1.49     |         |
| Coatomer subunit zeta-1                         | 20     | 3      | 4      | 2      | 5      | 4      | 4      | 7.43   | 2.71   | 11.06   | 1.33     | 1.49     |         |
| Serine protease inhibitor A3N                    | 47     | 0      | 3      | 0      | 2      | 4      | 1      | 1.45   | 2.51   | 2.16    | 1.05     | 1.49     |         |
| 4-aminobutyrate aminotransferase, mitochondrial  | 56     | 1      | 3      | 3      | 2      | 3      | 5      | 2.05   | 1.03   | 3.07    | 1.49     | 1.49     |         |
| Proteasome subunit beta type-2                   | 23     | 2      | 6      | 3      | 5      | 6      | 5      | 7.92   | 4.76   | 11.84   | 1.15     | 1.49     |         |
| General vesicular transport factor p115          | 107    | 4      | 2      | 2      | 5      | 1      | 3      | 1.06   | 0.69   | 1.59    | 0.71     | 1.49     |         |
| Cullin-associated NEDD8-dissociated protein 1     | 136    | 6      | 5      | 6      | 4      | 4      | 9      | 1.68   | 0.40   | 2.52    | 0.86     | 1.50     | 1.50    |
| Valyl-tRNA synthetase                            | 140    | 5      | 2      | 5      | 9      | 4      | 9      | 1.63   | 0.15   | 2.45    | 1.50     | 1.50     |         |
| Gazetteer Term                                      | 24 | 3  | 5  | 3  | 6  | 5  | 5  | 7.56 | 2.65 | 11.34 | 1.08 | 1.50 |
|---------------------------------------------------|----|----|----|----|----|----|----|------|------|-------|------|------|
| Putative pre-mRNA-splicing factor ATP-dependent RNA helicase DHX15 | 91 | 0  | 1  | 0  | 1  | 2  | 1  | 0.37 | 0.65 | 0.56  | 0.02 | 1.50 |
| Protein-L-isoaspartate(D-aspartate) O-methyltransferase | 25 | 0  | 1  | 0  | 1  | 2  | 1  | 1.36 | 2.35 | 2.04  | 0.06 | 1.50 |
| 3 beta-hydroxysteroid dehydrogenase type 7          | 41 | 0  | 1  | 0  | 1  | 2  | 1  | 0.83 | 1.44 | 1.25  | 0.03 | 1.50 |
| ADP-ribosylation factor 5                           | 21 | 5  | 8  | 2  | 11 | 12 | 9  | 15.09| 12.66| 22.70 | 3.57 | 1.50 |
| D-beta-hydroxybutyrate dehydrogenase, mitochondrial| 38 | 13 | 15 | 10 | 15 | 8  | 15 | 13.32| 3.02 | 20.17 | 0.54 | 1.51 |
| Glucokinase                                         | 52 | 1  | 2  | 0  | 1  | 1  | 0  | 0.64 | 0.55 | 0.97  | 0.97 | 1.52 |
| Cytosolic non-specific dipeptidase                  | 53 | 1  | 3  | 0  | 0  | 1  | 0  | 0.63 | 0.54 | 0.95  | 1.65 | 1.52 |
| Carbonic anhydrase 2                                 | 29 | 5  | 6  | 5  | 10 | 5  | 6  | 8.47 | 0.28 | 12.88 | 3.86 | 1.52 |
| Protein CREG1                                       | 24 | 0  | 0  | 1  | 3  | 1  | 0  | 1.37 | 1.19 | 2.09  | 3.63 | 1.53 |
| Signal transducer and activator of transcription 1 | 87 | 0  | 0  | 0  | 1  | 2  | 2  | 0.39 | 0.68 | 0.60  | 0.61 | 1.53 |
| Chromobox protein homolog 3                         | 21 | 0  | 0  | 0  | 1  | 2  | 2  | 1.62 | 2.80 | 2.47  | 2.51 | 1.53 |
| Mitochondrial carnitine/acylcarnitine carrier protein| 33 | 4  | 6  | 5  | 6  | 6  | 10 | 7.47 | 1.70 | 11.42 | 3.94 | 1.53 |
| Ras-related protein Rab-5B                         | 24 | 1  | 2  | 1  | 3  | 2  | 1  | 2.76 | 1.29 | 4.22  | 2.04 | 1.53 |
| Aldehyde dehydrogenase, cytosolic I                | 55 | 6  | 7  | 6  | 10 | 7  | 11 | 5.67 | 0.71 | 8.69  | 2.10 | 1.53 |
| Lon protease homolog, mitochondrial                 | 106| 6  | 8  | 9  | 16 | 8  | 10 | 3.55 | 0.70 | 5.45  | 1.94 | 1.53 |
| Cathepsin Z                                        | 34 | 1  | 0  | 0  | 2  | 1  | 1  | 0.98 | 0.85 | 1.50  | 1.48 | 1.54 |
| Annexin A5                                         | 36 | 9  | 10 | 7  | 12 | 5  | 9  | 9.51 | 2.55 | 14.64 | 1.88 | 1.54 |
| V-type proton ATPase catalytic subunit A            | 68 | 2  | 3  | 1  | 3  | 1  | 0  | 0.96 | 0.41 | 1.48  | 1.28 | 1.54 |
| Malectin                                           | 32 | 1  | 3  | 1  | 1  | 2  | 2  | 2.07 | 0.97 | 3.19  | 1.58 | 1.55 |
| Probable 2-oxoglutarate dehydrogenase E1 component DHKTD1, mitochondrial | 103| 6  | 9  | 10 | 10 | 3  | 9  | 2.99 | 1.58 | 4.63  | 0.24 | 1.55 |
| UPF0027 protein C22orf28 homolog                   | 55 | 2  | 2  | 0  | 1  | 0  | 0  | 0.59 | 1.02 | 0.91  | 0.92 | 1.55 |
| Multifunctional protein ADE2                       | 47 | 2  | 2  | 0  | 1  | 0  | 0  | 0.69 | 1.20 | 1.07  | 1.07 | 1.55 |
| Protein-glutamine gamma-glutamyltransferase K      | 90 | 2  | 3  | 0  | 0  | 0  | 0  | 0.36 | 0.62 | 0.56  | 0.97 | 1.55 |
| Betaine--homocysteine S-methyltransferase 1        | 45 | 70 | 88 | 56 | 88 | 61 | 103| 68.10| 8.13 | 105.8 | 12.84| 1.55 |
| Very long-chain specific acyl-CoA dehydrogenase, mitochondrial | 71 | 14 | 20 | 14 | 27 | 10 | 10 | 8.73 | 1.35 | 13.57 | 5.87 | 1.55 |
| Myosin regulatory light chain 12B                   | 20 | 5  | 2  | 1  | 3  | 4  | 6.56| 1.49 | 10.22| 2.54  | 2.56 | 1.56 |
| Ras-related protein Rab-6A                         | 24 | 1  | 0  | 0  | 1  | 1  | 2  | 1.38 | 1.20 | 2.16  | 2.20 | 1.56 |
| Protein Name                                             | Row 1 | Row 2 | Row 3 | Row 4 | Row 5 | Row 6 | Row 7 | Row 8 | Row 9 | Row 10 | Row 11 | Row 12 | Row 13 | 14 |
|----------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|----|
| Low molecular weight phosphotyrosine protein phosphatase | 18    | 3     | 3     | 0     | 0     | 1     | 3     | 0     | 1     | 4.16   | 1.65   | 2.29   | 1.98   | 1.57 |
| Protein DDI1 homolog 2                                   | 45    | 3     | 3     | 0     | 0     | 1     | 3     | 1     | 1     | 1.79   | 1.55   | 2.80   | 4.85   | 1.57 |
| Cathepsin B                                             | 37    | 4     | 9     | 3     | 8     | 8     | 6     | 6.72  | 3.79  | 10.55  | 1.58   | 1.57   | 1.57   | 1.57 |
| Keratin, type I cytoskeletal 18                          | 48    | 6     | 5     | 2     | 4     | 2     | 6     | 3.40  | 2.32  | 5.34   | 1.20   | 1.57   | 1.57   | 1.57 |
| Serum paraoxonase/lactonase 3                           | 39    | 2     | 1     | 0     | 0     | 1     | 1     | 0.83  | 1.44  | 1.31   | 0.04   | 1.58   | 1.58   | 1.58 |
| Endoplasmic reticulum resident protein 44                | 47    | 2     | 1     | 0     | 1     | 0     | 1     | 0.69  | 1.20  | 1.09   | 0.03   | 1.58   | 1.58   | 1.58 |
| Src substrate cortactin                                  | 61    | 0     | 1     | 1     | 0     | 1     | 2     | 0.54  | 0.47  | 0.85   | 0.86   | 1.58   | 1.58   | 1.58 |
| Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial | 40    | 0     | 1     | 1     | 0     | 1     | 2     | 0.82  | 0.71  | 1.30   | 1.32   | 1.58   | 1.58   | 1.58 |
| Kynurenine 3-monooxygenase                               | 55    | 4     | 5     | 3     | 3     | 1     | 4     | 2.36  | 1.32  | 3.72   | 0.92   | 1.58   | 1.58   | 1.58 |
| Calciycin-binding protein                                | 27    | 2     | 2     | 2     | 3     | 0     | 1     | 2.38  | 2.06  | 3.76   | 1.82   | 1.58   | 1.58   | 1.58 |
| 28 kDa heat- and acid-stable phosphoprotein              | 21    | 0     | 1     | 2     | 2     | 0     | 0     | 1.52  | 2.63  | 2.39   | 2.39   | 1.58   | 1.58   | 1.58 |
| Glutaredoxin-related protein 5, mitochondrial            | 16    | 0     | 1     | 2     | 2     | 0     | 0     | 1.99  | 3.45  | 3.14   | 3.14   | 1.58   | 1.58   | 1.58 |
| Alpha-aminoacidic semialdehyde dehydrogenase             | 56    | 9     | 12    | 6     | 9     | 12    | 20    | 7.96  | 2.90  | 12.56  | 5.59   | 1.58   | 1.58   | 1.58 |
| Serine--pyruvate aminotransferase, mitochondrial          | 46    | 1     | 4     | 3     | 1     | 0     | 1     | 1.39  | 1.59  | 2.21   | 1.88   | 1.58   | 1.58   | 1.58 |
| ATPase family AAA domain-containing protein 3             | 67    | 1     | 0     | 1     | 2     | 0     | 1     | 0.48  | 0.42  | 0.76   | 0.75   | 1.59   | 1.59   | 1.59 |
| Alanine--glyoxylate aminotransferase 2, mitochondrial    | 57    | 3     | 1     | 4     | 5     | 1     | 6     | 2.27  | 1.26  | 3.61   | 2.43   | 1.59   | 1.59   | 1.59 |
| Ras-related protein Rab-14                              | 24    | 3     | 6     | 2     | 6     | 4     | 2     | 6.19  | 2.26  | 9.85   | 4.73   | 1.59   | 1.59   | 1.59 |
| ATP-binding cassette subfamily D member 3                | 75    | 12    | 21    | 10    | 21    | 13    | 12    | 7.67  | 1.24  | 12.20  | 3.26   | 1.59   | 1.59   | 1.59 |
| Carbonic anhydrase 3                                     | 29    | 38    | 65    | 55    | 77    | 46    | 71    | 78.43 | 13.64 | 125.1  | 10.83  | 1.59   | 1.59   | 1.59 |
| Vigilin                                                  | 142   | 28    | 29    | 19    | 31    | 10    | 27    | 6.53  | 3.00  | 10.42  | 0.49   | 1.60   | 1.60   | 1.60 |
| Hemopexin                                                | 51    | 5     | 4     | 1     | 0     | 0     | 5     | 1.90  | 2.53  | 3.04   | 2.70   | 1.60   | 1.60   | 1.60 |
| Pyruvate dehydrogenase E1 component subunit beta, mitochondrial | 39    | 6     | 6     | 1     | 5     | 4     | 6     | 4.65  | 3.17  | 7.43   | 0.88   | 1.60   | 1.60   | 1.60 |
| Protein tyrosine phosphatase-like protein PTPLAD1         | 43    | 0     | 2     | 2     | 0     | 1     | 0.74  | 1.28  | 1.19  | 1.17   | 1.60   | 1.60   | 1.60   | 1.60 |
| Splicing factor, proline- and glutamine-rich             | 75    | 5     | 3     | 3     | 7     | 3     | 2     | 1.97  | 0.07  | 3.15   | 1.65   | 1.60   | 1.60   | 1.60 |
| Probable ubiquitin carboxyl-terminal hydrolase FAF-X     | 291   | 2     | 6     | 3     | 2     | 6     | 9     | 0.63  | 0.38  | 1.00   | 0.64   | 1.60   | 1.60   | 1.60 |
| Glutathione S-transferase Mu 3                           | 26    | 2     | 5     | 2     | 4     | 3     | 2     | 4.43  | 1.26  | 7.16   | 2.86   | 1.61   | 1.61   | 1.61 |
| Transcription factor A, mitochondrial                    | 28    | 1     | 1     | 1     | 0     | 0     | 2     | 1.15  | 0.99  | 1.85   | 1.88   | 1.61   | 1.61   | 1.61 |
| Protein Name                                           | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 | Column 8 | Column 9 | Column 10 | Column 11 | Column 12 |
|-------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| Long-chain-fatty-acid-CoA ligase 1                     | 78       | 17       | 35       | 20       | 27       | 22       | 30       | 12.41    | 1.89     | 20.09     | 2.60      | 1.62      |
| Heterogeneous nuclear ribonucleoprotein F             | 46       | 1        | 3        | 1        | 4        | 3        | 1        | 1.81     | 1.31     | 2.93      | 1.64      | 1.62      |
| Carboxylesterase 3                                    | 62       | 18       | 22       | 12       | 23       | 11       | 19       | 10.81    | 2.87     | 17.55     | 1.28      | 1.62      |
| Heterogeneous nuclear ribonucleoprotein U             | 88       | 3        | 4        | 5        | 8        | 1        | 2        | 1.65     | 1.07     | 2.68      | 1.72      | 1.63      |
| Cytochrome P450 2C54                                   | 56       | 2        | 2        | 0        | 4        | 3        | 2        | 1.49     | 1.38     | 2.42      | 1.01      | 1.63      |
| Calpastatin                                           | 85       | 2        | 3        | 2        | 4        | 3        | 4        | 1.36     | 0.38     | 2.21      | 0.38      | 1.63      |
| Large proline-rich protein BAT3                       | 121      | 0        | 0        | 2        | 1        | 0        | 2        | 0.26     | 0.46     | 0.43      | 0.44      | 1.63      |
| NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial | 43       | 3        | 3        | 2        | 5        | 2        | 3        | 2.66     | 0.64     | 4.34      | 1.30      | 1.63      |
| Inosine triphosphate pyrophosphatase                   | 22       | 1        | 3        | 1        | 3        | 3        | 2        | 3.78     | 2.75     | 6.17      | 1.19      | 1.63      |
| UDP-glucose 6-dehydrogenase                           | 55       | 3        | 6        | 5        | 10       | 4        | 3        | 3.57     | 0.86     | 5.83      | 3.15      | 1.63      |
| Cordon-bleu protein-like 1                             | 137      | 11       | 14       | 5        | 7        | 5        | 12       | 2.50     | 1.22     | 4.11      | 1.36      | 1.64      |
| Sideroflexin-1                                        | 36       | 2        | 3        | 2        | 2        | 3        | 6        | 3.20     | 0.91     | 5.26      | 3.13      | 1.64      |
| Proteasome subunit beta type-1                         | 26       | 5        | 6        | 3        | 7        | 4        | 6        | 7.57     | 1.93     | 12.44     | 0.98      | 1.64      |
| Dihydropicolinate synthase-like, mitochondrial         | 35       | 5        | 7        | 6        | 12       | 4        | 5        | 6.99     | 1.19     | 11.61     | 5.03      | 1.66      |
| Fermitin family homolog 2                              | 78       | 0        | 3        | 0        | 1        | 3        | 1        | 0.65     | 1.13     | 1.09      | 0.74      | 1.66      |
| Keratin, type II cytoskeletal 2 epidermal              | 71       | 5        | 5        | 3        | 8        | 2        | 3        | 2.29     | 1.02     | 3.81      | 1.73      | 1.66      |
| Dimethylalanine monoxygenase [N-oxide-forming] 1       | 60       | 1        | 3        | 2        | 2        | 2        | 3        | 1.37     | 0.49     | 2.28      | 0.52      | 1.66      |
| Radixin                                               | 69       | 8        | 9        | 4        | 7        | 3        | 8        | 3.54     | 1.84     | 5.93      | 0.75      | 1.67      |
| NADPH-cytochrome P450 reductase                        | 77       | 7        | 13       | 11       | 14       | 10       | 18       | 5.96     | 1.33     | 9.99      | 2.04      | 1.68      |
| Glycerol-3-phosphate dehydrogenase, mitochondrial      | 81       | 4        | 5        | 5        | 5        | 1        | 6        | 1.99     | 1.21     | 3.37      | 0.46      | 1.69      |
| Uncharacterized protein C1orf50 homolog               | 22       | 1        | 2        | 3        | 2        | 1        | 4        | 3.68     | 2.46     | 6.24      | 2.89      | 1.69      |
| Probable phospholipid-transporting ATPase 11C          | 129      | 8        | 17       | 8        | 13       | 9        | 11       | 3.18     | 0.33     | 5.40      | 1.11      | 1.70      |
| Complement C4-B                                       | 193      | 9        | 15       | 3        | 10       | 8        | 8        | 1.71     | 0.84     | 2.90      | 0.90      | 1.70      |
| S-phase kinase-associated protein 1                   | 19       | 0        | 2        | 2        | 5        | 4        | 3        | 5.26     | 5.37     | 8.95      | 4.00      | 1.70      |
| Cathepsin H                                           | 37       | 1        | 3        | 1        | 2        | 1        | 0        | 1.33     | 0.04     | 2.27      | 2.08      | 1.71      |
| Moesin                                                | 68       | 0        | 0        | 1        | 3        | 2        | 2        | 0.73     | 0.75     | 1.26      | 1.14      | 1.71      |
| Heterogeneous nuclear ribonucleoprotein A1             | 34       | 0        | 1        | 1        | 2        | 2        | 2        | 1.47     | 1.50     | 2.51      | 0.90      | 1.71      |
| NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial | 20       | 2        | 3        | 1        | 4        | 3        | 3        | 4.97     | 2.63     | 8.50      | 1.35      | 1.71      |
| Transcription factor BTF3                              | 22       | 0        | 7        | 5        | 7        | 7        | 6        | 9.03     | 8.27     | 15.46     | 0.94      | 1.71      |
| Signal recognition particle receptor subunit beta      | 30       | 0        | 2        | 2        | 3        | 1        | 0        | 1.63     | 1.59     | 2.79      | 2.56      | 1.72      |
| Gene Name                                      | Row 1   | Row 2   | Row 3   | Row 4   | Row 5   | Row 6   | Row 7   | Row 8   | Row 9   | Row 10  |
|----------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| AP-2 complex subunit alpha-1                 | 108     | 1       | 1       | 0       | 1       | 2       | 3       | 0.46    | 0.47    | 0.80    |
| LETM1 and EF-hand domain-containing protein 1, mitochondrial | 83      | 3       | 4       | 4       | 3       | 1       | 6       | 1.56    | 0.86    | 2.68    |
| Probable N-acetyltransferase CML1            | 25      | 1       | 2       | 1       | 2       | 1       | 1       | 1.97    | 0.07    | 3.39    |
| Coronin-1B                                   | 54      | 1       | 2       | 1       | 2       | 1       | 1       | 0.91    | 0.03    | 1.57    |
| Cytochrome P450 2E1                           | 57      | 9       | 12      | 9       | 15      | 11      | 21      | 8.36    | 1.29    | 14.41   |
| 60S ribosomal protein L11                     | 20      | 3       | 10      | 4       | 10      | 12      | 12      | 15.82   | 12.85   | 27.31   |
| Tubulin alpha-4A chain                       | 50      | 1       | 2       | 1       | 1       | 1       | 2       | 0.98    | 0.03    | 1.71    |
| L-xylulose reductase                         | 26      | 3       | 2       | 4       | 9       | 2       | 4       | 5.63    | 1.72    | 9.79    |
| Dihydropyrimidinase                          | 57      | 6       | 9       | 4       | 12      | 6       | 6       | 4.61    | 1.10    | 8.03    |
| Sulphotransferase family cytosolic 1B member 1 | 35      | 0       | 1       | 2       | 2       | 1       | 2       | 1.40    | 1.37    | 2.44    |
| Retinal dehydrogenase                         | 54      | 46      | 64      | 30      | 59      | 25      | 49      | 30.54   | 9.56    | 54.13   |
| 6-phosphofructokinase, liver type            | 85      | 1       | 1       | 2       | 2       | 0       | 2       | 0.57    | 0.56    | 1.00    |
| Serine/threonine-protein kinase MRCK beta     | 195     | 0       | 3       | 1       | 2       | 3       | 2       | 0.34    | 0.40    | 0.61    |
| Phosphopantothenate--cysteine ligase          | 34      | 0       | 0       | 2       | 1       | 1       | 4       | 1.44    | 1.41    | 2.56    |
| Mitochondrial import inner membrane translocase subunit Tim23 | 22      | 1       | 2       | 0       | 2       | 3       | 3       | 3.05    | 3.55    | 5.44    |
| ADP-ribosylation factor-like protein 8B       | 22      | 1       | 2       | 0       | 2       | 3       | 3       | 3.05    | 3.55    | 5.44    |
| Coatomer subunit alpha                       | 138     | 9       | 14      | 5       | 12      | 8       | 12      | 2.62    | 0.78    | 4.69    |
| Lamin-A/C                                    | 74      | 1       | 5       | 3       | 6       | 4       | 3       | 1.78    | 1.06    | 3.20    |
| Cytochrome P450 2C50                         | 56      | 4       | 5       | 1       | 6       | 3       | 3       | 2.35    | 1.35    | 4.23    |
| UDP-glucuronosyltransferase 2A3              | 61      | 2       | 5       | 3       | 6       | 3       | 3       | 2.15    | 0.49    | 3.89    |
| Uncharacterized protein KIAA0564 homolog     | 213     | 13      | 24      | 13      | 20      | 16      | 29      | 3.24    | 0.51    | 5.86    |
| Glucosamine 6-phosphate N-acetyltransferase  | 21      | 2       | 5       | 2       | 7       | 5       | 4       | 7.11    | 4.36    | 12.93   |
| Apolipoprotein A-I                           | 31      | 9       | 12      | 2       | 8       | 6       | 10      | 9.03    | 5.57    | 16.49   |
| Ornithine aminotransferase, mitochondrial     | 48      | 9       | 16      | 8       | 16      | 9       | 14      | 8.88    | 0.82    | 16.30   |
| Complement factor H                           | 139     | 2       | 3       | 2       | 3       | 0       | 1       | 0.46    | 0.40    | 0.85    |
| Phosphatidylcholine transfer protein          | 25      | 2       | 2       | 1       | 1       | 1       | 4       | 2.61    | 1.11    | 4.82    |
| NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 10, mitochondrial | 41      | 0       | 2       | 3       | 2       | 1       | 3       | 1.58    | 1.77    | 2.92    |
| Probable D-lactate dehydrogenase, mitochondrial | 52      | 0       | 3       | 2       | 3       | 3       | 3       | 1.59    | 1.49    | 2.95    |
| GTPase-activating protein and VPS9 domain-containing protein 1 | 162     | 1       | 6       | 3       | 1       | 1       | 2       | 0.50    | 0.33    | 0.94    |
| 3-mercaptopropionate sulfurtransferase        | 33      | 6       | 9       | 4       | 6       | 2       | 7       | 5.91    | 2.88    | 11.35   |
| Protein Name                                      | accession | M1 | M2 | M3 | M4 | M5 | M6 | MR1 | MR2 | MR3 | MR4 | MR5 | MR6 |
|--------------------------------------------------|-----------|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| Proteasome-associated protein ECM29 homolog      | 204       | 1  | 5  | 4  | 3  | 2  | 5  | 0.56| 0.35| 1.09| 0.30| 1.95|
| Protein BAT2-like 2                              | 309       | 0  | 0  | 0  | 2  | 1  | 0  | 0.06| 0.10| 0.11| 0.19| 1.97|
| Sigma 1-type opioid receptor                     | 25        | 0  | 0  | 0  | 2  | 1  | 0  | 0.68| 1.18| 1.34| 2.32| 1.97|
| Extracellular matrix protein FRAS1               | 442       | 0  | 2  | 0  | 0  | 1  | 0  | 0.04| 0.07| 0.08| 0.13| 1.98|
| Leucyl-cystinyl aminopeptidase                   | 117       | 0  | 2  | 0  | 0  | 1  | 0  | 0.15| 0.25| 0.29| 0.50| 1.98|
| Major urinary protein 2                          | 21        | 17 | 46 | 32 | 70 | 46 | 67 | 74.64| 36.19| 148.6| 33.21| 1.99|
| Serine/arginine repetitive matrix protein 1      | 107       | 1  | 2  | 0  | 2  | 1  | 0  | 0.31| 0.27| 0.63| 0.54| 2.02|
| Ubiquitin-conjugating enzyme E2 N                | 17        | 1  | 2  | 0  | 2  | 1  | 0  | 1.95| 1.69| 3.95| 3.42| 2.02|
| Transaldolase                                    | 37        | 0  | 3  | 1  | 2  | 2  | 1  | 1.35| 1.38| 2.74| 1.33| 2.03|
| Acyl-coenzyme A synthetase ACSM3, mitochondrial  | 66        | 0  | 3  | 1  | 1  | 1  | 1  | 0.50| 0.43| 1.02| 1.17| 2.04|
| Asialoglycoprotein receptor1                     | 33        | 1  | 2  | 0  | 1  | 1  | 1  | 1.01| 0.87| 2.06| 0.86| 2.04|
| 3-oxoacyl-[acyl-carrier-protein] synthase,        | 49        | 1  | 2  | 0  | 1  | 1  | 1  | 0.68| 0.59| 1.39| 0.58| 2.04|
| mitochondrial                                     |           |    |    |    |    |    |    |     |     |     |     |     |     |
| Perilipin-2                                      | 47        | 0  | 2  | 1  | 2  | 2  | 2  | 1.06| 1.09| 2.17| 0.06| 2.05|
| Peroxisomal Lon protease homolog 2               | 95        | 0  | 2  | 1  | 2  | 2  | 2  | 0.53| 0.54| 1.08| 0.03| 2.05|
| NADH dehydrogenase [ubiquinone] 1 beta subunit   | 22        | 1  | 2  | 1  | 4  | 3  | 4  | 3.78| 2.75| 7.77| 2.77| 2.05|
| NADH dehydrogenase [ubiquinone] iron-sulfur      | 25        | 1  | 2  | 0  | 0  | 0  | 0  | 0.65| 1.12| 1.34| 2.33| 2.07|
| NADH dehydrogenase [ubiquinone] 1 beta subunit   | 211       | 1  | 2  | 0  | 0  | 0  | 0  | 0.08| 0.13| 0.16| 0.28| 2.07|
| 7-alpha-hydroxycholesta-4-en-3-one 12-alpha       | 58        | 0  | 0  | 0  | 0  | 0  | 1  | 2   | 0.29| 0.51| 0.61| 1.05| 2.07|
| hydroxylase                                      |           |    |    |    |    |    |    |     |     |     |     |     |     |
| Molybdopterin synthase catalytic subunit 9        | 21        | 0  | 0  | 0  | 0  | 1  | 2  | 0.81| 1.40| 1.67| 2.90| 2.07|
| Clathrin light chain B                           | 25        | 1  | 2  | 0  | 0  | 0  | 0  | 0.65| 1.12| 1.34| 2.33| 2.07|
| Proteasome activator complex subunit 4           | 211       | 1  | 2  | 0  | 0  | 0  | 0  | 0.08| 0.13| 0.16| 0.28| 2.07|
| Neutrophil gelatinase-associated lipocalin       | 23        | 1  | 2  | 0  | 0  | 0  | 0  | 0.71| 1.22| 1.46| 2.53| 2.07|
| Ras-related protein Rap-2c                       | 21        | 1  | 0  | 1  | 4  | 1  | 2  | 2.34| 0.08| 4.86| 4.79| 2.08|
| Enoyl-CoA hydratase domain-containing protein 1   | 35        | 0  | 0  | 1  | 2  | 2  | 4  | 1.43| 1.46| 2.96| 3.01| 2.08|
| Band 3 anion transport protein                    | 103       | 1  | 3  | 1  | 1  | 1  | 2  | 0.48| 0.02| 0.99| 0.49| 2.08|
| Myosin-Ib                                        | 129       | 1  | 1  | 2  | 5  | 2  | 4  | 0.64| 0.23| 1.32| 0.82| 2.08|
| Phospholipase A-2-activating protein              | 87        | 0  | 1  | 1  | 1  | 1  | 2  | 0.38| 0.33| 0.79| 0.37| 2.08|
| NADH dehydrogenase [ubiquinone] iron-sulfur      | 25        | 1  | 1  | 1  | 3  | 0  | 0  | 1.29| 1.11| 2.68| 3.07| 2.08|
| protein 7, mitochondrial                         |           |    |    |    |    |    |    |     |     |     |     |     |
| Kynureninase                                     | 52        | 0  | 2  | 1  | 0  | 1  | 2  | 0.63| 0.55| 1.32| 1.14| 2.09|
| Aminoacyl tRNA synthetase complex-interacting    | 34        | 0  | 2  | 1  | 0  | 1  | 2  | 0.97| 0.84| 2.02| 1.75| 2.09|
| Protein Name | Code | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 |
|--------------|------|----|----|----|----|----|----|----|----|----|-----|-----|
| Ankyrin-1    | 204  | 1  | 2  | 1  | 2  | 0  | 0  | 0.16| 0.14| 0.33| 0.28 | 2.09 |
| Carboxymethylenebutenolase homolog | 28   | 4  | 5  | 3  | 6  | 5  | 13 | 7.06| 1.99| 14.74| 8.47 | 2.09 |
| FGYY carbohydrate kinase domain-containing protein | 60   | 0  | 0  | 1  | 2  | 0  | 0  | 0.27| 0.46| 0.56 | 0.97 | 2.10 |
| Destrin      | 19   | 1  | 2  | 2  | 3  | 0  | 1  | 2.53| 2.52| 5.34 | 2.58 | 2.11 |
| Ras-related protein Rap-1b | 21   | 1  | 2  | 3  | 3  | 2  | 7  | 4.67| 2.26| 9.85 | 6.79 | 2.11 |
| Alpha-1-antitrypsin I-4 | 46   | 1  | 1  | 1  | 2  | 0  | 1  | 0.70| 0.61| 1.48 | 0.62 | 2.11 |
| Stomatin-like protein 2 | 38   | 1  | 2  | 1  | 1  | 0  | 1  | 0.85| 0.73| 1.79 | 0.75 | 2.11 |
| Keratin, type II cytoskeletal 8 | 55   | 5  | 3  | 2  | 4  | 2  | 11 | 2.67| 1.52| 5.65 | 4.26 | 2.11 |
| Calcium-regulated heat stable protein 1 | 16   | 0  | 1  | 2  | 2  | 0  | 1  | 1.99| 3.45| 4.24 | 1.77 | 2.13 |
| Ras GTPase-activating protein-binding protein 1 | 52   | 1  | 1  | 1  | 1  | 0  | 2  | 0.62| 0.54| 1.32 | 0.61 | 2.14 |
| Acyl-coenzyme A synthetase ACSM5, mitochondrial | 64   | 1  | 2  | 1  | 0  | 0  | 2  | 0.50| 0.44| 1.07 | 0.93 | 2.14 |
| Coproporphyrinogen-III oxidase, mitochondrial | 50   | 1  | 4  | 3  | 0  | 0  | 4  | 1.28| 1.46| 2.75 | 2.38 | 2.15 |
| Heterogeneous nuclear ribonucleoprotein D0 | 38   | 0  | 0  | 2  | 2  | 0  | 2  | 0.84| 1.45| 1.81 | 1.57 | 2.15 |
| Cold shock domain-containing protein E1 | 89   | 0  | 1  | 2  | 1  | 0  | 2  | 0.36| 0.62| 0.77 | 0.36 | 2.15 |
| Neurolysin, mitochondrial | 80   | 1  | 0  | 0  | 0  | 0  | 2  | 0.20| 0.35| 0.44 | 0.76 | 2.17 |
| Cytochrome P450 2A12 | 56   | 1  | 5  | 3  | 7  | 3  | 3  | 2.05| 1.03| 4.53 | 1.73 | 2.21 |
| DNA damage-binding protein 1 | 127  | 3  | 5  | 2  | 7  | 2  | 3  | 0.90| 0.22| 2.00 | 0.76 | 2.22 |
| Glycine N-acyltransferase-like protein | 34   | 8  | 9  | 5  | 10 | 3  | 15 | 7.66| 3.52| 17.12| 5.36 | 2.24 |
| Vacular protein-sorting-associated protein 25 | 21   | 0  | 2  | 1  | 5  | 4  | 4  | 4.00| 5.08| 8.93 | 3.71 | 2.24 |
| GDH/6PGL endoplasmic bifunctional protein | 89   | 4  | 6  | 1  | 2  | 2  | 7  | 1.29| 0.83| 2.89 | 1.57 | 2.24 |
| Ferritin heavy chain | 21   | 2  | 5  | 2  | 5  | 2  | 3  | 4.68| 0.16| 10.49| 2.57 | 2.24 |
| E3 ubiquitin-protein ligase UBR4 | 572  | 0  | 0  | 0  | 0  | 0  | 5  | 11  | 0.15| 0.26| 0.34 | 0.59 | 2.27 |
| Dihydrofolate reductase | 22   | 2  | 2  | 1  | 5  | 2  | 4  | 3.74| 1.36| 8.53 | 3.54 | 2.28 |
| Ubiquitin carboxyl-terminal hydrolase 5 | 96   | 3  | 4  | 4  | 7  | 2  | 9  | 1.52| 0.47| 3.57 | 1.42 | 2.34 |
| Chloride intracellular channel protein 1 | 27   | 0  | 2  | 1  | 4  | 2  | 1  | 1.85| 1.89| 4.38 | 2.80 | 2.37 |
| Keratin, type I cytoskeletal 10 | 58   | 2  | 3  | 2  | 3  | 0  | 3  | 1.11| 0.96| 2.64 | 0.07 | 2.38 |
| AP-1 complex subunit gamma-1 | 91   | 0  | 3  | 2  | 4  | 1  | 0  | 0.54| 0.53| 1.29 | 1.15 | 2.40 |
| Multidrug resistance-associated protein 6 | 165  | 1  | 5  | 2  | 3  | 3  | 6  | 0.60| 0.32| 1.45 | 0.51 | 2.42 |
| Spectrin beta chain, erythrocyte | 245  | 1  | 4  | 1  | 1  | 1  | 2  | 0.20| 0.01| 0.49 | 0.31 | 2.42 |
| Regulator of microtubule dynamics protein 3 | 52   | 0  | 3  | 2  | 2  | 1  | 2  | 0.94| 0.92| 2.29 | 0.54 | 2.43 |
| Ubiquitin carboxyl-terminal hydrolase 14 | 56   | 0  | 0  | 1  | 4  | 1  | 1  | 0.59| 0.51| 1.51 | 1.86 | 2.57 |
| Protein Name                                                      | 1  | 2   | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|------------------------------------------------------------------|----|-----|----|----|----|----|----|----|----|----|----|----|
| 3-ketoacyl-CoA thiolase B, peroxisomal                           | 44 | 2   | 5  | 2  | 6  | 4  | 9  | 3.01 | 1.41 | 7.78 | 2.65 | 2.59 |
| Eukaryotic translation initiation factor 3 subunit C             | 106| 1   | 7  | 2  | 2  | 1  | 1  | 0.61 | 0.25 | 1.59 | 1.52 | 2.59 |
| 1,2-dihydroxy-3-keto-5-methylthiopentene dioxygenase             | 22 | 1   | 1  | 0  | 1  | 1  | 3  | 1.51 | 1.31 | 3.92 | 2.83 | 2.60 |
| 60S ribosomal protein L10                                        | 25 | 0   | 4  | 3  | 4  | 1  | 2  | 2.59 | 2.91 | 6.77 | 2.21 | 2.61 |
| Vesicle-fusing ATPase                                            | 83 | 1   | 2  | 1  | 2  | 0  | 1  | 0.39 | 0.34 | 1.02 | 0.33 | 2.63 |
| Leucyl-tRNA synthetase, cytoplasmic                              | 134| 2   | 3  | 1  | 1  | 1  | 6  | 0.49 | 0.21 | 1.29 | 1.00 | 2.64 |
| Catenin alpha-1                                                  | 100| 2   | 3  | 2  | 4  | 0  | 3  | 0.64 | 0.56 | 1.70 | 0.27 | 2.64 |
| CD166 antigen                                                    | 65 | 1   | 2  | 1  | 1  | 0  | 2  | 0.49 | 0.43 | 1.31 | 0.60 | 2.66 |
| U2 small nuclear ribonucleoprotein A'                            | 28 | 2   | 1  | 0  | 1  | 0  | 3  | 1.16 | 2.01 | 3.08 | 2.22 | 2.66 |
| Isoleucyl-tRNA synthetase, mitochondrial                        | 113| 1   | 4  | 1  | 4  | 3  | 5  | 0.74 | 0.54 | 1.96 | 0.32 | 2.67 |
| Calcineurin-like phosphoesterase domain-containing protein 1     | 35 | 0   | 1  | 2  | 2  | 0  | 2  | 0.91 | 1.58 | 2.44 | 0.87 | 2.68 |
| E3 SUMO-protein ligase RanBP2                                     | 341| 0   | 2  | 2  | 1  | 0  | 2  | 0.09 | 0.16 | 0.25 | 0.09 | 2.68 |
| Ectonucleoside triphosphate diphosphohydrolase 5                 | 47 | 2   | 1  | 0  | 0  | 0  | 4  | 0.69 | 1.20 | 1.85 | 2.34 | 2.68 |
| Alpha-actin-1                                                    | 103| 2   | 3  | 1  | 5  | 2  | 5  | 0.80 | 0.29 | 2.15 | 0.60 | 2.69 |
| Cystathionine beta-synthase                                      | 62 | 4   | 4  | 2  | 8  | 1  | 6  | 1.83 | 1.19 | 4.94 | 1.62 | 2.70 |
| Apoptosis regulator BAX                                          | 21 | 0   | 2  | 1  | 2  | 2  | 4  | 2.38 | 2.43 | 6.54 | 3.03 | 2.75 |
| Annexin A2                                                       | 39 | 2   | 1  | 0  | 3  | 1  | 4  | 1.27 | 1.25 | 3.52 | 2.08 | 2.78 |
| Alanine aminotransferase 1                                       | 55 | 2   | 4  | 0  | 0  | 1  | 4  | 0.90 | 0.88 | 2.50 | 2.17 | 2.78 |
| 28S ribosomal protein S23, mitochondrial                         | 20 | 0   | 1  | 0  | 2  | 1  | 0  | 0.85 | 1.47 | 2.51 | 2.51 | 2.96 |
| Septin-9                                                         | 66 | 0   | 2  | 0  | 1  | 1  | 0  | 0.26 | 0.45 | 0.76 | 0.76 | 2.96 |
| Retinol-binding protein 4                                         | 23 | 0   | 3  | 0  | 0  | 0  | 1  | 0.74 | 1.28 | 2.19 | 3.79 | 2.96 |
| Liver carboxylesterase 1                                         | 63 | 3   | 12 | 2  | 3  | 2  | 5  | 1.82 | 0.43 | 5.39 | 3.75 | 2.96 |
| Carbonic anhydrase 1                                             | 28 | 0   | 3  | 0  | 2  | 2  | 1  | 1.21 | 2.10 | 3.62 | 1.76 | 2.98 |
| COMM domain-containing protein 3                                 | 22 | 0   | 2  | 0  | 0  | 1  | 1  | 0.77 | 1.34 | 2.32 | 2.29 | 3.01 |
| Aminopeptidase N                                                 | 110| 4   | 9  | 3  | 6  | 1  | 8  | 1.18 | 0.66 | 3.56 | 0.73 | 3.02 |
| Serrate RNA effector molecule homolog                            | 100| 0   | 0  | 0  | 0  | 1  | 2  | 0.17 | 0.29 | 0.52 | 0.53 | 3.05 |
| 39S ribosomal protein L16, mitochondrial                         | 29 | 0   | 1  | 0  | 0  | 1  | 2  | 0.59 | 1.02 | 1.79 | 1.82 | 3.05 |
| 39S ribosomal protein L11, mitochondrial                         | 21 | 0   | 1  | 0  | 0  | 1  | 2  | 0.81 | 1.40 | 2.47 | 2.51 | 3.05 |
| GTP cyclohydrolase 1                                             | 27 | 0   | 1  | 0  | 0  | 1  | 2  | 0.63 | 1.09 | 1.92 | 1.95 | 3.05 |
| Selenoprotein S                                                  | 22 | 0   | 1  | 0  | 0  | 1  | 2  | 0.77 | 1.34 | 2.36 | 2.40 | 3.05 |
| Derlin-2                                                         | 28 | 1   | 2  | 0  | 2  | 1  | 2  | 1.19 | 1.03 | 3.65 | 0.10 | 3.08 |
| Cytochrome P450 2A4                                               | 57 | 1   | 0  | 0  | 3  | 0  | 0  | 0.28 | 0.49 | 0.88 | 0.88 | 3.10 |
| Carcinoembryonic antigen-related cell adhesion molecule 1        | 57 | 1   | 2  | 0  | 1  | 0  | 0  | 0.28 | 0.49 | 0.88 | 0.88 | 3.10 |
| Nicotinamide phosphoribosyltransferase                           | 55 | 1   | 3  | 0  | 0  | 0  | 0  | 0.29 | 0.51 | 0.92 | 1.59 | 3.11 |
| Protein Name                                                                 | Score | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|------------------------------------------------------------------------------|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|
| Keratin, type II cytoskeletal 1                                              | 66    | 1 | 4 | 2 | 6 | 3 | 8 | 1.50 | 0.79 | 4.67 | 1.67 | 3.11 |
| Transmembrane and coiled-coil domain-containing protein 1                  | 21    | 0 | 1 | 1 | 2 | 1 | 3 | 1.57 | 1.36 | 4.90 | 2.57 | 3.13 |
| Gamma-aminobutyric acid receptor-associated protein                        | 14    | 1 | 2 | 1 | 3 | 0 | 1 | 2.30 | 1.99 | 7.24 | 3.50 | 3.15 |
| Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit STT3A| 81    | 1 | 2 | 1 | 3 | 0 | 1 | 0.40 | 0.34 | 1.25 | 0.61 | 3.15 |
| Epidermal growth factor receptor kinase substrate 8-like protein 2          | 82    | 1 | 2 | 0 | 0 | 0 | 1 | 0.20 | 0.34 | 0.62 | 0.61 | 3.15 |
| Eukaryotic translation initiation factor 3 subunit F                        | 38    | 1 | 2 | 0 | 0 | 0 | 1 | 0.43 | 0.74 | 1.35 | 1.33 | 3.15 |
| Seryl-tRNA synthetase, cytoplasmic                                          | 58    | 0 | 1 | 1 | 2 | 0 | 0 | 0.27 | 0.48 | 0.87 | 0.87 | 3.16 |
| NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 11, mitochondrial| 17    | 0 | 2 | 1 | 1 | 0 | 0 | 0.94 | 1.62 | 2.96 | 2.96 | 3.16 |
| Golgi SNAP receptor complex member 2                                         | 25    | 0 | 2 | 1 | 1 | 0 | 0 | 0.64 | 1.10 | 2.01 | 2.01 | 3.16 |
| 28S ribosomal protein S15, mitochondrial                                     | 29    | 1 | 1 | 0 | 0 | 0 | 2 | 0.56 | 0.97 | 1.79 | 1.82 | 3.20 |
| 26S proteasome non-ATPase regulatory subunit 9                              | 25    | 0 | 0 | 1 | 2 | 0 | 1 | 0.64 | 1.10 | 2.04 | 2.01 | 3.20 |
| Phosphatidate phosphatase LPIN1                                              | 102   | 0 | 0 | 1 | 1 | 0 | 2 | 0.16 | 0.27 | 0.51 | 0.52 | 3.26 |
| Actin-related protein 2/3 complex subunit 4                                 | 20    | 0 | 4 | 1 | 1 | 2 | 5 | 2.50 | 2.55 | 8.59 | 5.48 | 3.44 |
| Regulator of nonsense transcripts 1                                          | 124   | 2 | 5 | 1 | 5 | 0 | 0 | 0.39 | 0.39 | 1.35 | 1.17 | 3.47 |
| Peroxisomal carnitine O-octanoyltransferase                                 | 70    | 1 | 5 | 2 | 4 | 0 | 1 | 0.69 | 0.68 | 2.41 | 1.48 | 3.50 |
| Keratin, type I cytoskeletal 14                                              | 53    | 1 | 1 | 0 | 3 | 1 | 3 | 0.63 | 0.54 | 2.26 | 1.14 | 3.61 |
| Fumarylacetoacetate hydrolase domain-containing protein 2A                  | 35    | 0 | 5 | 1 | 0 | 1 | 2 | 0.94 | 0.82 | 3.40 | 3.61 | 3.61 |
| Epoxide hydrolase 1                                                          | 53    | 1 | 6 | 2 | 4 | 1 | 4 | 1.23 | 0.50 | 4.49 | 1.05 | 3.66 |
| Insulin-degrading enzyme                                                     | 118   | 2 | 1 | 0 | 3 | 0 | 3 | 0.27 | 0.48 | 1.01 | 0.51 | 3.69 |
| Disks large homolog 1                                                        | 100   | 0 | 3 | 2 | 3 | 0 | 1 | 0.32 | 0.55 | 1.18 | 0.57 | 3.71 |
| Fatty aldehyde dehydrogenase                                                 | 54    | 2 | 6 | 2 | 6 | 2 | 10 | 1.82 | 0.06 | 6.98 | 2.41 | 3.83 |
| Monoglyceride lipase                                                         | 33    | 0 | 1 | 0 | 2 | 1 | 1 | 0.52 | 0.89 | 2.06 | 0.86 | 3.99 |
| Transcription intermediary factor 1-beta                                     | 89    | 0 | 3 | 0 | 0 | 1 | 1 | 0.19 | 0.33 | 0.76 | 0.86 | 4.00 |
| GTPase HRas                                                                  | 21    | 0 | 1 | 0 | 1 | 1 | 2 | 0.81 | 1.40 | 3.27 | 1.51 | 4.04 |
| 28S ribosomal protein S25, mitochondrial                                     | 20    | 0 | 1 | 0 | 1 | 1 | 1 | 2.85 | 1.47 | 3.43 | 1.59 | 4.04 |
| Mitochondrial 2-oxodicarboxylate carrier                                     | 33    | 0 | 1 | 0 | 0 | 1 | 3 | 0.52 | 0.89 | 2.11 | 2.45 | 4.09 |
| Protein Name | Gene Name | Chromosome | Exon | Intron | Gene | Start | CDS Length | UTR3 | UTR5 | ORF3 | ORF5 | ORF7 | ORF9 | ORF11 | ORF13 |
|--------------|-----------|------------|------|--------|------|-------|-----------|------|------|------|------|------|------|-------|-------|
| Kynurenine--oxoglutarate transaminase 3 | 51 1 4 0 1 1 3 | 0.65 | 0.56 | 2.68 | 1.53 | 4.11 |
| Arginyl-tRNA synthetase, cytoplasmic | 76 1 1 0 3 0 0 | 0.21 | 0.37 | 0.88 | 1.01 | 4.13 |
| Acyl-CoA dehydrogenase family member 9, mitochondrial | 69 1 0 0 3 0 1 | 0.24 | 0.41 | 0.98 | 1.11 | 4.18 |
| Eukaryotic translation initiation factor 3 subunit K | 25 1 1 0 2 0 1 | 0.65 | 1.12 | 2.71 | 1.13 | 4.18 |
| Glutathione S-transferase A1 | 26 2 3 1 6 0 3 | 1.86 | 1.87 | 7.83 | 3.27 | 4.21 |
| 26S protease regulatory subunit 8 | 46 1 0 0 2 0 2 | 0.35 | 0.61 | 1.49 | 1.29 | 4.23 |
| Peroxisomal membrane protein 4 | 24 0 2 1 1 0 1 | 0.66 | 1.15 | 2.83 | 1.19 | 4.26 |
| Stromal cell-derived factor 2-like protein 1 | 24 0 2 1 1 0 1 | 0.66 | 1.15 | 2.83 | 1.19 | 4.26 |
| 28S ribosomal protein S2, mitochondrial | 32 0 1 1 1 0 2 | 0.50 | 0.86 | 2.15 | 0.99 | 4.31 |
| Solute carrier family 25 member 42 | 35 0 0 1 1 0 3 | 0.46 | 0.79 | 1.98 | 2.31 | 4.36 |
| Multidrug resistance protein 2 | 140 1 6 2 3 1 8 | 0.46 | 0.19 | 2.08 | 0.97 | 4.48 |
| Pressequence protease, mitochondrial | 117 0 2 0 2 1 1 | 0.15 | 0.25 | 0.72 | 0.24 | 4.98 |
| Large proline-rich protein BAT2 | 229 0 4 0 0 1 1 | 0.07 | 0.13 | 0.37 | 0.46 | 4.98 |
| Ubiquilin-1 | 62 0 2 0 1 1 2 | 0.27 | 0.47 | 1.38 | 0.49 | 5.03 |
| Probable 10-formyltetrahydrofolate dehydrogenase ALDH1L2 | 102 1 1 0 3 0 1 | 0.16 | 0.28 | 0.83 | 0.56 | 5.22 |
| Cutaneous T-cell lymphoma-associated antigen 5 homolog | 88 1 2 0 2 0 1 | 0.18 | 0.32 | 0.96 | 0.31 | 5.22 |
| Antithrombin-III | 52 0 4 1 1 0 0 | 0.31 | 0.53 | 1.61 | 2.02 | 5.26 |
| 26S proteasome non-ATPase regulatory subunit 14 | 35 0 1 1 3 0 1 | 0.46 | 0.79 | 2.42 | 1.64 | 5.31 |
| Aminoglycoside phosphotransferase domain-containing protein 1 | 42 0 2 1 2 0 1 | 0.38 | 0.66 | 2.02 | 0.66 | 5.31 |
| Uncharacterized protein KIAA0664 | 148 2 14 5 10 0 12 | 0.76 | 0.81 | 4.14 | 0.69 | 5.47 |
| Talin-2 | 254 1 6 0 4 1 1 | 0.13 | 0.11 | 0.73 | 0.49 | 5.58 |
| Annexin A4 | 36 2 5 0 2 0 4 | 0.90 | 1.56 | 5.21 | 2.17 | 5.79 |
| Partner of Y14 and mago | 23 1 0 0 5 0 1 | 0.71 | 1.22 | 4.41 | 5.76 | 6.25 |
| Caprin-1 | 78 1 1 0 3 0 2 | 0.21 | 0.36 | 1.31 | 0.64 | 6.30 |
| Purinergic-sensitive aminopeptidase | 103 1 1 0 3 0 2 | 0.16 | 0.27 | 0.99 | 0.49 | 6.30 |
| Palmitoyl-protein thioesterase 1 | 34 1 2 0 1 0 3 | 0.48 | 0.83 | 3.03 | 1.59 | 6.35 |
| Thyroid hormone receptor-associated protein 3 | 108 0 2 1 3 0 2 | 0.15 | 0.26 | 1.10 | 0.26 | 7.46 |
| Gene Name                                                                 | Protein Transport | Sec24A | Canalicular multispecific organic anion transporter 2 | Endoplasmic reticulum aminopeptidase 1 | Tuberin | Isoleucyl-tRNA synthetase, cytoplasmic | Fanconi anemia group I protein homolog | Nascent polypeptide-associated complex subunit alpha, muscle-specific form | Spectrin alpha chain, erythrocyte | PERQ amino acid-rich with GYF domain-containing protein 2 | Serine/threonine-protein kinase mTOR | Eukaryotic translation initiation factor 2 subunit 1 | Nucleoside diphosphate kinase B | Metaxin-2 | 26S proteasome non-ATPase regulatory subunit 12 | Tetratricopeptide repeat protein 35 | AP-3 complex subunit delta-1 | ATP-dependent RNA helicase A | Hydroxyacid-oxoacid transhydrogenase, mitochondrial | Nucleobindin-1 | CDP-diacylglycerol-phosphatidyltransferase | COMM domain-containing protein 1 | 39S ribosomal protein L13, mitochondrial | Monoacylglycerol lipase ABHD6 | Lysoosomal protective protein | Mitochondrial-processing peptidase subunit alpha |
|--------------------------------------------------------------------------|-------------------|--------|------------------------------------------------------|---------------------------------------|---------|------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------|-----------------------------|----------------|------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------|-----------------------------------------------|--------------------------------|--------------------------------|-----------------------------|--------------------------------|----------------|--------------------------------|----------------|
| N(G),N(G)-dimethylarginine dimethylaminohydrolase 1                       | 31                | 0      | 3                                                    | 0                                    | 3       | 1                                        | 3                                      | 0.55                                                                              | 0.95                     | 4.95                                                                            | 0.13                     | 9.02                                                                            | 119                         | 0                    | 5                                            | 1                                    | 5        | 0                                           | 3                                      | 0.13                                                                              | 0.23                     | 1.85                                                                            | 0.45                     | 13.83                                                                   | 169                         | 0                    | 7                                            | 0                                    | 2        | 0                                           | 5                                      | 0.00                                                                              | 0.00                     | 1.41                                                                            | 0.76                     | ∞                                                                 | 107                         | 0                    | 3                                            | 0                                    | 2        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 1.11                                                                            | 0.26                     | ∞                                                                 | 202                         | 0                    | 1                                            | 0                                    | 1        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 0.34                                                                            | 0.16                     | ∞                                                                 | 144                         | 0                    | 2                                            | 0                                    | 3        | 0                                           | 4                                      | 0.00                                                                              | 0.00                     | 1.07                                                                            | 0.38                     | ∞                                                                 | 149                         | 0                    | 0                                            | 0                                    | 2        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 0.34                                                                            | 0.34                     | ∞                                                                 | 221                         | 0                    | 0                                            | 0                                    | 2        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 0.23                                                                            | 0.23                     | ∞                                                                 | 280                         | 0                    | 4                                            | 2                                    | 0        | 1                                           | 1                                      | 0.00                                                                              | 0.00                     | 0.42                                                                            | 0.27                     | ∞                                                                 | 149                         | 0                    | 2                                            | 0                                    | 0        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 0.34                                                                            | 0.34                     | ∞                                                                 | 289                         | 0                    | 2                                            | 0                                    | 0        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 0.24                                                                            | 0.21                     | ∞                                                                 | 36                          | 0                    | 2                                            | 0                                    | 1        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 1.89                                                                            | 0.79                     | ∞                                                                 | 17                          | 0                    | 3                                            | 0                                    | 2        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 5.97                                                                            | 2.89                     | ∞                                                                 | 30                          | 0                    | 2                                            | 0                                    | 1        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 2.26                                                                            | 0.95                     | ∞                                                                 | 53                          | 0                    | 2                                            | 0                                    | 0        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 1.30                                                                            | 1.12                     | ∞                                                                 | 35                          | 0                    | 0                                            | 0                                    | 3        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 1.94                                                                            | 2.19                     | ∞                                                                 | 135                         | 0                    | 1                                            | 0                                    | 3        | 0                                           | 0                                      | 0.00                                                                              | 0.00                     | 0.50                                                                            | 0.57                     | ∞                                                                 | 149                         | 0                    | 3                                            | 0                                    | 0        | 0                                           | 1                                      | 0.00                                                                              | 0.00                     | 0.46                                                                            | 0.51                     | ∞                                                                 | 50                          | 0                    | 1                                            | 0                                    | 1        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 1.37                                                                            | 0.64                     | ∞                                                                 | 53                          | 0                    | 1                                            | 0                                    | 0        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 0.98                                                                            | 0.99                     | ∞                                                                 | 24                          | 0                    | 1                                            | 0                                    | 1        | 0                                           | 3                                      | 0.00                                                                              | 0.00                     | 3.59                                                                            | 2.59                     | ∞                                                                 | 21                          | 0                    | 2                                            | 0                                    | 3        | 0                                           | 0                                      | 0.00                                                                              | 0.00                     | 3.99                                                                            | 3.66                     | ∞                                                                 | 21                          | 0                    | 1                                            | 0                                    | 1        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 3.27                                                                            | 1.51                     | ∞                                                                 | 38                          | 0                    | 2                                            | 0                                    | 0        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 1.81                                                                            | 1.57                     | ∞                                                                 | 54                          | 0                    | 2                                            | 0                                    | 0        | 0                                           | 2                                      | 0.00                                                                              | 0.00                     | 1.27                                                                            | 1.10                     | ∞                                                                 | 58                          | 0                    | 1                                            | 0                                    | 2        | 0                                           | 0                                      | 0.00                                                                              | 0.00                     | 0.87                                                                            | 0.87                     | ∞                                                                 |
| Protein                                                                 | M1 | M2 | M3 | M4 | M5 | M6 | SAF 1 | SAF 2 | SAF 3 | SAF 4 |
|------------------------------------------------------------------------|----|----|----|----|----|----|-------|-------|-------|-------|
| Gephyrin                                                              | 83 | 0  | 1  | 0  | 0  | 0  | 3     | 0.00  | 0.00  | 0.84  |
| Uncharacterized protein KIAA0090                                      | 112| 0  | 1  | 0  | 0  | 0  | 3     | 0.00  | 0.00  | 0.62  |
| ATP-binding cassette subfamily A member 1                              | 254| 0  | 2  | 0  | 0  | 0  | 1     | 0.00  | 0.00  | 0.20  |
| ATP-binding cassette subfamily D member 1                              | 82 | 0  | 0  | 0  | 2  | 0  | 1     | 0.00  | 0.00  | 0.62  |
| Beta-actin-like protein 2                                               | 42 | 0  | 2  | 0  | 1  | 0  | 0     | 0.00  | 0.00  | 1.20  |
| NADPH:adrenodoxin oxidoreductase, mitochondrial                       | 54 | 0  | 1  | 0  | 0  | 0  | 2     | 0.00  | 0.00  | 0.96  |
| Apoptosis inhibitor 5                                                  | 57 | 0  | 1  | 0  | 2  | 0  | 0     | 0.00  | 0.00  | 0.88  |
| COMM domain-containing protein 9                                       | 22 | 0  | 2  | 0  | 0  | 0  | 1     | 0.00  | 0.00  | 2.32  |
| Eukaryotic translation initiation factor 3 subunit J                   | 29 | 0  | 1  | 0  | 2  | 0  | 0     | 0.00  | 0.00  | 1.73  |
| Alpha-mannosidase 2C1                                                  | 116| 0  | 2  | 0  | 1  | 0  | 0     | 0.00  | 0.00  | 0.43  |
| Mitochondrial carrier homolog 1                                       | 42 | 0  | 0  | 0  | 2  | 0  | 1     | 0.00  | 0.00  | 1.22  |
| Acyl-CoA synthetase short-chain family member 3, mitochondrial        | 75 | 0  | 2  | 0  | 0  | 0  | 1     | 0.00  | 0.00  | 0.68  |
| HBS1-like protein                                                      | 75 | 0  | 2  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 0.45  |
| Uncharacterized protein C1orf93 homolog                                | 22 | 0  | 0  | 0  | 2  | 0  | 0     | 0.00  | 0.00  | 1.52  |
| Apoptotic chromatin condensation inducer in the nucleus                | 151| 0  | 3  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 0.33  |
| Calpain-1 catalytic subunit                                            | 82 | 0  | 3  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 0.61  |
| Serine/threonine-protein kinase TAO3                                   | 105| 0  | 0  | 0  | 3  | 0  | 0     | 0.00  | 0.00  | 0.48  |
| Host cell factor 1                                                     | 211| 0  | 0  | 0  | 0  | 2  | 0     | 0.00  | 0.00  | 0.17  |
| Acyl-coenzyme A amino acid N-acyltransferase 1                         | 46 | 0  | 2  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 0.73  |
| BCL2/adenovirus E1B 19 kDa protein-interacting protein 3              | 21 | 0  | 0  | 0  | 0  | 0  | 2     | 0.00  | 0.00  | 1.67  |
| Carbonic anhydrase 5A, mitochondrial                                    | 34 | 0  | 0  | 0  | 2  | 0  | 0     | 0.00  | 0.00  | 0.99  |
| Coronin-7                                                              | 101| 0  | 2  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 0.33  |
| Cleavage and polyadenylation specificity factor subunit 1              | 161| 0  | 2  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 0.21  |
| Probable ATP-dependent RNA helicase DDX17                               | 72 | 0  | 0  | 0  | 2  | 0  | 0     | 0.00  | 0.00  | 0.47  |
| Guanine deaminase                                                      | 51 | 0  | 0  | 0  | 0  | 2  | 0     | 0.00  | 0.00  | 0.69  |
| Hippocalcin-like protein 1                                             | 22 | 0  | 0  | 0  | 2  | 0  | 0     | 0.00  | 0.00  | 1.52  |
| Neck-associated protein 1                                              | 129| 0  | 0  | 0  | 2  | 0  | 0     | 0.00  | 0.00  | 0.26  |
| Peroxisomal membrane protein 11B                                       | 29 | 0  | 2  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 1.16  |
| Splicing factor 3A subunit 1                                           | 89 | 0  | 2  | 0  | 0  | 0  | 0     | 0.00  | 0.00  | 0.38  |

| \( \Sigma \) SAF | 205.6 | 198.6 | 209.1 | 199.0 | 196.1 | 189.8 |