**Table S1:** Taqman gene expression assays.

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| Functional Group | Gene Symbol | Gene Name | Assay ID |
| Mitochondrial Energy & Redox Metabolism | Atp5a1 | ATP synthase, mitochondrial F1 complex, alpha subunit 1 | Atp5a1-Rn01638043\_g1 |
| Cox4i1 | cytochrome c oxidase subunit IV isoform 1 | Cox4i1-Rn00665001\_g1 |
| Cyb5b | Cytochrome b5 type B (outer mitochondrial membrane) | Cyb5b-Rn00577982\_m1 |
| Dnm1l | dynamin 1-like | Dnm1l-Rn00586466\_m1 |
| Hadh | Hydroxyacyl-Coenzyme A dehydrogenase | Hadh-Rn00589352\_m1 |
| Mfn1 | mitofusin 1 | Mfn1-Rn00594496\_m1 |
| Mfn2 | mitofusin 2 | Mfn2-Rn00500120\_m1 |
| MT-CO2 | Cytochrome c oxidase II | MT-CO2-Rn03296737\_s1 |
| MT-CO3 | Cytochrome c oxidase III | MT-CO3-Rn03296820\_s1 |
| Nfe2l2 | nuclear factor (erythroid-derived 2)-like 2 | Nfe2l2-Rn00477784\_m1 |
| Nrf1 | nuclear respiratory factor 1 | Nrf1-Rn01455958\_m1 |
| Pdha1 | pyruvate dehydrogenase (lipoamide) alpha 1 | LOC685778-Rn01424350\_g1 |
| Pdhb | pyruvate dehydrogenase (lipoamide) beta | Pdhb-Rn01537771\_g1 |
| Polg | polymerase (DNA directed), gamma | Polg-Rn00450527\_m1 |
| Ppargc1a | peroxisome proliferator-activated receptor gamma, coactivator 1 alpha | Ppargc1a-Rn00580241\_m1 |
| Ppargc1b | peroxisome proliferator-activated receptor gamma, coactivator 1 beta | Ppargc1b-Rn00598552\_m1 |
| Prdx5 | Peroxiredoxin 5 | Prdx5-Rn00586040\_m1 |
| Sirt1 | sirtuin | Sirt1-Rn01428093\_m1 |
| Slc16a1 | Solute carrier family 16, member 1 (monocarboxylic acid transporter 1) | Slc16a1-Rn00562332\_m1 |
| Slc16a7 | Solute carrier family 16, member 7 (monocarboxylic acid transporter 2) | Slc16a7-Rn00568872\_m1 |
| Slc25a4 | Solute carrier family 25 (mitochondrial carrier), member 4 | Slc25a4-Rn00821477\_g1 |
| Slc2a1 | Solute carrier family 2 (facilitated glucose transporter), member 1 | Slc2a1-Rn01417099\_m1 |
| Slc2a3 | Solute carrier family 2 (facilitated glucose transporter), member 3 | Slc2a3-Rn00567331\_m1 |
| Sod2 | Superoxide dismutase 2, mitochondrial | Sod2-Rn00566942\_g1 |
| Tfam | transcription factor A, mitochondrial | Tfam-Rn00580051\_m1 |
| Cholesterol Homeostasis & Myelin Metabolism | Abca1 | ATP-binding cassette, sub-family A (ABC1), member 1 | Abca1-Rn00710172\_m1 |
| Apoe | Apolipoprotein E | Apoe-Rn00593680\_m1 |
| Apof | Apolipoprotein F | Apof-Rn01756260\_g1 |
| Capn1 | calpain 1, (mu/I) large subunit | Capn1-Rn00569689\_m1 |
| Cd81 | Cd81 molecule | Cd81-Rn00565272\_m1 |
| Cnp | 2’3’-cyclic nucleotide 3’ phosphodiesterase; CNPase | Cnp-Rn01399463\_m1 |
| Ctsb | cathepsin B | Ctsb-Rn00575030\_m1 |
| Cyp27a1 | Cytochrome P450, family 27, subfamily A, polypeptide 1 | Cyp27a1-Rn00710297\_m1 |
| Galc | galactosylceramidase | Galc-Rn01517759\_m1 |
| Lcat | Lecithin-cholesterol acyltransferase | Lcat-Rn00500505\_m1 |
| Mbp | myelin basic protein | Mbp-Rn00690431\_m1 |
| Mog | myelin oligodendrocyte glycoprotein | Mog-Rn00575354\_m1 |
| Nr1h2 | Nuclear receptor subfamily 1, group H, member 2 | Nr1h2-Rn00581178\_m1 |
| Nr1h3 | Nuclear receptor subfamily 1, group H, member 3 | Nr1h3-Rn00581185\_m1 |
| Nr1i2 | Nuclear receptor subfamily 1, group I, member 2 | Nr1i2-Rn00583887\_m1 |
| Plp1 | proteolipid protein 1 | Plp1-Rn00456892\_m1 |
| Smpd1 | sphingomyelin phosphodiesterase 1, acid lysosomal | Smpd1-Rn01506464\_g1 |
| Star | Steroidogenic acute regulatory protein | Star-Rn00580695\_m1 |
| Tspo | Translocator protein | Tspo-Rn00560892\_m1 |
| Insulin Signaling & Amyloid Metabolism | A2m | Alpha-2-macroglobulin | A2m-Rn00560589\_m1 |
| Ace | Angiotensin I converting enzyme (peptidyl-dipeptidase A) 1 | Ace-Rn00561094\_m1 |
| Adam17 | ADAM metallopeptidase domain 17; TACE | Adam17-Rn00571880\_m1 |
| Apba1 | Amyloid beta (A4) precursor protein-binding, family A, member 1 | Apba1-Rn00582341\_m1 |
| Apba2 | Amyloid beta (A4) precursor protein-binding, family A, member 2 | Apba2-Rn00582349\_m1 |
| Apba3 | Amyloid beta (A4) precursor protein-binding, family A, member 3 | Apbb3-Rn00588606\_m1 |
| Apbb1 | Amyloid beta (A4) precursor protein-binding, family B, member 1 | Apbb1-Rn00589704\_m1 |
| Apbb2 | Amyloid beta (A4) precursor protein-binding, family B, member 2 | Apbb2-Rn01413178\_m1 |
| Apbb3 | Amyloid beta (A4) precursor protein-binding, family B, member 3 | Apbb3-Rn00588606\_m1 |
| Apeh | N-acylaminoacyl-peptide hydrolase | Apeh-Rn00560727\_m1 |
| Aph1a | Anterior pharynx defective 1 homolog A (C. elegans) | Aph1a-Rn01534325\_g1 |
| App | Amyloid beta (A4) precursor protein | App-Rn00570673\_m1 |
| Bace1 | Beta-site APP-cleaving enzyme 1 | Bace1-Rn00569988\_m1 |
| Bace2 | Beta-site APP-cleaving enzyme 2 | Bace2-Rn01763455\_m1 |
| Ece1 | Endothelin converting enzyme 1 | Ece1-Rn00585943\_m1 |
| Ece2 | Endothelin converting enzyme 2 | Ece2-Rn01404095\_m1 |
| Ide | Insulin-degrading enzyme | Ide-Rn00565839\_m1 |
| Igf1 | Insulin-like growth factor 1 (somatomedin C) | Igf1-Rn00710306\_m1 |
| Ins1 | Insulin | Ins1-Rn02121433\_g1 |
| Insr | Insulin receptor | Insr-Rn01637243\_m1 |
| Mme | Membrane metallo-endopeptidase | Mme-Rn00561572\_m1 |
| Mmp2 | Matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase) | Mmp2-Rn01538177\_m1 |
| Mmp3 | Matrix metallopeptidase 3 (stromelysin 1, progelatinase) | Mmp3-Rn00591740\_m1 |
| Mmp9 | Matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase) | Mmp9-Rn00579162\_m1 |
| Nae1 | NEDD8 activating enzyme E1 subunit 1 | Nae1-Rn00583368\_m1 |
| Ncstn | Nicastrin | Ncstn-Rn00598037\_m1 |
| Plg | Plasminogen | Plg-Rn00585167\_m1 |
| Prep | Prolyl endopeptidase | Prep-Rn00580039\_m1 |
| Psen1 | Presenilin 1 | Psen1-Rn00569763\_m1 |
| Psen2 | Presenilin 2 (Alzheimer disease 4) | Psen2-Rn00579412\_m1 |
| Psenen | Presenilin enhancer 2 homolog (C. elegans) | Psenen-Rn01476909\_g1 |
| Thop1 | Thimet oligopeptidase 1 | Thop1-Rn00597140\_m1 |
| Timp2 | TIMP metallopeptidase inhibitor 2 | Timp2-Rn00573232\_m1 |
| Ubqln1 | Ubiquilin 1 | Ubqln1-Rn00587037\_m1 |
| Inflammation | Adrb1 | Adrenergic, beta-1-, receptor | Adrb1-Rn00824536\_s1 |
| Adrb2 | Adrenergic, beta-2-, receptor, surface | Adrb2-Rn00560650\_s1 |
| Ager | Advanced glycosylation end product-specific receptor | Ager-Rn00584249\_m1 |
| Alox12 | Arachidonate 12-lipoxygenase | Alox12-Rn01461082\_m1 |
| Alox5 | Arachidonate 5-lipoxygenase | Alox5-Rn00563172\_m1 |
| Anxa1 | Annexin A1 | Anxa1-Rn00563742\_m1 |
| Anxa3 | Annexin A3 | Anxa3-Rn00563181\_m1 |
| Anxa5 | Annexin A5 | Anxa5-Rn00565571\_m1 |
| C1qb | Complement component 1, q subcomponent, B chain | C1qb-Rn00570480\_m1 |
| C3 | Complement component 3 | C3-Rn00566466\_m1 |
| Casp1 | Caspase 1, apoptosis-related cysteine peptidase | Casp1-Rn00562724\_m1 |
| Cysltr1 | Cysteinyl leukotriene receptor 1 | Cysltr1-Rn00586294\_s1 |
| Gfap | Glial fibrillary acidic protein | Gfap-Rn00566603\_m1 |
| Hpgd | Hydroxyprostaglandin dehydrogenase 15-(NAD) | Hpgd-Rn00577775\_m1 |
| Hrh1 | Histamine receptor H1 | Hrh1-Rn00566691\_s1 |
| Hrh2 | Histamine receptor H2 | Hrh2-Rn00564216\_s1 |
| Hrh3 | Histamine receptor H3 | Hrh3-Rn00585276\_m1 |
| Icam1 | Intercellular adhesion molecule 1 | Icam1-Rn00564227\_m1 |
| Il10 | Interleukin 10 | Il10-Rn01644839\_m1 |
| Il13 | Interleukin 13 | Il13-Rn00587615\_m1 |
| Il1a | Interleukin 1, alpha | Il1a-Rn00566700\_m1 |
| Il1b | Interleukin 1, beta | Il1b-Rn00580432\_m1 |
| Il1r1 | Interleukin 1 receptor, type I | Il1r1-Rn00565482\_m1 |
| Il1r2 | Interleukin 1 receptor, type II | Il1r2-Rn00588589\_m1 |
| Il1rapl2 | Interleukin 1 receptor accessory protein-like 2 | Il1rapl2-Rn01410545\_m1 |
| Il1rl1 | Interleukin 1 receptor-like 1 | Il1rl1-Rn01640664\_m1 |
| Il2ra | Interleukin 2 receptor, alpha | Il2ra-Rn00565865\_m1 |
| Il2rb | Interleukin 2 receptor, beta | Il2rb-Rn00682353\_m1 |
| Il2rg | Interleukin 2 receptor, gamma | Il2rg-Rn01752908\_g1 |
| Il6 | Interleukin 6 (interferon, beta 2) | Il6-Rn00561420\_m1 |
| Itgal | Integrin, alpha L (antigen CD11A) | Itgal-Rn01754645\_m1 |
| Itgam | Integrin, alpha M (complement component 3 receptor 3) | Itgam-Rn00709342\_m1 |
| Itgb1 | Integrin, beta 1 (antigen CD29 includes MDF2, MSK12) | Itgb1-Rn00566727\_m1 |
| Itgb2 | Integrin, beta 2 (complement component 3 receptor 3/4) | Itgb2-Rn01427948\_m1 |
| Lta4h | Leukotriene A4 hydrolase | Lta4h-Rn01503878\_m1 |
| Ltc4s | Leukotriene C4 synthase | Ltc4s-Rn01497055\_g1 |
| Mapk1 | Mitogen-activated protein kinase 1 | Mapk1-Rn00671828\_m1 |
| Mapk14 | Mitogen-activated protein kinase 14 | Mapk14-Rn00578842\_m1 |
| Mapk3 | Mitogen-activated protein kinase 3 | Mapk3-Rn00820922\_g1 |
| Mapk8 | Mitogen-activated protein kinase 8 | Mapk8-Rn01453358\_m1 |
| Nfkb1 | Nuclear factor of kappa B | Nfkb1-Rn01399583\_m1 |
| Nr3c1 | Nuclear receptor subfamily 3, group C, member 1 | Nr3c1-Rn00561369\_m1 |
| Pde4a | Phosphodiesterase 4A, cAMP-specific | Pde4a-Rn00565354\_m1 |
| Pde4b | Phosphodiesterase 4B, cAMP-specific | Pde4b-Rn00566785\_m1 |
| Pde4c | Phosphodiesterase 4C, cAMP-specific | Pde4c-Rn01754402\_g1 |
| Pde4d | Phosphodiesterase 4D, cAMP-specific | Pde4d-Rn00566798\_m1 |
| Pla2g10 | Phospholipase A2, group X | Pla2g10-Rn01424865\_g1 |
| Pla2g1b | Phospholipase A2, group IB (pancreas) | Pla2g1b-Rn00580896\_m1 |
| Pla2g2a | Phospholipase A2, group IIA (platelets, synovial fluid) | Pla2g2a-Rn00580999\_m1 |
| Pla2g2d | Phospholipase A2, group IID | Pla2g2d-Rn01520520\_m1 |
| Pla2g4c | Phospholipase A2, group IVC (cytosolic, calcium-independent) | LOC691813-Rn01772640\_m1 |
| Plcb2 | Phospholipase C, beta 2 | Plcb2-Rn00585063\_m1 |
| Plcb3 | Phospholipase C, beta 3 (phosphatidylinositol-specific) | Plcb3-Rn01453968\_m1 |
| Plcb4 | Phospholipase C, beta 4 | Plcb4-Rn00577426\_m1 |
| Plcd1 | Phospholipase C, delta 1 | Plcd1-Rn00690481\_m1 |
| Plce1 | Phospholipase C, beta 2 | Plce1-Rn00587127\_m1 |
| Plcg1 | Phospholipase C, gamma 1 | Plcg1-Rn00566108\_m1 |
| Plcg2 | Phospholipase C, gamma 2 (phosphatidylinositol-specific) | Plcg2-Rn00567751\_m1 |
| Ptafr | Prostaglandin F receptor (FP) | Ptafr-Rn02132919\_s1 |
| Ptgdr | Prostaglandin D2 receptor (DP) | Ptgdr-Rn00824628\_m1 |
| Ptger2 | Prostaglandin E receptor 2 (subtype EP2), 53kDa | Ptger2-Rn00579419\_m1 |
| Ptger3 | Prostaglandin E receptor 3 (subtype EP3) | Ptger3-Rn00562282\_m1 |
| Ptgfr | Prostaglandin F receptor (FP) | Ptgfr-Rn00565423\_m1 |
| Ptgir | Prostaglandin I2 (prostacyclin) receptor (IP) | Ptgir-Rn01764022\_m1 |
| Ptgis | Prostaglandin I2 (prostacyclin) synthase | Ptgis-Rn00694611\_m1 |
| Ptgs1 | Prostaglandin-endoperoxide synthase 1 | Ptgs1-Rn00566881\_m1 |
| Ptgs2 | Prostaglandin-endoperoxide synthase 2 | Ptgs2-Rn01483828\_m1 |
| Scye1 | Small inducible cytokine subfamily E, member 1 | Scye1-Rn01518601\_m1 |
| Tbxa2r | Thromboxane A2 receptor | Tbxa2r-Rn00690601\_m1 |
| Tbxas1 | Thromboxane A synthase 1 (platelet) | Tbxas1-Rn00562160\_m1 |
| Tlr2 | Toll-like receptor 2 | Tlr2-Rn02133647\_s1 |
| Tlr4 | Toll-like receptor 4 | Tlr4-Rn00569848\_m1 |
| Tnf | Tumor necrosis factor (TNF superfamily, member 2) | Tnf-Rn99999017\_m1 |
| Tnfrsf1a | Tumor necrosis factor receptor superfamily, member 1A | Tnfrsf1a-Rn01492348\_m1 |
| Tnfrsf1b | Tumor necrosis factor receptor superfamily, member 1A | Tnfrsf1b-Rn00709830\_m1 |
| Vcam1 | Vascular cell adhesion molecule 1 | Vcam1-Rn00563627\_m1 |
| Estrogen & Progesterone Receptors | Esr1 | Estrogen receptor 1 (ER alpha) | Esr1-Rn01640372\_m1 |
| Esr2 | Estrogen receptor 2 (ER beta) | Esr2-Rn00562610\_m1 |
| Esrra | Estrogen-related receptor alpha | Esrra-Rn00433142\_m1 |
| Esrrb | Estrogen-related receptor beta | Esrrb-Rn02606541\_m1 |
| Esrrg | Estrogen-related receptor gamma | Esrrg-Rn01415309\_m1 |
| Gper | G protein-coupled estrogen receptor 1 | Gper-Rn01643280\_s1 |
| Pgr | Progesterone receptor | Pgr-Rn01448227\_m1 |
| Pgrmc1 | Progesterone receptor membrane component 1 | Pgrmc1-Rn01774803\_m1 |
| Pgrmc2 | Progesterone receptor membrane component 2 | Pgrmc2-Rn01755753\_m1 |
| Control genes | 18S | 18S ribosomal RNA | 18S-Hs99999901\_s1 |
| Actb | Actin, beta | Actb-Rn00667869\_m1 |
| Gapdh | Glyceraldehyde-3-phosphate dehydrogenase | Gapdh-Rn99999916\_s1 |
| Hprt1 | Hypoxanthine phosphoribosyltransferase 1 | Hprt1-Rn01527840\_m1 |

Genes colored in grey were undetermined for at least one of two reasons: 1) no amplification possibly due to low expression or failed assays; 2) two or fewer samples with undetectable Ct values within any of the seven groups.