**Table S3.** Top functional annotation clusters for the 1,363 genes regulated by the top 300 *trans*-eQTL hotspots.

| Original database | Enriched terms | Count | P_Value | Fold Change | Bonferroni |
|---|---|---|---|---|---|
| **Annotation Cluster 1 Enrichment Score: 6.95** | | | | | |
| SP_PIR_KEYWORDS | mitochondrion | 105 | 1.30E-09 | 1.80 | 5.90E-07 |
| GOTERM_CC_FAT | mitochondrion | 156 | 1.60E-09 | 1.60 | 7.50E-07 |
| SP_PIR_KEYWORDS | transit peptide | 64 | 5.20E-07 | 1.90 | 2.40E-04 |
| GOTERM_CC_FAT | mitochondrial part | 69 | 3.10E-06 | 1.80 | 1.50E-03 |
| UP_SEQ_FEATURE | transit peptide:Mitochondrion | 63 | 5.40E-06 | 1.80 | 1.50E-02 |
| **Annotation Cluster 2 Enrichment Score: 4.12** | | | | | |
| GOTERM_CC_FAT | mitochondrial part | 69 | 3.10E-06 | 1.80 | 1.50E-03 |
| GOTERM_CC_FAT | organelle envelope | 68 | 1.70E-05 | 1.70 | 8.10E-03 |
| GOTERM_CC_FAT | envelope | 68 | 1.90E-05 | 1.70 | 9.20E-03 |
| GOTERM_CC_FAT | mitochondrial membrane | 48 | 1.60E-04 | 1.80 | 7.30E-02 |
| GOTERM_CC_FAT | organelle inner membrane | 42 | 2.20E-04 | 1.80 | 1.00E-01 |
| GOTERM_CC_FAT | mitochondrial inner membrane | 40 | 2.90E-04 | 1.80 | 1.30E-01 |
| GOTERM_CC_FAT | mitochondrial envelope | 49 | 3.40E-04 | 1.70 | 1.50E-01 |
| GOTERM_CC_FAT | organelle membrane | 87 | 3.40E-04 | 1.50 | 1.50E-01 |
| **Annotation Cluster 3 Enrichment Score: 3.64** | | | | | |
| GOTERM_CC_FAT | mitochondrial part | 69 | 3.10E-06 | 1.80 | 1.50E-03 |
| GOTERM_CC_FAT | mitochondrial lumen | 24 | 2.00E-03 | 2.00 | 6.20E-01 |
| GOTERM_CC_FAT | mitochondrial matrix | 24 | 2.00E-03 | 2.00 | 6.20E-01 |
| **Annotation Cluster 4 Enrichment Score: 3.28** | | | | | |
| GOTERM_BP_FAT | intracellular transport | 58 | 6.60E-06 | 1.90 | 1.90E-02 |

| | | | | | |
|---|---|---|---|---|---|
| SP_PIR_KEYWORDS | protein transport | 60 | 1.30E-05 | 1.80 | 5.70E-03 |
| GOTERM_BP_FAT | protein localization | 81 | 3.20E-04 | 1.50 | 6.00E-01 |
| GOTERM_BP_FAT | establishment of protein localization | 72 | 4.00E-04 | 1.50 | 6.90E-01 |
| GOTERM_BP_FAT | protein transport | 71 | 5.30E-04 | 1.50 | 7.80E-01 |
| SP_PIR_KEYWORDS | transport | 145 | 1.50E-03 | 1.30 | 4.90E-01 |
| GOTERM_BP_FAT | cellular protein localization | 35 | 6.00E-03 | 1.60 | 1.00E+00 |
| GOTERM_BP_FAT | cellular macromolecule localization | 35 | 6.60E-03 | 1.60 | 1.00E+00 |
| GOTERM_BP_FAT | intracellular protein transport | 32 | 1.00E-02 | 1.60 | 1.00E+00 |