Supplementary Table 1 Enrichment of the DEGs to GO terms

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| GO:0030199 collagen fibril organization | Col1a2 /// NEWGENE\_621351 | collagen, type I, alpha 2 /// collagen, type I, alpha 2 |
| Anxa2 | annexin A2 |
| NEWGENE\_621351 | collagen, type I, alpha 2 |
| Lum | lumican |
| Col3a1 | collagen, type III, alpha 1 |
| Col5a1 | collagen, type V, alpha 1 |
| Fmod | fibromodulin |
| Col1a1 | collagen, type I, alpha 1 |
| Col1a1 | collagen, type I, alpha 1 |
| Ddr2 | discoidin domain receptor tyrosine kinase 2 |
| Serpinh1 | serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1) |
| GO:0032964 collagen biosynthetic process | Col5a1 | collagen, type V, alpha 1 |
| Col1a1 | collagen, type I, alpha 1 |
| Col1a1 | collagen, type I, alpha 1 |
| Serpinh1 | serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1) |
| Arg1 | arginase 1 |
| GO:0045104 intermediate filament cytoskeleton organization | Synm | synemin, intermediate filament protein |
| Nefh | neurofilament, heavy polypeptide |
| Prph | peripherin |
| Nefm | neurofilament, medium polypeptide |
| Ina | internexin neuronal intermediate filament protein, alpha |
| GO:0002474 antigen processing and presentation of peptide antigen via MHC class I | RT1-T24-4 | RT1 class I, locus T24, gene 4 |
| RT1-A2 /// RT1-A3 /// RT1-EC2 | RT1 class Ia, locus A2 /// RT1 class I, locus A3 /// RT1 class Ib, locus EC2 |
| RT1-T24-3 | RT1 class I, locus T24, gene 3 |
| RT1-S3 | RT1 class Ib, locus S3 |
| RT1-S3 | RT1 class Ib, locus S3 |
| RT1-S3 | RT1 class Ib, locus S3 |
| RT1-CE16 | RT1 class I, locus CE16 |
| RT1-EC2 | RT1 class Ib, locus EC2 |
| RT1-S3 | RT1 class Ib, locus S3 |
| GO:0051384 response to glucocorticoid | Ptgds | prostaglandin D2 synthase (brain) |
| Lcat | lecithin cholesterol acyltransferase |
| Sult1a1 | sulfotransferase family 1A member 1 |
| Bmp6 | bone morphogenetic protein 6 |
| Mgp | matrix Gla protein |
| Bmp4 | bone morphogenetic protein 4 |
| Bmp6 | bone morphogenetic protein 6 |
| Aqp4 | aquaporin 4 |
| Igfbp2 | insulin-like growth factor binding protein 2 |
| A2m /// LOC100911545 | alpha-2-macroglobulin /// alpha-2-macroglobulin-like |
| Anxa1 | annexin A1 |
| C3 | complement component 3 |
| Oxt | oxytocin/neurophysin 1 prepropeptide |
| Got1 | glutamic-oxaloacetic transaminase 1, soluble |
| GO:0001568 blood vessel development | Col1a2 /// NEWGENE\_621351 | collagen, type I, alpha 2 /// collagen, type I, alpha 2 |
| Mef2c | myocyte enhancer factor 2C |
| NEWGENE\_621351 | collagen, type I, alpha 2 |
| Itgav | integrin, alpha V |
| Aldh1a2 | aldehyde dehydrogenase 1 family, member A2 |
| Stra6 | stimulated by retinoic acid 6 |
| Stra6 | stimulated by retinoic acid 6 |
| Col3a1 | collagen, type III, alpha 1 |
| Col5a1 | collagen, type V, alpha 1 |
| Col1a1 | collagen, type I, alpha 1 |
| Col1a1 | collagen, type I, alpha 1 |
| Bmp4 | bone morphogenetic protein 4 |
| GO:0009612 response to mechanical stimulus | Angpt2 | angiopoietin 2 |
| Col3a1 | collagen, type III, alpha 1 |
| Cxcl12 | chemokine (C-X-C motif) ligand 12 |
| Tnc | tenascin C |
| Col1a1 | collagen, type I, alpha 1 |
| Dcn | decorin |
| Txnip | thioredoxin interacting protein |
| Mgp | matrix Gla protein |
| Bmp4 | bone morphogenetic protein 4 |
| Igfbp2 | insulin-like growth factor binding protein 2 |
| Col1a1 | collagen, type I, alpha 1 |
| Meis2 | Meis homeobox 2 |
| Oxt | oxytocin/neurophysin 1 prepropeptide |
| GO:0042573 retinoic acid metabolic process | Rbp1 | retinol binding protein 1, cellular |
| Aldh1a2 | aldehyde dehydrogenase 1 family, member A2 |
| Stra6 | stimulated by retinoic acid 6 |
| Aldh1a1 | aldehyde dehydrogenase 1 family, member A1 |
| Stra6 | stimulated by retinoic acid 6 |
| Cyp26b1 | cytochrome P450, family 26, subfamily b, polypeptide 1 |
| GO:0001958 endochondral ossification | Mef2c | myocyte enhancer factor 2C |
| Pthlh | parathyroid hormone-like hormone |
| Bmp6 | bone morphogenetic protein 6 |
| Col1a1 | collagen, type I, alpha 1 |
| Col1a1 | collagen, type I, alpha 1 |
| Bmp6 | bone morphogenetic protein 6 |
| Bmp4 | bone morphogenetic protein 4 |
| Cbs | cystathionine beta synthase |
| Gnas | GNAS complex locus |
| GO:0015671 oxygen transport | Hbb-b1 /// LOC100134871 /// LOC103694857 /// LOC689064 | hemoglobin, beta adult major chain /// beta globin minor gene /// hemoglobin subunit beta-2 /// beta-globin |
| Hba1 /// Hba2 | hemoglobin, alpha 1 /// hemoglobin, alpha 2 |
| Hba1 /// Hba2 | hemoglobin, alpha 1 /// hemoglobin, alpha 2 |
| Hbb | hemoglobin, beta |
| Hbb-b1 /// LOC103694857 /// LOC689064 | hemoglobin, beta adult major chain /// hemoglobin subunit beta-2 /// beta-globin |
| Hba1 /// Hba2 | hemoglobin, alpha 1 /// hemoglobin, alpha 2 |
| Hba-a1 | hemoglobin alpha, adult chain 1 |
| Ngb | neuroglobin |

541 differentially expressed genes were analyzed for their enrichment in GO-terms using DAVID (*p*-value < 0.1, https://david.ncifcrf.gov/). Genes in shaded and plane columns were upregulated and downregulated in C-group, respectively.