**Supplementary file 6 - Table 6**

**GO-term analysis of genes showing high inter-individual variation between livers of old wt female mice**

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| --- | --- | --- | --- | --- | --- |
| **GO term** | **Description** | **p-value** | **FDR q-value** | **Number of genes** | **Fold enrich-ment** |
| GO:0005739 | Mitochondrion | 1.2x10-30 | 1.8x10-27 | 236 | 2.1 |
| GO:0070062 | Extracellular exosome | 3.4x10-29 | 5.1x10-26 | 315 | 1.8 |
| GO:0055114 | Oxidation-reduction process | 4.4x10-26 | 8.0x10-23 | 124 | 2.8 |
| GO:0005743 | Mitochondrial inner membrane | 2.5x10-24 | 3.7x10-21 | 86 | 3.5 |
| GO:0016491 | Oxidoreductase activity | 2.6x10-24 | 4.2x10-21 | 113 | 2.8 |
| GO:0005783 | Endoplasmic reticulum | 1.8x10-17 | 2.6x10-14 | 166 | 2.0 |
| GO:0008152 | Metabolic process | 1.7x10-12 | 3.1x10-9 | 74 | 2.4 |
| GO:0072562 | Blood microparticle | 5.0x10-11 | 7.3x10-8 | 33 | 3.9 |
| GO:0006953 | Acute phase response | 1.2x10-10 | 2.3x10-7 | 17 | 7.4 |
| GO:0005789 | Endoplasmic reticulum membrane | 1.6x10-10 | 2.4x10-7 | 92 | 2.0 |
| GO:0006810 | Transport | 2.3x10-10 | 4.2x10-7 | 187 | 1.6 |
| GO:0043231 | Intracellular membrane-bounded organelle | 2.9x10-10 | 4.3x10-7 | 95 | 2.0 |
| GO:0007596 | Blood coagulation | 2.5x10-9 | 4.5x10-6 | 24 | 4.4 |
| GO:0042730 | Fibrinolysis | 3.0x10-9 | 5.6x10-6 | 11 | 11.2 |
| GO:0016020 | Membrane | 4.5x10-9 | 6.6x10-6 | 546 | 1.2 |
| GO:0006635 | Fatty acid beta-oxidation | 5.9x10-8 | 1.1x10-4 | 16 | 5.6 |
| GO:0006631 | Fatty acid metabolic process | 8.0x10-8 | 1.5x10-4 | 31 | 3.0 |
| GO:0031090 | Organelle membrane | 8.7x10-8 | 1.3x10-4 | 23 | 3.8 |
| GO:0006629 | Lipid metabolic process | 9.2x10-8 | 1.7x10-4 | 62 | 2.1 |
| GO:0007599 | Hemostasis | 1.2x10-7 | 2.1x10-4 | 16 | 5.3 |
| GO:0005777 | Peroxisome | 2.1x10-7 | 3.1x10-4 | 27 | 3.2 |
| GO:0006749 | Glutathione metabolic process | 3.0x10-7 | 5.5x10-4 | 16 | 5.0 |
| GO:0005829 | Cytosol | 4.6x10-7 | 6.7x10-4 | 167 | 1.5 |
| GO:0005615 | Extracellular space | 9.5x10-7 | 1.4x10-3 | 144 | 1.5 |
| GO:0034364 | High-density lipoprotein particle | 2.6x10-6 | 3.8x10-3 | 10 | 7.4 |
| GO:0005793 | Endoplasmic reticulum-Golgi intermediate compartment | 4.6x10-6 | 6.7x10-3 | 17 | 3.9 |
| GO:0004364 | Glutathione transferase activity | 4.8x10-6 | 7.8x10-3 | 12 | 5.5 |
| GO:0004129 | Cytochrome-c oxidase activity | 6.4x10-6 | 1.1x10-2 | 11 | 6.0 |
| GO:0003988 | Acetyl-CoA C-acetyltransferase activity | 6.9x10-6 | 1.1x10-2 | 6 | 15.2 |
| GO:0006099 | Tricarboxylic acid cycle | 8.7x10-6 | 1.6x10-2 | 11 | 5.8 |
| GO:0020037 | Heme binding | 1.1x10-5 | 1.7x10-2 | 29 | 2.5 |
| GO:0043022 | Ribosome binding | 1.1x10-5 | 1.8x10-2 | 15 | 4.1 |
| GO:0016829 | Lyase activity | 1.2x10-5 | 2.0x10-2 | 25 | 2.7 |
| GO:0005765 | Lysosomal membrane | 1.7x10-5 | 2.5x10-2 | 34 | 2.3 |
| GO:0016787 | Hydrolase activity | 2.2x10-5 | 3.6x10-2 | 142 | 1.4 |
| GO:0004497 | Monooxygenase activity | 2.2x10-5 | 3.6x10-2 | 21 | 3.0 |