Supp Table 1 DD vs DDC comparison

| ENSG | baseMean | log2FoldC | lfcSE | stat | pvalue | padj | symbol | entrez | genename |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 1445.535 | 7.527035 | 0.527443 | 14.2708 | 3.33E-46 | 6.80E-42 | SCRG1 | 11341 | stimulator of chondrogenesis 1 |
| ENSG0000 | 30165.09 | 7.060163 | 0.529774 | 13.32674 | 1.62E-40 | 1.65E-36 | CHI3L1 | 1116 | chitinase 3 like 1 |
| ENSG0000 | 329.011 | 4.880292 | 0.380099 | 12.83953 | 9.85E-38 | 6.71E-34 | ITGB2 | 3689 | integrin subunit beta 2 |
| ENSG0000 | 146899.2 | 1.678717 | 0.138994 | 12.07762 | 1.39E-33 | 7.08E-30 | COL12A1 | 1303 | collagen type XII alpha 1 chain |
| ENSG0000 | 237.9376 | 2.653065 | 0.221998 | 11.95086 | 6.43E-33 | 2.63E-29 | NA | NA | NA |
| ENSG0000 | 315.4139 | -8.80776 | 0.776658 | -11.3406 | 8.26E-30 | 2.81E-26 | CHRM2 | 1129 | cholinergic receptor muscarinic 2 |
| ENSG0000 | 940.4362 | 4.495589 | 0.40742 | 11.03429 | 2.61E-28 | 7.62E-25 | DAPK1 | 1612 | death associated protein kinase 1 |
| ENSG0000 | 45420.22 | 2.560806 | 0.235585 | 10.86999 | 1.60E-27 | 4.09E-24 | ITGA11 | 22801 | integrin subunit alpha 11 |
| ENSG0000 | 1111.258 | 3.482956 | 0.32315 | 10.77814 | 4.37E-27 | 9.91E-24 | MEDAG | 84935 | mesenteric estrogen dependent adipogenesis |
| ENSG0000 | 409.9789 | 8.270147 | 0.776764 | 10.64693 | 1.80E-26 | 3.68E-23 | KRT16 | 3868 | keratin 16 |
| ENSG0000 | 2295.721 | -2.91763 | 0.274444 | -10.6311 | 2.14E-26 | 3.94E-23 | NES | 10763 | nestin |
| ENSG0000 | 202.962 | -7.71313 | 0.726035 | -10.6236 | 2.31E-26 | 3.94E-23 | IRX2 | 153572 | iroquois homeobox 2 |
| ENSG0000 | 107937.4 | 3.397741 | 0.320114 | 10.61416 | 2.56E-26 | 4.02E-23 | CEMIP | 57214 | cell migration inducing hyaluronidase 1 |
| ENSG0000 | 112.4467 | -7.06601 | 0.670978 | -10.5309 | 6.22E-26 | 9.08E-23 | NA | NA | NA |
| ENSG0000 | 1125.164 | 7.932971 | 0.75491 | 10.50849 | 7.89E-26 | 1.08E-22 | CSF2RB | 1439 | colony stimulating factor 2 receptor subunit beta |
| ENSG0000 | 172.8414 | 5.137919 | 0.493279 | 10.41586 | 2.10E-25 | 2.68E-22 | CHRDL1 | 91851 | chordin like 1 |
| ENSG0000 | 13183.96 | 2.505823 | 0.241496 | 10.37626 | 3.18E-25 | 3.82E-22 | MFAP5 | 8076 | microfibril associated protein 5 |
| ENSG0000 | 328.1161 | -9.04362 | 0.872142 | -10.3694 | 3.42E-25 | 3.88E-22 | LHX8 | 431707 | LIM homeobox 8 |
| ENSG0000 | 13704.49 | 5.124799 | 0.496341 | 10.32515 | 5.42E-25 | 5.83E-22 | ABI3BP | 25890 | ABI family member 3 binding protein |
| ENSG0000 | 2505.719 | 4.274287 | 0.430347 | 9.93219 | 3.02E-23 | 3.08E-20 | CILP2 | 148113 | cartilage intermediate layer protein 2 |
| ENSG0000 | 524.8223 | 7.181062 | 0.736171 | 9.754611 | 1.76E-22 | 1.64E-19 | PRG4 | 10216 | proteoglycan 4 |
| ENSG0000 | 543.3207 | 5.631632 | 0.584584 | 9.633569 | 5.77E-22 | 5.12E-19 | PNMA2 | 10687 | PNMA family member 2 |
| ENSG0000 | 241.7267 | 2.972251 | 0.316612 | 9.387674 | 6.13E-21 | 5.22E-18 | CGREF1 | 10669 | cell growth regulator with EF-hand domain 1 |
| ENSG0000 | 475.4362 | 2.348225 | 0.252826 | 9.287925 | 1.57E-20 | 1.29E-17 | CSGALNAC | 55790 | chondroitin sulfate N-acetylgalactosaminyltransferase 1 |
| ENSG0000 | 448.6361 | 6.431914 | 0.698437 | 9.209005 | 3.29E-20 | 2.59E-17 | MEOX2 | 4223 | mesenchyme homeobox 2 |
| ENSG0000 | 4428.194 | -4.96976 | 0.541405 | -9.17937 | 4.34E-20 | 3.28E-17 | MMP1 | 4312 | matrix metallopeptidase 1 |
| ENSG0000 | 911.8341 | 2.231888 | 0.243611 | 9.161669 | 5.11E-20 | 3.73E-17 | JAG1 | 182 | jagged canonical Notch ligand 1 |
| ENSG0000 | 218.2144 | -7.94676 | 0.867985 | -9.15541 | 5.42E-20 | 3.81E-17 | SPHKAP | 80309 | SPHK1 interactor, AKAP domain containing |
| ENSG0000 | 1099.783 | 5.057988 | 0.561707 | 9.004675 | 2.16E-19 | 1.47E-16 | PAPPA2 | 60676 | pappalysin 2 |
| ENSG0000 | 5360.999 | 4.775755 | 0.530903 | 8.995539 | 2.35E-19 | 1.55E-16 | VCAM1 | 7412 | vascular cell adhesion molecule 1 |
| ENSG0000 | 529.9509 | 2.15476 | 0.241353 | 8.927823 | 4.34E-19 | 2.77E-16 | NA | NA | NA |
| ENSG0000 | 120.0513 | -10.0693 | 1.131351 | -8.90028 | 5.57E-19 | 3.45E-16 | SHOX | 6473 | short stature homeobox |
| ENSG0000 | 2243.905 | -6.39659 | 0.726202 | -8.80828 | 1.27E-18 | 7.64E-16 | SFRP1 | 6422 | secreted frizzled related protein 1 |
| ENSG0000 | 128.7655 | -4.17071 | 0.486586 | -8.57138 | 1.02E-17 | 5.97E-15 | CES1 | 1066 | carboxylesterase 1 |
| ENSG0000 | 2228.168 | -1.69864 | 0.198357 | -8.56357 | 1.09E-17 | 6.21E-15 | SCD | 6319 | stearoyl-CoA desaturase |
| ENSG0000 | 329.7563 | 5.667848 | 0.666194 | 8.507798 | 1.77E-17 | 9.53E-15 | SCN3A | 6328 | sodium voltage-gated channel alpha subunit 3 |
| ENSG0000 | 251.7749 | 4.292915 | 0.510053 | 8.416607 | 3.88E-17 | 1.98E-14 | SIX2 | 10736 | SIX homeobox 2 |
| ENSG0000 | 292.9428 | -1.72861 | 0.205737 | -8.40201 | 4.39E-17 | 2.19E-14 | CNIH3 | 149111 | cornichon family AMPA receptor auxiliary protein 3 |
| ENSG0000 | 391.6661 | 4.461005 | 0.533867 | 8.356022 | 6.49E-17 | 3.16E-14 | PLXDC2 | 84898 | plexin domain containing 2 |
| ENSG0000 | 1734.51 | 4.227235 | 0.50697 | 8.338228 | 7.54E-17 | 3.58E-14 | PDE1C | 5137 | phosphodiesterase 1C |
| ENSG0000 | 107.7029 | 4.014682 | 0.488419 | 8.219742 | 2.04E-16 | 9.06E-14 | PPM1H | 57460 | protein phosphatase, Mg2+/Mn2+ dependent 1H |
| ENSG0000 | 970.2533 | 6.248413 | 0.763943 | 8.179163 | 2.86E-16 | 1.24E-13 | SORBS2 | 8470 | sorbin and SH3 domain containing 2 |
| ENSG0000 | 332.147 | 8.507426 | 1.042724 | 8.158849 | 3.38E-16 | 1.44E-13 | EPGN | 255324 | epithelial mitogen |
| ENSG0000 | 254.5113 | -3.68856 | 0.45621 | -8.08522 | 6.21E-16 | 2.59E-13 | RNF112 | 7732 | ring finger protein 112 |
| ENSG0000 | 40816.3 | 2.596123 | 0.322439 | 8.051504 | 8.18E-16 | 3.34E-13 | PTX3 | 5806 | pentraxin 3 |
| ENSG0000 | 410.6385 | 1.689942 | 0.211433 | 7.992804 | 1.32E-15 | 5.28E-13 | PTK2B | 2185 | protein tyrosine kinase 2 beta |
| ENSG0000 | 202.7744 | 3.981305 | 0.498796 | 7.981826 | 1.44E-15 | 5.66E-13 | NA | NA | NA |
| ENSG0000 | 35323.77 | 4.245916 | 0.532984 | 7.966316 | 1.63E-15 | 6.30E-13 | EFEMP1 | 2202 | EGF containing fibulin extracellular matrix protein 1 |
| ENSG0000 | 30558.26 | 1.613225 | 0.203607 | 7.923228 | 2.31E-15 | 8.76E-13 | MFGE8 | 4240 | milk fat globule EGF and factor V/VIII domain containing |
| ENSG0000 | 251.0476 | 3.000053 | 0.379657 | 7.902018 | 2.74E-15 | 1.02E-12 | ANKRD6 | 22881 | ankyrin repeat domain 6 |
| ENSG0000 | 5880.101 | 2.058177 | 0.262184 | 7.85011 | 4.16E-15 | 1.52E-12 | MEGF6 | 1953 | multiple EGF like domains 6 |
| ENSG0000 | 147.398 | 2.932299 | 0.376369 | 7.791022 | 6.65E-15 | 2.38E-12 | HAS3 | 3038 | hyaluronan synthase 3 |
| ENSG0000 | 3576.68 | -5.95101 | 0.76767 | -7.75204 | 9.04E-15 | 3.19E-12 | FBN2 | 2201 | fibrillin 2 |
| ENSG0000 | 372.0362 | 2.229155 | 0.288623 | 7.723427 | 1.13E-14 | 3.92E-12 | CARD10 | 29775 | caspase recruitment domain family member 10 |
| ENSG0000 | 218.5395 | -2.27844 | 0.295447 | -7.71185 | 1.24E-14 | 4.22E-12 | RNF152 | 220441 | ring finger protein 152 |
| ENSG0000 | 99.2046 | -2.96535 | 0.388848 | -7.62597 | 2.42E-14 | 7.98E-12 | TRABD2A | 129293 | TraB domain containing 2A |
| ENSG0000 | 1471.349 | 1.825311 | 0.239657 | 7.616342 | 2.61E-14 | 8.46E-12 | ADAMTS7 | 11173 | ADAM metallopeptidase with thrombospondin type 1 motif 7 |
| ENSG0000 | 637.7454 | -1.51773 | 0.199393 | -7.61172 | 2.70E-14 | 8.63E-12 | HS3ST3A1 | 9955 | heparan sulfate-glucosamine 3-sulfotransferase 3A1 |
| ENSG0000 | 2448.528 | -2.55743 | 0.336399 | -7.60237 | 2.91E-14 | 9.14E-12 | COL7A1 | 1294 | collagen type VII alpha 1 chain |
| ENSG0000 | 776.0383 | 1.827134 | 0.241055 | 7.579731 | 3.46E-14 | 1.07E-11 | FZD4 | 8322 | frizzled class receptor 4 |
| ENSG0000 | 412.1192 | 2.120792 | 0.282339 | 7.511518 | 5.84E-14 | 1.76E-11 | DCLK1 | 9201 | doublecortin like kinase 1 |
| ENSG0000 | 15293.91 | 2.116071 | 0.283098 | 7.474702 | 7.74E-14 | 2.29E-11 | IGFBP5 | 3488 | insulin like growth factor binding protein 5 |
| ENSG0000 | 57.10524 | -5.80131 | 0.780605 | -7.43182 | 1.07E-13 | 3.13E-11 | COL23A1 | 91522 | collagen type XXIII alpha 1 chain |
| ENSG0000 | 7247.117 | 2.431929 | 0.327976 | 7.41495 | 1.22E-13 | 3.50E-11 | CYP1B1 | 1545 | cytochrome P450 family 1 subfamily B member 1 |
| ENSG0000 | 95.04179 | -4.34854 | 0.58803 | -7.3951 | 1.41E-13 | 4.01E-11 | FLRT3 | 23767 | fibronectin leucine rich transmembrane protein 3 |
| ENSG0000 | 154.8379 | 4.101987 | 0.55528 | 7.387247 | 1.50E-13 | 4.19E-11 | CACNB4 | 785 | calcium voltage-gated channel auxiliary subunit beta 4 |
| ENSG0000 | 42.26215 | 5.813064 | 0.796783 | 7.295672 | 2.97E-13 | 8.14E-11 | PKNOX2 | 63876 | PBX/knotted 1 homeobox 2 |
| ENSG0000 | 143.2805 | 1.666585 | 0.228458 | 7.294929 | 2.99E-13 | 8.14E-11 | ADAMTS7 | 400406 | ADAMTS7 pseudogene 3 |
| ENSG0000 | 212.8903 | 3.406992 | 0.467811 | 7.28284 | 3.27E-13 | 8.79E-11 | CSTA | 1475 | cystatin A |
| ENSG0000 | 1081.757 | 2.104898 | 0.290045 | 7.257132 | 3.95E-13 | 1.05E-10 | CCPG1 | 9236 | cell cycle progression 1 |
| ENSG0000 | 916.0438 | -2.68217 | 0.370334 | -7.24257 | 4.40E-13 | 1.15E-10 | SLC9A3R2 | 9351 | SLC9A3 regulator 2 |
| ENSG0000 | 613.3747 | 4.465192 | 0.616919 | 7.237887 | 4.56E-13 | 1.18E-10 | SRGN | 5552 | serglycin |
| ENSG0000 | 61.99605 | 3.04116 | 0.421401 | 7.216787 | 5.32E-13 | 1.36E-10 | CYP1B1-AS | 285154 | CYP1B1 antisense RNA 1 |
| ENSG0000 | 52.18038 | -8.15146 | 1.13466 | -7.18406 | 6.77E-13 | 1.71E-10 | NA | NA | NA |
| ENSG0000 | 1318.327 | 2.571951 | 0.358751 | 7.169188 | 7.54E-13 | 1.88E-10 | HAPLN3 | 145864 | hyaluronan and proteoglycan link protein 3 |
| ENSG0000 | 421.2785 | 4.27063 | 0.602808 | 7.084561 | 1.39E-12 | 3.43E-10 | NTRK2 | 4915 | neurotrophic receptor tyrosine kinase 2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 127.4728 | 6.736148 | 0.952468 | 7.072306 | 1.52E-12 | 3.71E-10 | EYA4 | 2070 | EYA transcriptional coactivator and phosphatase 4 |
| ENSG0000 | 65.06579 | -2.79659 | 0.395638 | -7.06856 | 1.57E-12 | 3.76E-10 | FERMT3 | 83706 | FERM domain containing kindlin 3 |
| ENSG0000 | 163.3783 | 2.918004 | 0.415328 | 7.025775 | 2.13E-12 | 5.02E-10 | ZNF704 | 619279 | zinc finger protein 704 |
| ENSG0000 | 441.8176 | 4.122703 | 0.586843 | 7.025221 | 2.14E-12 | 5.02E-10 | TPD52L1 | 7164 | TPD52 like 1 |
| ENSG0000 | 933.3015 | -3.11406 | 0.443867 | -7.01574 | 2.29E-12 | 5.31E-10 | CHN1 | 1123 | chimerin 1 |
| ENSG0000 | 181.0131 | 6.849562 | 0.978066 | 7.00317 | 2.50E-12 | 5.74E-10 | EPHA5 | 2044 | EPH receptor A5 |
| ENSG0000 | 928.0519 | -4.18191 | 0.603386 | -6.93074 | 4.19E-12 | 9.50E-10 | PTN | 5764 | pleiotrophin |
| ENSG0000 | 29.03387 | -4.13981 | 0.601042 | -6.88772 | 5.67E-12 | 1.27E-09 | RIMS2 | 9699 | regulating synaptic membrane exocytosis 2 |
| ENSG0000 | 660.9701 | 4.328983 | 0.628731 | 6.885268 | 5.77E-12 | 1.28E-09 | DEPTOR | 64798 | DEP domain containing MTOR interacting protein |
| ENSG0000 | 187.9547 | 1.60085 | 0.234747 | 6.819471 | 9.14E-12 | 1.99E-09 | LINC01547 | 84536 | long intergenic non-protein coding RNA 1547 |
| ENSG0000 | 42.83207 | -3.72522 | 0.548456 | -6.79219 | 1.10E-11 | 2.37E-09 | CARD16 | 114769 | caspase recruitment domain family member 16 |
| ENSG0000 | 3319.275 | -3.47838 | 0.514104 | -6.7659 | 1.32E-11 | 2.82E-09 | TBX3 | 6926 | T-box transcription factor 3 |
| ENSG0000 | 41.14699 | -4.39775 | 0.651672 | -6.7484 | 1.49E-11 | 3.15E-09 | TRIM55 | 84675 | tripartite motif containing 55 |
| ENSG0000 | 7271.508 | 2.679351 | 0.397402 | 6.742162 | 1.56E-11 | 3.25E-09 | IGFBP7 | 3490 | insulin like growth factor binding protein 7 |
| ENSG0000 | 25776.1 | 1.725021 | 0.257955 | 6.687282 | 2.27E-11 | 4.69E-09 | TXNRD1 | 7296 | thioredoxin reductase 1 |
| ENSG0000 | 52.20727 | -5.411 | 0.809477 | -6.68457 | 2.32E-11 | 4.73E-09 | CES1P1 | 51716 | carboxylesterase 1 pseudogene 1 |
| ENSG0000 | 332.0405 | 3.476621 | 0.520615 | 6.677918 | 2.42E-11 | 4.90E-09 | SAMD12 | 401474 | sterile alpha motif domain containing 12 |
| ENSG0000 | 6245.306 | 1.736451 | 0.26027 | 6.671717 | 2.53E-11 | 5.06E-09 | C1orf198 | 84886 | chromosome 1 open reading frame 198 |
| ENSG0000 | 1041.364 | 8.379112 | 1.268201 | 6.607084 | 3.92E-11 | 7.76E-09 | KRT14 | 3861 | keratin 14 |
| ENSG0000 | 1256.825 | 3.332784 | 0.504519 | 6.605859 | 3.95E-11 | 7.76E-09 | MAF | 4094 | MAF bZIP transcription factor |
| ENSG0000 | 41.1757 | 8.027776 | 1.220513 | 6.57738 | 4.79E-11 | 9.32E-09 | IL26 | 55801 | interleukin 26 |
| ENSG0000 | 1080.699 | 1.700739 | 0.259303 | 6.558894 | 5.42E-11 | 1.04E-08 | ADM2 | 79924 | adrenomedullin 2 |
| ENSG0000 | 73.02492 | 3.169573 | 0.484766 | 6.538357 | 6.22E-11 | 1.19E-08 | HTR2A | 3356 | 5-hydroxytryptamine receptor 2A |
| ENSG0000 | 593.969 | -2.03176 | 0.310807 | -6.53705 | 6.27E-11 | 1.19E-08 | SKAP2 | 8935 | src kinase associated phosphoprotein 2 |
| ENSG0000 | 272.7314 | -2.83737 | 0.434905 | -6.52412 | 6.84E-11 | 1.28E-08 | PRKAR2B | 5577 | protein kinase cAMP-dependent type II regulatory sub unit beta |
| ENSG0000 | 145.8785 | -2.86107 | 0.440084 | -6.50119 | 7.97E-11 | 1.48E-08 | SEMA6D | 80031 | semaphorin 6D |
| ENSG0000 | 873.9143 | -3.56973 | 0.549445 | -6.49696 | 8.20E-11 | 1.51E-08 | TNFRSF21 | 27242 | TNF receptor superfamily member 21 |
| ENSG0000 | 10160.56 | 2.215229 | 0.342544 | 6.466986 | 1.00E-10 | 1.82E-08 | CDH13 | 1012 | cadherin 13 |
| ENSG0000 | 1974.601 | -8.32407 | 1.291773 | -6.44391 | 1.16E-10 | 2.09E-08 | APCDD1 | 147495 | APC down-regulated 1 |
| ENSG0000 | 66.09372 | -5.93499 | 0.921385 | -6.44138 | 1.18E-10 | 2.10E-08 | GAL | 51083 | galanin and GMAP prepropeptide |
| ENSG0000 | 424.1536 | 2.544207 | 0.395246 | 6.437024 | 1.22E-10 | 2.15E-08 | LINC01133 | 1.01E+08 | long intergenic non-protein coding RNA 1133 |
| ENSG0000 | 58.6884 | 5.559077 | 0.86499 | 6.426754 | 1.30E-10 | 2.28E-08 | KRT31 | 3881 | keratin 31 |
| ENSG0000 | 273.6245 | 3.376971 | 0.526741 | 6.411065 | 1.45E-10 | 2.50E-08 | DMD | 1756 | dystrophin |
| ENSG0000 | 1152.495 | -2.15135 | 0.335791 | -6.4068 | 1.49E-10 | 2.55E-08 | TBX5-AS1 | 255480 | TBX5 antisense RNA 1 |
| ENSG0000 | 35.49623 | -3.30352 | 0.518775 | -6.36793 | 1.92E-10 | 3.26E-08 | LTK | 4058 | leukocyte receptor tyrosine kinase |
| ENSG0000 | 801.6303 | 2.856495 | 0.451641 | 6.324698 | 2.54E-10 | 4.21E-08 | DEPP1 | 11067 | DEPP1 autophagy regulator |
| ENSG0000 | 39.26634 | 7.307678 | 1.157831 | 6.311522 | 2.76E-10 | 4.55E-08 | PART1 | 25859 | prostate androgen-regulated transcript 1 |
| ENSG0000 | 170.0363 | 4.560258 | 0.723847 | 6.300028 | 2.98E-10 | 4.82E-08 | STEAP4 | 79689 | STEAP4 metalloreductase |
| ENSG0000 | 790.125 | -2.85002 | 0.455085 | -6.26261 | 3.79E-10 | 6.06E-08 | GALNT6 | 11226 | polypeptide N-acetylgalactosaminyltransferase 6 |
| ENSG0000 | 39.36002 | 3.834232 | 0.612288 | 6.262141 | 3.80E-10 | 6.06E-08 | CDH1 | 999 | cadherin 1 |
| ENSG0000 | 36.69955 | 4.887848 | 0.783276 | 6.240265 | 4.37E-10 | 6.92E-08 | NA | NA | NA |
| ENSG0000 | 2152.671 | 1.954225 | 0.31389 | 6.22583 | 4.79E-10 | 7.53E-08 | COL11A1 | 1301 | collagen type XI alpha 1 chain |
| ENSG0000 | 307.1557 | 4.11362 | 0.661069 | 6.222676 | 4.89E-10 | 7.62E-08 | H19 | 283120 | H19 imprinted maternally expressed transcript |
| ENSG0000 | 277.7374 | -3.4415 | 0.553475 | -6.21799 | 5.04E-10 | 7.79E-08 | DIRAS3 | 9077 | DIRAS family GTPase 3 |
| ENSG0000 | 33.72545 | -7.57511 | 1.220713 | -6.20548 | 5.45E-10 | 8.38E-08 | NA | NA | NA |
| ENSG0000 | 85.41302 | -8.20448 | 1.323459 | -6.19927 | 5.67E-10 | 8.65E-08 | IRX1 | 79192 | iroquois homeobox 1 |
| ENSG0000 | 57.598 | -6.5998 | 1.065747 | -6.19265 | 5.92E-10 | 8.95E-08 | SOX11 | 6664 | SRY-box transcription factor 11 |
| ENSG0000 | 38.61588 | 4.405136 | 0.712412 | 6.183409 | 6.27E-10 | 9.42E-08 | GPR88 | 54112 | G protein-coupled receptor 88 |
| ENSG0000 | 604.1987 | 5.591058 | 0.904585 | 6.180797 | 6.38E-10 | 9.51E-08 | CCKAR | 886 | cholecystokinin A receptor |
| ENSG0000 | 59.64424 | -3.72909 | 0.604819 | -6.16564 | 7.02E-10 | 1.04E-07 | HOXA5 | 3202 | homeobox A5 |
| ENSG0000 | 177.8521 | 3.19618 | 0.524481 | 6.09399 | 1.10E-09 | 1.61E-07 | NALCN | 259232 | sodium leak channel, non-selective |
| ENSG0000 | 96.87807 | 4.744715 | 0.780386 | 6.079956 | 1.20E-09 | 1.74E-07 | SCARA5 | 286133 | scavenger receptor class A member 5 |
| ENSG0000 | 327.9095 | -1.78535 | 0.293988 | -6.07285 | 1.26E-09 | 1.81E-07 | STXBP6 | 29091 | syntaxin binding protein 6 |
| ENSG0000 | 128.2124 | 5.258488 | 0.869067 | 6.050731 | 1.44E-09 | 2.06E-07 | SLC16A9 | 220963 | solute carrier family 16 member 9 |
| ENSG0000 | 56.92481 | 6.713645 | 1.110212 | 6.047171 | 1.47E-09 | 2.09E-07 | KRT16P3 | 644945 | keratin 16 pseudogene 3 |
| ENSG0000 | 161.884 | 2.543268 | 0.421799 | 6.029574 | 1.64E-09 | 2.28E-07 | CYP19A1 | 1588 | cytochrome P450 family 19 subfamily A member 1 |
| ENSG0000 | 191.9901 | 4.094366 | 0.679389 | 6.026545 | 1.68E-09 | 2.31E-07 | KCTD16 | 57528 | potassium channel tetramerization domain containing 16 |
| ENSG0000 | 72.03205 | -7.33273 | 1.217059 | -6.02496 | 1.69E-09 | 2.32E-07 | NA | NA | NA |
| ENSG0000 | 2215.245 | 3.77613 | 0.627197 | 6.020642 | 1.74E-09 | 2.37E-07 | NTN4 | 59277 | netrin 4 |
| ENSG0000 | 3843.9 | 8.636338 | 1.441841 | 5.989799 | 2.10E-09 | 2.82E-07 | SFRP4 | 6424 | secreted frizzled related protein 4 |
| ENSG0000 | 222.0382 | -1.87193 | 0.312583 | -5.98858 | 2.12E-09 | 2.82E-07 | MBNL3 | 55796 | muscleblind like splicing regulator 3 |
| ENSG0000 | 31.73182 | 3.433544 | 0.573415 | 5.987893 | 2.13E-09 | 2.82E-07 | TP63 | 8626 | tumor protein p63 |
| ENSG0000 | 112.0544 | 5.986293 | 1.000081 | 5.98581 | 2.15E-09 | 2.84E-07 | KRT33B | 3884 | keratin 33B |
| ENSG0000 | 304.2949 | -5.34262 | 0.892761 | -5.98438 | 2.17E-09 | 2.84E-07 | TRMT9B | 57604 | tRNA methyltransferase 9B (putative) |
| ENSG0000 | 165.4752 | 1.663684 | 0.278104 | 5.98223 | 2.20E-09 | 2.86E-07 | GSAP | 54103 | gamma-secretase activating protein |
| ENSG0000 | 36.67157 | 3.088749 | 0.516465 | 5.980554 | 2.22E-09 | 2.86E-07 | LINC02015 | 1.03E+08 | long intergenic non-protein coding RNA 2015 |
| ENSG0000 | 94.32653 | 2.058512 | 0.344207 | 5.98045 | 2.23E-09 | 2.86E-07 | LGALSL | 29094 | galectin like |
| ENSG0000 | 50.97731 | 6.202453 | 1.037499 | 5.978271 | 2.26E-09 | 2.88E-07 | CHRDL2 | 25884 | chordin like 2 |
| ENSG0000 | 23.40712 | 6.844448 | 1.149223 | 5.955718 | 2.59E-09 | 3.27E-07 | NA | NA | NA |
| ENSG0000 | 84.73215 | 6.969881 | 1.170844 | 5.952868 | 2.63E-09 | 3.30E-07 | CDH18 | 1016 | cadherin 18 |
| ENSG0000 | 21210.38 | 1.83594 | 0.308951 | 5.942492 | 2.81E-09 | 3.50E-07 | ADAMTS1 | 9510 | ADAM metallopeptidase with thrombospondin type 1 motif 1 |
| ENSG0000 | 19.44536 | -4.0583 | 0.686763 | -5.90932 | 3.44E-09 | 4.23E-07 | NA | NA | NA |
| ENSG0000 | 1441.356 | 2.832187 | 0.480915 | 5.889161 | 3.88E-09 | 4.73E-07 | FNDC1 | 84624 | fibronectin type III domain containing 1 |
| ENSG0000 | 39.64837 | 3.92049 | 0.665759 | 5.888751 | 3.89E-09 | 4.73E-07 | NA | NA | NA |
| ENSG0000 | 1891.802 | 2.915523 | 0.495962 | 5.878522 | 4.14E-09 | 5.00E-07 | GFRA1 | 2674 | GDNF family receptor alpha 1 |
| ENSG0000 | 136.0545 | 2.716025 | 0.462339 | 5.874531 | 4.24E-09 | 5.07E-07 | SLC2A5 | 6518 | solute carrier family 2 member 5 |
| ENSG0000 | 30.48444 | -5.35075 | 0.914884 | -5.84856 | 4.96E-09 | 5.89E-07 | NA | NA | NA |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 76.70697 | 6.033985 | 1.033843 | 5.836464 | 5.33E-09 | 6.30E-07 | LINC01018 | 255167 | long intergenic non-protein coding RNA 1018 |
| ENSG0000 | 21.52505 | -5.29856 | 0.909122 | -5.82821 | 5.60E-09 | 6.58E-07 | P2RY1 | 5028 | purinergic receptor P2Y1 |
| ENSG0000 | 23.67829 | 4.232144 | 0.728993 | 5.80547 | 6.42E-09 | 7.45E-07 | LINC01750 | 643355 | long intergenic non-protein coding RNA 1750 |
| ENSG0000 | 74.72837 | 5.809238 | 1.000969 | 5.803617 | 6.49E-09 | 7.49E-07 | HRH2 | 3274 | histamine receptor H2 |
| ENSG0000 | 81.27146 | 1.64718 | 0.284184 | 5.796176 | 6.78E-09 | 7.79E-07 | ZFHX4-AS1 | 1E+08 | ZFHX4 antisense RNA 1 |
| ENSG0000 | 111.8538 | 3.267732 | 0.564669 | 5.786987 | 7.17E-09 | 8.09E-07 | CCND2 | 894 | cyclin D2 |
| ENSG0000 | 1695.706 | 1.699391 | 0.2939 | 5.782204 | 7.37E-09 | 8.28E-07 | ARL4C | 10123 | ADP ribosylation factor like GTPase 4C |
| ENSG0000 | 304.8865 | 2.267932 | 0.393704 | 5.760506 | 8.39E-09 | 9.36E-07 | FUCA1 | 2517 | alpha-L-fucosidase 1 |
| ENSG0000 | 150.8549 | 3.178299 | 0.552601 | 5.751531 | 8.84E-09 | 9.82E-07 | PCSK1 | 5122 | proprotein convertase subtilisin/kexin type 1 |
| ENSG0000 | 102.9551 | -5.81356 | 1.013757 | -5.73467 | 9.77E-09 | 1.07E-06 | ANO4 | 121601 | anoctamin 4 |
| ENSG0000 | 60.32538 | 4.159232 | 0.725916 | 5.729632 | 1.01E-08 | 1.09E-06 | KLHDC7B | 113730 | kelch domain containing 7B |
| ENSG0000 | 29.73085 | 4.011383 | 0.700457 | 5.726808 | 1.02E-08 | 1.11E-06 | IGF1 | 3479 | insulin like growth factor 1 |
| ENSG0000 | 17155.13 | 1.524845 | 0.267212 | 5.706498 | 1.15E-08 | 1.24E-06 | GJA1 | 2697 | gap junction protein alpha 1 |
| ENSG0000 | 31.80065 | 4.103646 | 0.720936 | 5.69211 | 1.25E-08 | 1.34E-06 | CCDC110 | 256309 | coiled-coil domain containing 110 |
| ENSG0000 | 250.866 | -2.94038 | 0.516937 | -5.68809 | 1.28E-08 | 1.37E-06 | TOX2 | 84969 | TOX high mobility group box family member 2 |
| ENSG0000 | 140.5113 | 2.422745 | 0.426056 | 5.686444 | 1.30E-08 | 1.37E-06 | HMGA2-A | 1E+08 | HMGA2 antisense RNA 1 |
| ENSG0000 | 390.8244 | -3.76617 | 0.663618 | -5.67521 | 1.39E-08 | 1.44E-06 | CASP1 | 834 | caspase 1 |
| ENSG0000 | 47.14542 | 2.116269 | 0.373065 | 5.672656 | 1.41E-08 | 1.46E-06 | ADAMTS7 | 390660 | ADAMTS7 pseudogene 1 |
| ENSG0000 | 57.29886 | 4.757984 | 0.8393 | 5.66899 | 1.44E-08 | 1.47E-06 | PADI2 | 11240 | peptidyl arginine deiminase 2 |
| ENSG0000 | 179.5165 | 3.525234 | 0.622214 | 5.665631 | 1.46E-08 | 1.50E-06 | NA | NA | NA |
| ENSG0000 | 291.2887 | 2.585143 | 0.457076 | 5.655823 | 1.55E-08 | 1.57E-06 | ASPHD2 | 57168 | aspartate beta-hydroxylase domain containing 2 |
| ENSG0000 | 46.7031 | -4.05582 | 0.71747 | -5.65295 | 1.58E-08 | 1.59E-06 | APBA2 | 321 | amyloid beta precursor protein binding family A member 2 |
| ENSG0000 | 70.09104 | 3.120444 | 0.552852 | 5.644269 | 1.66E-08 | 1.66E-06 | KRTAP1-1 | 81851 | keratin associated protein 1-1 |
| ENSG0000 | 26.35013 | -4.03713 | 0.717489 | -5.62674 | 1.84E-08 | 1.82E-06 | ST8SIA5 | 29906 | ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 5 |
| ENSG0000 | 3294.453 | 2.110241 | 0.375997 | 5.612383 | 2.00E-08 | 1.97E-06 | GRAMD2B | 65983 | GRAM domain containing 2B |
| ENSG0000 | 869.8808 | -2.39121 | 0.427285 | -5.59629 | 2.19E-08 | 2.15E-06 | GNG2 | 54331 | G protein subunit gamma 2 |
| ENSG0000 | 43.69225 | 3.677452 | 0.657618 | 5.592081 | 2.24E-08 | 2.18E-06 | GALNT13 | 114805 | polypeptide N-acetylgalactosaminyltransferase 13 |
| ENSG0000 | 116.7767 | 1.549452 | 0.277638 | 5.580831 | 2.39E-08 | 2.32E-06 | RFLNA | 144347 | refilin A |
| ENSG0000 | 79.52821 | 2.601715 | 0.466309 | 5.579374 | 2.41E-08 | 2.33E-06 | VLDLR-AS1 | 401491 | VLDLR antisense RNA 1 |
| ENSG0000 | 898.338 | 1.646423 | 0.295195 | 5.577416 | 2.44E-08 | 2.34E-06 | COBLL1 | 22837 | cordon-bleu WH2 repeat protein like 1 |
| ENSG0000 | 368.8601 | 3.246669 | 0.582535 | 5.573343 | 2.50E-08 | 2.39E-06 | GATA6 | 2627 | GATA binding protein 6 |
| ENSG0000 | 39.42904 | -4.90894 | 0.8813 | -5.57011 | 2.55E-08 | 2.42E-06 | HOXA1 | 3198 | homeobox A1 |
| ENSG0000 | 62.39832 | -3.84566 | 0.69335 | -5.5465 | 2.91E-08 | 2.74E-06 | WNT7B | 7477 | Wnt family member 7B |
| ENSG0000 | 27.00907 | 4.223776 | 0.76167 | 5.545413 | 2.93E-08 | 2.75E-06 | APOA1 | 335 | apolipoprotein A1 |
| ENSG0000 | 664.2147 | 2.679144 | 0.483915 | 5.5364 | 3.09E-08 | 2.88E-06 | GDF5 | 8200 | growth differentiation factor 5 |
| ENSG0000 | 50.98487 | 5.890146 | 1.06466 | 5.532419 | 3.16E-08 | 2.93E-06 | TMEM178 | 1.01E+08 | transmembrane protein 178B |
| ENSG0000 | 2156.026 | 2.47648 | 0.448355 | 5.523484 | 3.32E-08 | 3.07E-06 | LACC1 | 144811 | laccase domain containing 1 |
| ENSG0000 | 319.7704 | 2.089107 | 0.378679 | 5.516826 | 3.45E-08 | 3.16E-06 | NHSL1 | 57224 | NHS like 1 |
| ENSG0000 | 1388.445 | -1.70441 | 0.308975 | -5.51633 | 3.46E-08 | 3.16E-06 | GNG11 | 2791 | G protein subunit gamma 11 |
| ENSG0000 | 1839.989 | 3.561075 | 0.649254 | 5.484876 | 4.14E-08 | 3.73E-06 | MEST | 4232 | mesoderm specific transcript |
| ENSG0000 | 448.0038 | 2.06584 | 0.378145 | 5.463091 | 4.68E-08 | 4.17E-06 | NA | NA | NA |
| ENSG0000 | 8364.688 | 8.644128 | 1.585059 | 5.453505 | 4.94E-08 | 4.39E-06 | ACAN | 176 | aggrecan |
| ENSG0000 | 18012.64 | -3.88667 | 0.714611 | -5.43886 | 5.36E-08 | 4.74E-06 | MXRA5 | 25878 | matrix remodeling associated 5 |
| ENSG0000 | 264.9256 | -8.69776 | 1.602947 | -5.4261 | 5.76E-08 | 5.03E-06 | GRIK2 | 2898 | glutamate ionotropic receptor kainate type subunit 2 |
| ENSG0000 | 160.828 | -4.53594 | 0.837032 | -5.41907 | 5.99E-08 | 5.21E-06 | COL6A6 | 131873 | collagen type VI alpha 6 chain |
| ENSG0000 | 184.5698 | -5.25206 | 0.972234 | -5.40205 | 6.59E-08 | 5.67E-06 | MAP2K6 | 5608 | mitogen-activated protein kinase kinase 6 |

Supp Table 2 DDC vs NS comparison

| ENSG | baseMean | log2FoldC | lfcSE | stat | pvalue | padj | symbol | entrez | genename |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 1751.458 | -3.99209 | 0.182657 | -21.8557 | 6.86E-106 | 1.80E-101 | JAM2 | 58494 | junctional adhesion molecule 2 |
| ENSG0000 | 8139.154 | -2.95224 | 0.178747 | -16.5163 | 2.80E-61 | 3.68E-57 | JUND | 3727 | JunD proto-oncogene, AP-1 transcription factor subunit |
| ENSG0000 | 4536.474 | -3.8835 | 0.237745 | -16.3347 | 5.59E-60 | 4.89E-56 | CSRNP1 | 64651 | cysteine and serine rich nuclear protein 1 |
| ENSG0000 | 391.7914 | -4.68084 | 0.288902 | -16.2021 | 4.87E-59 | 3.20E-55 | TNFSF9 | 8744 | TNF superfamily member 9 |
| ENSG0000 | 13622.91 | -4.41895 | 0.29259 | -15.1029 | 1.55E-51 | 8.14E-48 | GADD45B | 4616 | growth arrest and DNA damage inducible beta |
| ENSG0000 | 424.3872 | 2.005845 | 0.133761 | 14.99568 | 7.84E-51 | 3.43E-47 | MRTFB | 57496 | myocardin related transcription factor B |
| ENSG0000 | 393.3528 | -5.98573 | 0.399742 | -14.974 | 1.09E-50 | 4.08E-47 | HES4 | 57801 | hes family bHLH transcription factor 4 |
| ENSG0000 | 13590.97 | -5.35951 | 0.369699 | -14.497 | 1.27E-47 | 3.70E-44 | BHLHE40 | 8553 | basic helix-loop-helix family member e40 |
| ENSG0000 | 4325.254 | -3.94389 | 0.277538 | -14.2103 | 7.91E-46 | 2.08E-42 | PER1 | 5187 | period circadian regulator 1 |
| ENSG0000 | 100532.5 | -2.10177 | 0.148745 | -14.13 | 2.48E-45 | 5.92E-42 | ND2 | 4536 | NADH dehydrogenase subunit 2 |
| ENSG0000 | 2633.898 | -3.08842 | 0.221583 | -13.938 | 3.72E-44 | 8.15E-41 | NA | NA | NA |
| ENSG0000 | 922.621 | -4.51819 | 0.324937 | -13.9048 | 5.92E-44 | 1.20E-40 | DAPK1 | 1612 | death associated protein kinase 1 |
| ENSG0000 | 7550.216 | -2.63214 | 0.196139 | -13.4198 | 4.63E-41 | 8.69E-38 | MIDN | 90007 | midnolin |
| ENSG0000 | 6378.852 | -4.49823 | 0.342968 | -13.1156 | 2.68E-39 | 4.14E-36 | HES1 | 3280 | hes family bHLH transcription factor 1 |
| ENSG0000 | 1075.316 | -1.57721 | 0.125248 | -12.5927 | 2.32E-36 | 3.38E-33 | SELENOK | 58515 | selenoprotein K |
| ENSG0000 | 146.2949 | 6.456761 | 0.517608 | 12.47423 | 1.03E-35 | 1.43E-32 | HOXD10 | 3236 | homeobox D10 |
| ENSG0000 | 1061.686 | -6.19903 | 0.501918 | -12.3507 | 4.83E-35 | 6.34E-32 | C11orf96 | 387763 | chromosome 11 open reading frame 96 |
| ENSG0000 | 1932.567 | 1.876146 | 0.153224 | 12.2445 | 1.80E-34 | 2.25E-31 | SH3KBP1 | 30011 | SH3 domain containing kinase binding protein 1 |
| ENSG0000 | 8527.247 | -2.86766 | 0.235011 | -12.2023 | 3.02E-34 | 3.61E-31 | KLF10 | 7071 | KLF transcription factor 10 |
| ENSG0000 | 87.96214 | 5.844008 | 0.485298 | 12.0421 | 2.13E-33 | 2.44E-30 | GALNT18 | 374378 | polypeptide N-acetylgalactosaminyltransferase 18 |
| ENSG0000 | 294.9143 | 6.777534 | 0.564817 | 11.99953 | 3.57E-33 | 3.91E-30 | VAT1L | 57687 | vesicle amine transport 1 like |
| ENSG0000 | 267.5419 | -4.25597 | 0.364698 | -11.6698 | 1.82E-31 | 1.84E-28 | LIMS3 | 96626 | LIM zinc finger domain containing 3 |
| ENSG0000 | 259.4226 | -4.25694 | 0.370333 | -11.4949 | 1.40E-30 | 1.27E-27 | LIMS4 | 1E+08 | LIM zinc finger domain containing 4 |
| ENSG0000 | 338.8982 | -6.79697 | 0.595277 | -11.4182 | 3.39E-30 | 2.97E-27 | NA | NA | NA |
| ENSG0000 | 65.65142 | 5.880763 | 0.515235 | 11.41375 | 3.57E-30 | 3.02E-27 | HOXD11 | 3237 | homeobox D11 |
| ENSG0000 | 25511.49 | -1.91444 | 0.16782 | -11.4077 | 3.83E-30 | 3.14E-27 | ND4L | 4539 | NADH dehydrogenase subunit 4L |
| ENSG0000 | 3197.946 | 1.887737 | 0.165715 | 11.39146 | 4.61E-30 | 3.60E-27 | PTPN13 | 5783 | protein tyrosine phosphatase non-receptor type 13 |
| ENSG0000 | 46344.4 | -2.31991 | 0.203668 | -11.3906 | 4.66E-30 | 3.60E-27 | MTND2P2 | 1.01E+08 | MT-ND2 pseudogene 28 |
| ENSG0000 | 2541.964 | -2.41436 | 0.21518 | -11.2202 | 3.24E-29 | 2.43E-26 | MAFF | 23764 | MAF bZIP transcription factor F |
| ENSG0000 | 77.03513 | -3.62918 | 0.324131 | -11.1966 | 4.23E-29 | 3.09E-26 | NA | NA | NA |
| ENSG0000 | 1367.199 | -1.6113 | 0.146106 | -11.0283 | 2.79E-28 | 1.98E-25 | NA | NA | NA |
| ENSG0000 | 2186.721 | 1.999115 | 0.181924 | 10.98876 | 4.33E-28 | 2.99E-25 | ITPRID2 | 6744 | ITPR interacting domain containing 2 |
| ENSG0000 | 100.425 | -3.69109 | 0.336626 | -10.965 | 5.63E-28 | 3.79E-25 | NA | NA | NA |
| ENSG0000 | 100.5881 | -3.78383 | 0.351766 | -10.7567 | 5.51E-27 | 3.53E-24 | NA | NA | NA |
| ENSG0000 | 2701.762 | -1.62242 | 0.151201 | -10.7303 | 7.34E-27 | 4.59E-24 | DDAH2 | 23564 | dimethylarginine dimethylaminohydrolase 2 |
| ENSG0000 | 54.7552 | -4.75816 | 0.445771 | -10.674 | 1.35E-26 | 8.04E-24 | HOXC-AS2 | 1.01E+08 | HOXC cluster antisense RNA 2 |
| ENSG0000 | 228.1435 | 1.577099 | 0.148116 | 10.6477 | 1.79E-26 | 1.04E-23 | GSPT2 | 23708 | G1 to S phase transition 2 |
| ENSG0000 | 401.2329 | -4.4021 | 0.414703 | -10.6151 | 2.54E-26 | 1.45E-23 | EML6 | 400954 | EMAP like 6 |
| ENSG0000 | 359.8155 | 6.078262 | 0.576909 | 10.53591 | 5.90E-26 | 3.30E-23 | HOXA13 | 3209 | homeobox A13 |
| ENSG0000 | 1243.021 | 1.661063 | 0.157772 | 10.52824 | 6.40E-26 | 3.50E-23 | ZNF395 | 55893 | zinc finger protein 395 |
| ENSG0000 | 596.9496 | -1.77546 | 0.170853 | -10.3917 | 2.70E-25 | 1.45E-22 | ZNF408 | 79797 | zinc finger protein 408 |
| ENSG0000 | 3129.744 | -3.68871 | 0.360252 | -10.2393 | 1.32E-24 | 6.81E-22 | ZC3H12A | 80149 | zinc finger CCCH-type containing 12A |
| ENSG0000 | 207.4425 | -10.9559 | 1.07403 | -10.2008 | 1.97E-24 | 9.93E-22 | LEP | 3952 | leptin |
| ENSG0000 | 1474.826 | -5.21061 | 0.512295 | -10.1711 | 2.67E-24 | 1.29E-21 | ATF3 | 467 | activating transcription factor 3 |
| ENSG0000 | 1048.174 | 1.671962 | 0.164402 | 10.16996 | 2.70E-24 | 1.29E-21 | PTGR3 | 284273 | prostaglandin reductase 3 |
| ENSG0000 | 99.36353 | -5.55874 | 0.555998 | -9.99778 | 1.56E-23 | 7.18E-21 | NA | NA | NA |
| ENSG0000 | 417.2829 | -5.58436 | 0.560241 | -9.96778 | 2.11E-23 | 9.55E-21 | USP2 | 9099 | ubiquitin specific peptidase 2 |
| ENSG0000 | 1508.093 | -4.75232 | 0.476899 | -9.96504 | 2.17E-23 | 9.65E-21 | LOC10272 | 1.03E+08 | salt inducible kinase 1B (putative) |
| ENSG0000 | 1365.287 | -4.70383 | 0.472509 | -9.955 | 2.40E-23 | 1.05E-20 | SIK1 | 150094 | salt inducible kinase 1 |
| ENSG0000 | 479.169 | -2.09912 | 0.211791 | -9.9113 | 3.72E-23 | 1.57E-20 | TUFT1 | 7286 | tuftelin 1 |
| ENSG0000 | 477.1729 | -1.89239 | 0.190956 | -9.91008 | 3.76E-23 | 1.57E-20 | H1-2 | 3006 | H1.2 linker histone, cluster member |
| ENSG0000 | 7047.515 | 2.231672 | 0.226451 | 9.854998 | 6.52E-23 | 2.68E-20 | CD109 | 135228 | CD109 molecule |
| ENSG0000 | 358.6499 | -8.43033 | 0.855739 | -9.85152 | 6.75E-23 | 2.73E-20 | MYH1 | 4619 | myosin heavy chain 1 |
| ENSG0000 | 748.7 | 1.769018 | 0.179617 | 9.848814 | 6.94E-23 | 2.76E-20 | PPARA | 5465 | peroxisome proliferator activated receptor alpha |
| ENSG0000 | 1275.773 | -3.14592 | 0.323036 | -9.73861 | 2.06E-22 | 8.09E-20 | MAP3K8 | 1326 | mitogen-activated protein kinase kinase kinase 8 |
| ENSG0000 | 191.8913 | 1.728914 | 0.177595 | 9.735126 | 2.14E-22 | 8.25E-20 | PDP2 | 57546 | pyruvate dehydrogenase phosphatase catalytic subunit 2 |
| ENSG0000 | 1519.447 | -2.31635 | 0.238009 | -9.73221 | 2.20E-22 | 8.32E-20 | GDPD5 | 81544 | glycerophosphodiester phosphodiesterase domain contain ng 5 |
| ENSG0000 | 1337.994 | -1.98349 | 0.203827 | -9.73124 | 2.22E-22 | 8.32E-20 | NA | NA | NA |
| ENSG0000 | 43192.03 | -1.55111 | 0.159554 | -9.72153 | 2.44E-22 | 9.03E-20 | MTATP6P | 1.06E+08 | MT-ATP6 pseudogene 1 |
| ENSG0000 | 116.8718 | -10.1288 | 1.047503 | -9.66944 | 4.07E-22 | 1.46E-19 | HOXB8 | 3218 | homeobox B8 |
| ENSG0000 | 113.7697 | -3.48485 | 0.360472 | -9.66745 | 4.15E-22 | 1.47E-19 | NA | NA | NA |
| ENSG0000 | 102.3169 | -3.53384 | 0.367122 | -9.62578 | 6.22E-22 | 2.18E-19 | NA | NA | NA |
| ENSG0000 | 225837.6 | -1.70149 | 0.17703 | -9.61128 | 7.17E-22 | 2.48E-19 | ND4 | 4538 | NADH dehydrogenase subunit 4 |
| ENSG0000 | 996.5017 | -6.06082 | 0.63105 | -9.60435 | 7.66E-22 | 2.61E-19 | PCSK9 | 255738 | proprotein convertase subtilisin/kexin type 9 |
| ENSG0000 | 128355.5 | -2.14083 | 0.223384 | -9.58363 | 9.37E-22 | 3.16E-19 | CYTB | 4519 | cytochrome b |
| ENSG0000 | 129.3665 | -6.12554 | 0.641381 | -9.55055 | 1.29E-21 | 4.18E-19 | EXPH5 | 23086 | exophilin 5 |
| ENSG0000 | 2154.908 | -2.73588 | 0.287122 | -9.52863 | 1.59E-21 | 5.10E-19 | LIMS2 | 55679 | LIM zinc finger domain containing 2 |
| ENSG0000 | 105.8647 | -2.09924 | 0.220839 | -9.50576 | 1.99E-21 | 6.21E-19 | MMP15 | 4324 | matrix metallopeptidase 15 |
| ENSG0000 | 153.4485 | -1.52603 | 0.16151 | -9.44853 | 3.44E-21 | 1.06E-18 | NA | NA | NA |
| ENSG0000 | 370.6283 | -2.76478 | 0.294297 | -9.39452 | 5.75E-21 | 1.71E-18 | HSD17B14 | 51171 | hydroxysteroid 17-beta dehydrogenase 14 |
| ENSG0000 | 154.0538 | -4.64282 | 0.494246 | -9.39375 | 5.79E-21 | 1.71E-18 | TRPC6 | 7225 | transient receptor potential cation channel subfamily C m ember 6 |
| ENSG0000 | 224.9752 | 1.696886 | 0.180719 | 9.389633 | 6.02E-21 | 1.76E-18 | KBTBD6 | 89890 | kelch repeat and BTB domain containing 6 |
| ENSG0000 | 614.5936 | -3.3338 | 0.355213 | -9.38534 | 6.27E-21 | 1.81E-18 | KIT | 3815 | KIT proto-oncogene, receptor tyrosine kinase |
| ENSG0000 | 961.1958 | 3.658463 | 0.391816 | 9.337192 | 9.89E-21 | 2.82E-18 | MATN2 | 4147 | matrilin 2 |
| ENSG0000 | 700.6564 | -2.09847 | 0.226111 | -9.28068 | 1.68E-20 | 4.76E-18 | DHRS7B | 25979 | dehydrogenase/reductase 7B |
| ENSG0000 | 1429.274 | 3.513165 | 0.380688 | 9.228468 | 2.75E-20 | 7.37E-18 | CA12 | 771 | carbonic anhydrase 12 |
| ENSG0000 | 33.91774 | -3.41513 | 0.370711 | -9.21239 | 3.19E-20 | 8.38E-18 | BHLHE40- | 1.01E+08 | BHLHE40 antisense RNA 1 |
| ENSG0000 | 938.5063 | 2.653177 | 0.288591 | 9.193552 | 3.80E-20 | 9.88E-18 | EHD3 | 30845 | EH domain containing 3 |
| ENSG0000 | 196.1425 | -1.7539 | 0.1914 | -9.16352 | 5.02E-20 | 1.27E-17 | C15orf61 | 145853 | chromosome 15 open reading frame 61 |
| ENSG0000 | 263.4157 | -9.85328 | 1.080103 | -9.12253 | 7.34E-20 | 1.82E-17 | HOXB-AS3 | 404266 | HOXB cluster antisense RNA 3 |
| ENSG0000 | 4006.734 | -3.2481 | 0.3561 | -9.12132 | 7.42E-20 | 1.82E-17 | PIM1 | 5292 | Pim-1 proto-oncogene, serine/threonine kinase |
| ENSG0000 | 59.53254 | 3.202532 | 0.35161 | 9.108189 | 8.38E-20 | 2.04E-17 | SOX8 | 30812 | SRY-box transcription factor 8 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 50.22782 | 4.580277 | 0.503179 | 9.102678 | 8.81E-20 | 2.12E-17 | NA | NA | NA |
| ENSG0000 | 875.135 | -1.63304 | 0.180501 | -9.04729 | 1.47E-19 | 3.50E-17 | PTS | 5805 | 6-pyruvoyltetrahydropterin  synthase |
| ENSG0000 | 1832.423 | -1.60833 | 0.178844 | -8.99289 | 2.41E-19 | 5.60E-17 | NEU1 | 4758 | neuraminidase 1 |
| ENSG0000 | 225.8076 | -10.3567 | 1.1534 | -8.97932 | 2.72E-19 | 6.22E-17 | HES5 | 388585 | hes family bHLH transcription factor 5 |
| ENSG0000 | 660.8992 | 2.409133 | 0.269141 | 8.951198 | 3.52E-19 | 7.96E-17 | NHSL2 | 340527 | NHS like 2 |
| ENSG0000 | 858.7559 | -5.7876 | 0.646999 | -8.9453 | 3.71E-19 | 8.33E-17 | INMT | 11185 | indolethylamine N-methyltransferase |
| ENSG0000 | 2021.079 | -3.67837 | 0.411325 | -8.94272 | 3.80E-19 | 8.45E-17 | TRIB1 | 10221 | tribbles pseudokinase 1 |
| ENSG0000 | 48.32817 | -3.54978 | 0.397895 | -8.92139 | 4.60E-19 | 1.02E-16 | NA | NA | NA |
| ENSG0000 | 73.77881 | 3.967342 | 0.446 | 8.895385 | 5.82E-19 | 1.27E-16 | ICAM5 | 7087 | intercellular adhesion molecule 5 |
| ENSG0000 | 434.6675 | 2.758944 | 0.312716 | 8.822534 | 1.12E-18 | 2.37E-16 | INSYN2B | 1E+08 | inhibitory synaptic factor family member 2B |
| ENSG0000 | 1871.912 | -3.49008 | 0.397987 | -8.76934 | 1.80E-18 | 3.75E-16 | KLF2 | 10365 | KLF transcription factor 2 |
| ENSG0000 | 7619.416 | -2.09029 | 0.238528 | -8.7633 | 1.90E-18 | 3.92E-16 | PPP1R15A | 23645 | protein phosphatase 1 regulatory subunit 15A |
| ENSG0000 | 21924.35 | 1.542127 | 0.176176 | 8.753347 | 2.07E-18 | 4.22E-16 | CD44 | 960 | CD44 molecule (Indian blood group) |
| ENSG0000 | 2927.289 | -12.2192 | 1.402333 | -8.71347 | 2.95E-18 | 5.95E-16 | SMOC2 | 64094 | SPARC related modular calcium binding 2 |
| ENSG0000 | 88.26492 | 8.749609 | 1.004958 | 8.706443 | 3.14E-18 | 6.29E-16 | SHOX | 6473 | short stature homeobox |
| ENSG0000 | 882.9998 | -2.09093 | 0.240558 | -8.69202 | 3.56E-18 | 6.98E-16 | JAG1 | 182 | jagged canonical Notch ligand 1 |
| ENSG0000 | 366.7137 | -3.36008 | 0.388711 | -8.64415 | 5.42E-18 | 1.03E-15 | FGF14 | 2259 | fibroblast growth factor 14 |
| ENSG0000 | 108080.9 | -1.53005 | 0.178769 | -8.55883 | 1.14E-17 | 2.08E-15 | ATP6 | 4508 | ATP synthase F0 subunit 6 |
| ENSG0000 | 267.4607 | -1.72938 | 0.202892 | -8.52366 | 1.55E-17 | 2.76E-15 | NA | NA | NA |
| ENSG0000 | 223.3337 | -3.44151 | 0.405006 | -8.49745 | 1.94E-17 | 3.42E-15 | IDI2-AS1 | 55853 | IDI2 antisense RNA 1 |
| ENSG0000 | 1945.535 | 1.501736 | 0.178343 | 8.420492 | 3.75E-17 | 6.43E-15 | CNOT1 | 23019 | CCR4-NOT transcription complex subunit 1 |
| ENSG0000 | 6476.403 | -2.75457 | 0.327263 | -8.417 | 3.86E-17 | 6.55E-15 | INSIG1 | 3638 | insulin induced gene 1 |
| ENSG0000 | 42.09023 | 6.435995 | 0.766282 | 8.398992 | 4.50E-17 | 7.49E-15 | COL23A1 | 91522 | collagen type XXIII alpha 1 chain |
| ENSG0000 | 477697.2 | -1.68063 | 0.201394 | -8.34499 | 7.12E-17 | 1.14E-14 | COX1 | 4512 | cytochrome c oxidase subunit I |
| ENSG0000 | 37.5955 | 4.499105 | 0.539517 | 8.339133 | 7.48E-17 | 1.19E-14 | SORL1 | 6653 | sortilin related receptor 1 |
| ENSG0000 | 342.8852 | -2.94786 | 0.353947 | -8.32854 | 8.18E-17 | 1.29E-14 | TMEM171 | 134285 | transmembrane protein 171 |
| ENSG0000 | 241.654 | 1.584349 | 0.191048 | 8.292934 | 1.10E-16 | 1.73E-14 | PTER | 9317 | phosphotriesterase related |
| ENSG0000 | 952.0344 | -1.50371 | 0.181399 | -8.28951 | 1.14E-16 | 1.77E-14 | THAP9-AS | 1E+08 | THAP9 antisense RNA 1 |
| ENSG0000 | 156.0573 | 1.662024 | 0.201085 | 8.265263 | 1.39E-16 | 2.14E-14 | ZBTB39 | 9880 | zinc finger and BTB domain containing 39 |
| ENSG0000 | 274.1051 | 4.911045 | 0.594897 | 8.255291 | 1.52E-16 | 2.31E-14 | AFF2 | 2334 | ALF transcription elongation factor 2 |
| ENSG0000 | 948.5801 | -1.61091 | 0.195182 | -8.2534 | 1.54E-16 | 2.34E-14 | SLC25A25 | 114789 | solute carrier family 25 member 25 |
| ENSG0000 | 249.3369 | -1.53809 | 0.18658 | -8.24363 | 1.67E-16 | 2.52E-14 | FAM89B | 23625 | family with sequence similarity 89 member B |
| ENSG0000 | 454.0147 | 3.984524 | 0.483527 | 8.240535 | 1.71E-16 | 2.56E-14 | TM4SF1 | 4071 | transmembrane 4 L six family member 1 |
| ENSG0000 | 207.3308 | -1.6521 | 0.204233 | -8.08929 | 6.00E-16 | 8.66E-14 | REC8 | 9985 | REC8 meiotic recombination protein |
| ENSG0000 | 1515.75 | 1.901517 | 0.23516 | 8.086071 | 6.16E-16 | 8.84E-14 | TSHZ1 | 10194 | teashirt zinc finger homeobox 1 |
| ENSG0000 | 85.0154 | -5.33013 | 0.662046 | -8.051 | 8.21E-16 | 1.17E-13 | NA | NA | NA |
| ENSG0000 | 112785.1 | 1.901834 | 0.236397 | 8.045074 | 8.62E-16 | 1.22E-13 | COL6A3 | 1293 | collagen type VI alpha 3 chain |
| ENSG0000 | 39.30015 | -4.18459 | 0.521303 | -8.02716 | 9.98E-16 | 1.41E-13 | NA | NA | NA |
| ENSG0000 | 1195.772 | -2.01149 | 0.25096 | -8.01517 | 1.10E-15 | 1.54E-13 | ANK2 | 287 | ankyrin 2 |
| ENSG0000 | 1537.87 | -1.61978 | 0.202976 | -7.98014 | 1.46E-15 | 2.01E-13 | JMJD6 | 23210 | jumonji domain containing 6, arginine demethylase and lys ine hydroxylase |
| ENSG0000 | 859.2714 | 2.498415 | 0.313175 | 7.977696 | 1.49E-15 | 2.04E-13 | TBX5-AS1 | 255480 | TBX5 antisense RNA 1 |
| ENSG0000 | 33.6731 | 4.96772 | 0.626031 | 7.93526 | 2.10E-15 | 2.81E-13 | GALNT14 | 79623 | polypeptide N-acetylgalactosaminyltransferase 14 |
| ENSG0000 | 20.07205 | 8.059297 | 1.01606 | 7.931912 | 2.16E-15 | 2.88E-13 | HOXD13 | 3239 | homeobox D13 |
| ENSG0000 | 204.9394 | -4.2363 | 0.535682 | -7.90823 | 2.61E-15 | 3.44E-13 | B3GALT2 | 8707 | beta-1,3-galactosyltransferase 2 |
| ENSG0000 | 44.62946 | -3.84838 | 0.486664 | -7.90767 | 2.62E-15 | 3.44E-13 | NR3C2 | 4306 | nuclear receptor subfamily 3 group C member 2 |
| ENSG0000 | 1840.461 | -3.23043 | 0.408934 | -7.89964 | 2.80E-15 | 3.65E-13 | PLAC9 | 219348 | placenta associated 9 |
| ENSG0000 | 791.6409 | -4.90129 | 0.62073 | -7.89601 | 2.88E-15 | 3.74E-13 | HEY1 | 23462 | hes related family bHLH transcription factor with YRPW m otif 1 |
| ENSG0000 | 566.1145 | -3.78913 | 0.480399 | -7.88746 | 3.08E-15 | 3.95E-13 | RRAD | 6236 | RRAD, Ras related glycolysis inhibitor and calcium channel  regulator |
| ENSG0000 | 184.41 | 2.498058 | 0.316967 | 7.881123 | 3.24E-15 | 4.14E-13 | RHOU | 58480 | ras homolog family member U |
| ENSG0000 | 1301.936 | 1.751535 | 0.222283 | 7.879756 | 3.28E-15 | 4.16E-13 | NA | NA | NA |
| ENSG0000 | 77.9968 | -5.06088 | 0.643282 | -7.86729 | 3.62E-15 | 4.58E-13 | HOXC-AS1 | 1.01E+08 | HOXC cluster antisense RNA 1 |
| ENSG0000 | 6384.186 | -3.38836 | 0.431382 | -7.85465 | 4.01E-15 | 5.04E-13 | IER3 | 8870 | immediate early response 3 |
| ENSG0000 | 4929.199 | -3.0648 | 0.390405 | -7.8503 | 4.15E-15 | 5.19E-13 | LMCD1 | 29995 | LIM and cysteine rich domains 1 |
| ENSG0000 | 158008.8 | -1.70157 | 0.216835 | -7.8473 | 4.25E-15 | 5.29E-13 | MTCO1P1 | 1.07E+08 | MT-CO1 pseudogene 12 |
| ENSG0000 | 29.81113 | -3.86256 | 0.492384 | -7.84461 | 4.34E-15 | 5.36E-13 | NA | NA | NA |
| ENSG0000 | 108832.8 | -1.56035 | 0.199091 | -7.83737 | 4.60E-15 | 5.65E-13 | ND5 | 4540 | NADH dehydrogenase subunit 5 |
| ENSG0000 | 24569.97 | -1.59629 | 0.203872 | -7.82986 | 4.88E-15 | 5.94E-13 | CDKN1A | 1026 | cyclin dependent kinase inhibitor 1A |
| ENSG0000 | 359.4522 | 2.292043 | 0.293092 | 7.820214 | 5.27E-15 | 6.35E-13 | THSD4 | 79875 | thrombospondin type 1 domain containing 4 |
| ENSG0000 | 944.3016 | 1.681321 | 0.215063 | 7.817824 | 5.37E-15 | 6.45E-13 | TBL1X | 6907 | transducin beta like 1 X-linked |
| ENSG0000 | 1783.413 | 2.017244 | 0.258452 | 7.80509 | 5.95E-15 | 7.10E-13 | PCDHGC3 | 5098 | protocadherin gamma subfamily C, 3 |
| ENSG0000 | 1105.516 | -1.77991 | 0.2281 | -7.80319 | 6.04E-15 | 7.17E-13 | TMSB4XP4 | 7118 | TMSB4X pseudogene 4 |
| ENSG0000 | 124.7077 | 3.516472 | 0.452084 | 7.778363 | 7.35E-15 | 8.65E-13 | COL6A6 | 131873 | collagen type VI alpha 6 chain |
| ENSG0000 | 139.9359 | -1.57526 | 0.202747 | -7.76958 | 7.87E-15 | 9.19E-13 | ZNF433 | 163059 | zinc finger protein 433 |
| ENSG0000 | 110.7199 | -2.72057 | 0.350158 | -7.76957 | 7.88E-15 | 9.19E-13 | CD14 | 929 | CD14 molecule |
| ENSG0000 | 132.7503 | -1.58821 | 0.204515 | -7.76575 | 8.12E-15 | 9.43E-13 | C4orf48 | 401115 | chromosome 4 open reading frame 48 |
| ENSG0000 | 1964.48 | 1.962381 | 0.252763 | 7.763717 | 8.25E-15 | 9.54E-13 | SYNJ2 | 8871 | synaptojanin 2 |
| ENSG0000 | 573.7673 | -3.77358 | 0.489099 | -7.71537 | 1.21E-14 | 1.39E-12 | LINC02381 | 400043 | long intergenic non-protein coding RNA 2381 |
| ENSG0000 | 3934.514 | 3.373478 | 0.437357 | 7.713333 | 1.23E-14 | 1.41E-12 | PTGS1 | 5742 | prostaglandin-endoperoxide synthase 1 |
| ENSG0000 | 35267.53 | -5.3219 | 0.690138 | -7.71136 | 1.24E-14 | 1.42E-12 | FOSB | 2354 | FosB proto-oncogene, AP-1 transcription factor subunit |
| ENSG0000 | 1452.692 | -1.53305 | 0.198824 | -7.71059 | 1.25E-14 | 1.42E-12 | H1-10 | 8971 | H1.10 linker histone |
| ENSG0000 | 83526.78 | -2.11803 | 0.274731 | -7.70946 | 1.26E-14 | 1.43E-12 | ND1 | 4535 | NADH dehydrogenase subunit 1 |
| ENSG0000 | 429.5929 | 1.627125 | 0.211154 | 7.705866 | 1.30E-14 | 1.46E-12 | CRYBG3 | 131544 | crystallin beta-gamma domain containing 3 |
| ENSG0000 | 1271.655 | -2.83389 | 0.368284 | -7.69485 | 1.42E-14 | 1.58E-12 | FIBIN | 387758 | fin bud initiation factor homolog |
| ENSG0000 | 140.4432 | 6.884147 | 0.894807 | 7.693444 | 1.43E-14 | 1.59E-12 | ZFY | 7544 | zinc finger protein Y-linked |
| ENSG0000 | 13287.86 | -1.51692 | 0.197415 | -7.68391 | 1.54E-14 | 1.70E-12 | NA | NA | NA |
| ENSG0000 | 501.3535 | -2.44957 | 0.319019 | -7.67843 | 1.61E-14 | 1.76E-12 | SLC19A2 | 10560 | solute carrier family 19 member 2 |
| ENSG0000 | 869.4195 | -1.64742 | 0.214928 | -7.66501 | 1.79E-14 | 1.94E-12 | PIK3IP1 | 113791 | phosphoinositide-3-kinase interacting protein 1 |
| ENSG0000 | 963.796 | 1.69126 | 0.220677 | 7.663965 | 1.80E-14 | 1.95E-12 | PPP2R3A | 5523 | protein phosphatase 2 regulatory subunit B''alpha |
| ENSG0000 | 1215.393 | -1.67809 | 0.219356 | -7.65006 | 2.01E-14 | 2.15E-12 | CASTOR2 | 729438 | cytosolic arginine sensor for mTORC1 subunit 2 |
| ENSG0000 | 1108.468 | 1.735694 | 0.227144 | 7.641372 | 2.15E-14 | 2.28E-12 | NA | NA | NA |
| ENSG0000 | 32.36498 | -3.29186 | 0.430807 | -7.64115 | 2.15E-14 | 2.28E-12 | KCP | 375616 | kielin cysteine rich BMP regulator |
| ENSG0000 | 448.8958 | -3.12055 | 0.410578 | -7.60039 | 2.95E-14 | 3.09E-12 | CDKN1C | 1028 | cyclin dependent kinase inhibitor 1C |
| ENSG0000 | 64.0959 | -9.26173 | 1.219109 | -7.59713 | 3.03E-14 | 3.16E-12 | NPNT | 255743 | nephronectin |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 588.4189 | -3.39005 | 0.447058 | -7.58301 | 3.38E-14 | 3.48E-12 | CHRD | 8646 | chordin |
| ENSG0000 | 27.64859 | -3.73939 | 0.493264 | -7.5809 | 3.43E-14 | 3.51E-12 | CCDC148 | 130940 | coiled-coil domain containing 148 |
| ENSG0000 | 31.65399 | -5.19311 | 0.686068 | -7.56938 | 3.75E-14 | 3.79E-12 | LOC10537 | 1.05E+08 | uncharacterized LOC105370047 |
| ENSG0000 | 105.4978 | -2.23587 | 0.295906 | -7.55602 | 4.16E-14 | 4.17E-12 | DHRS12 | 79758 | dehydrogenase/reductase 12 |
| ENSG0000 | 17.9985 | 4.493609 | 0.594778 | 7.555102 | 4.19E-14 | 4.18E-12 | NA | NA | NA |
| ENSG0000 | 199.0755 | 3.25139 | 0.430651 | 7.549936 | 4.35E-14 | 4.33E-12 | PRKAR2B | 5577 | protein kinase cAMP-dependent type II regulatory subunit beta |
| ENSG0000 | 1495.317 | -3.01048 | 0.3997 | -7.53185 | 5.00E-14 | 4.92E-12 | RNA5-8SN | 1.1E+08 | RNA, 5.8S ribosomal N3 |
| ENSG0000 | 1494.572 | -3.0097 | 0.399921 | -7.52575 | 5.24E-14 | 5.12E-12 | RNA5-8SN | 1.1E+08 | RNA, 5.8S ribosomal N2 |
| ENSG0000 | 1493.937 | -3.01154 | 0.40078 | -7.51419 | 5.73E-14 | 5.55E-12 | RNA5-8SN | 1.07E+08 | RNA, 5.8S ribosomal N1 |
| ENSG0000 | 1493.192 | -3.01076 | 0.401001 | -7.50812 | 6.00E-14 | 5.75E-12 | LOC12490 | 1.25E+08 | 5.8S ribosomal RNA |
| ENSG0000 | 1493.192 | -3.01076 | 0.401001 | -7.50812 | 6.00E-14 | 5.75E-12 | LOC12490 | 1.25E+08 | 5.8S ribosomal RNA |
| ENSG0000 | 1493.192 | -3.01076 | 0.401001 | -7.50812 | 6.00E-14 | 5.75E-12 | RNA5-8SP | 1.1E+08 | RNA, 5.8S ribosomal pseudogene 10 |
| ENSG0000 | 1492.862 | -3.01042 | 0.401074 | -7.5059 | 6.10E-14 | 5.81E-12 | RNA5-8SN | 1E+08 | RNA, 5.8S ribosomal N5 |
| ENSG0000 | 1492.862 | -3.01042 | 0.401074 | -7.5059 | 6.10E-14 | 5.81E-12 | RNA5-8SN | 1.1E+08 | RNA, 5.8S ribosomal N4 |
| ENSG0000 | 108.7304 | 6.770845 | 0.90346 | 7.49435 | 6.66E-14 | 6.32E-12 | MYPN | 84665 | myopalladin |
| ENSG0000 | 82.71256 | 2.091138 | 0.279763 | 7.474688 | 7.74E-14 | 7.29E-12 | FAR2 | 55711 | fatty acyl-CoA reductase 2 |
| ENSG0000 | 93.24905 | 8.831182 | 1.181701 | 7.473282 | 7.82E-14 | 7.31E-12 | PPP2R2B | 5521 | protein phosphatase 2 regulatory subunit Bbeta |
| ENSG0000 | 17596.63 | -2.96255 | 0.396503 | -7.4717 | 7.92E-14 | 7.37E-12 | HMOX1 | 3162 | heme oxygenase 1 |
| ENSG0000 | 1743.851 | -2.68902 | 0.360086 | -7.4677 | 8.16E-14 | 7.57E-12 | CLCF1 | 23529 | cardiotrophin like cytokine factor 1 |
| ENSG0000 | 1963.6 | -2.23115 | 0.299032 | -7.46126 | 8.57E-14 | 7.93E-12 | ARL5B | 221079 | ADP ribosylation factor like GTPase 5B |
| ENSG0000 | 11162.55 | -2.01725 | 0.270889 | -7.44675 | 9.57E-14 | 8.75E-12 | MTND1P2 | 1.01E+08 | MT-ND1 pseudogene 23 |
| ENSG0000 | 281.4301 | -5.4297 | 0.72929 | -7.44519 | 9.68E-14 | 8.83E-12 | FGF18 | 8817 | fibroblast growth factor 18 |
| ENSG0000 | 76.74286 | -2.38917 | 0.322077 | -7.41801 | 1.19E-13 | 1.07E-11 | NA | NA | NA |
| ENSG0000 | 106.8736 | 2.307133 | 0.3113 | 7.411292 | 1.25E-13 | 1.11E-11 | MIR381HG | 378881 | MIR381 host gene |
| ENSG0000 | 88.49612 | -3.66841 | 0.495851 | -7.39821 | 1.38E-13 | 1.20E-11 | SEMA6A | 57556 | semaphorin 6A |
| ENSG0000 | 432.9565 | 5.538879 | 0.748917 | 7.395855 | 1.41E-13 | 1.22E-11 | TENT5C | 54855 | terminal nucleotidyltransferase 5C |
| ENSG0000 | 43.10068 | -5.41779 | 0.732917 | -7.39209 | 1.45E-13 | 1.25E-11 | ITIH3 | 3699 | inter-alpha-trypsin inhibitor heavy chain 3 |
| ENSG0000 | 44.57541 | 4.218908 | 0.57102 | 7.388368 | 1.49E-13 | 1.28E-11 | FRMD3 | 257019 | FERM domain containing 3 |
| ENSG0000 | 119.4693 | 2.360905 | 0.32096 | 7.355759 | 1.90E-13 | 1.60E-11 | PM20D2 | 135293 | peptidase M20 domain containing 2 |
| ENSG0000 | 237.2115 | 6.913377 | 0.941472 | 7.343157 | 2.09E-13 | 1.74E-11 | SLC14A1 | 6563 | solute carrier family 14 member 1 (Kidd blood group) |
| ENSG0000 | 637.1536 | -4.08734 | 0.557733 | -7.32849 | 2.33E-13 | 1.94E-11 | IGSF10 | 285313 | immunoglobulin superfamily member 10 |
| ENSG0000 | 356.587 | 3.574173 | 0.48779 | 7.327279 | 2.35E-13 | 1.95E-11 | UBASH3B | 84959 | ubiquitin associated and SH3 domain containing B |
| ENSG0000 | 153.282 | 4.630197 | 0.633003 | 7.314657 | 2.58E-13 | 2.13E-11 | CDK15 | 65061 | cyclin dependent kinase 15 |
| ENSG0000 | 2548.446 | 5.372185 | 0.735852 | 7.300637 | 2.86E-13 | 2.35E-11 | ENPP1 | 5167 | ectonucleotide pyrophosphatase/phosphodiesterase 1 |
| ENSG0000 | 26.50738 | 3.740349 | 0.512564 | 7.297333 | 2.94E-13 | 2.40E-11 | LTK | 4058 | leukocyte receptor tyrosine kinase |

Supp Table 3  WNT4siRNA vs NS

| ENSG | baseMean | log2FoldC | lfcSE | stat | pvalue | padj | symbol | entrez | genename |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 42569.34 | -7.7639 | 0.27807 | -27.9207 | 1.50E-171 | 3.71E-167 | FOSB | 2354 | FosB proto-oncogene, AP-1 transcription factor subunit |
| ENSG0000 | 7639.531 | -5.65231 | 0.303536 | -18.6215 | 2.15E-77 | 2.67E-73 | HES1 | 3280 | hes family bHLH transcription factor 1 |
| ENSG0000 | 27781.43 | -2.8726 | 0.159069 | -18.0589 | 6.72E-73 | 5.55E-69 | ND4L | 4539 | NADH dehydrogenase subunit 4L |
| ENSG0000 | 886.8821 | -3.78813 | 0.212231 | -17.8491 | 2.94E-71 | 1.82E-67 | NA | NA | NA |
| ENSG0000 | 200.9244 | 8.123774 | 0.458026 | 17.73647 | 2.19E-70 | 1.09E-66 | ZFY | 7544 | zinc finger protein Y-linked |
| ENSG0000 | 241026.6 | -2.76214 | 0.158198 | -17.4601 | 2.88E-68 | 1.19E-64 | ND4 | 4538 | NADH dehydrogenase subunit 4 |
| ENSG0000 | 45191.96 | -2.80377 | 0.160701 | -17.4471 | 3.62E-68 | 1.28E-64 | MTATP6P | 106480796 | MT-ATP6 pseudogene 1 |
| ENSG0000 | 1135.605 | 14.58525 | 0.87707 | 16.62951 | 4.26E-62 | 1.32E-58 | RPS4Y1 | 6192 | ribosomal protein S4 Y-linked 1 |
| ENSG0000 | 113438.7 | -2.62919 | 0.159284 | -16.5063 | 3.30E-61 | 9.10E-58 | ATP6 | 4508 | ATP synthase F0 subunit 6 |
| ENSG0000 | 35198.71 | -4.34588 | 0.27335 | -15.8986 | 6.48E-57 | 1.61E-53 | ZFP36 | 7538 | ZFP36 ring finger protein |
| ENSG0000 | 737.7384 | 1.880378 | 0.118758 | 15.83374 | 1.82E-56 | 4.10E-53 | UTP25 | 27042 | UTP25 small subunit processome component |
| ENSG0000 | 145474.6 | -2.72256 | 0.1734 | -15.7011 | 1.49E-55 | 3.07E-52 | COX3 | 4514 | cytochrome c oxidase subunit III |
| ENSG0000 | 16798.62 | -2.69868 | 0.175677 | -15.3616 | 2.96E-53 | 5.65E-50 | MTCO3P1 | 107075270 | MT-CO3 pseudogene 12 |
| ENSG0000 | 548.3524 | 10.86476 | 0.711767 | 15.26449 | 1.32E-52 | 2.33E-49 | DDX3Y | 8653 | DEAD-box helicase 3 Y-linked |
| ENSG0000 | 9590.732 | -2.91322 | 0.198917 | -14.6454 | 1.44E-48 | 2.38E-45 | JUND | 3727 | JunD proto-oncogene, AP-1 transcription factor subunit |
| ENSG0000 | 111441.3 | -2.89689 | 0.199778 | -14.5005 | 1.20E-47 | 1.86E-44 | ND2 | 4536 | NADH dehydrogenase subunit 2 |
| ENSG0000 | 234.8087 | 12.31139 | 0.884029 | 13.92645 | 4.38E-44 | 6.38E-41 | KDM5D | 8284 | lysine demethylase 5D |
| ENSG0000 | 2573.298 | -1.57177 | 0.114289 | -13.7526 | 4.91E-43 | 6.77E-40 | UBL5 | 59286 | ubiquitin like 5 |
| ENSG0000 | 1989.133 | -1.59746 | 0.119947 | -13.318 | 1.82E-40 | 2.37E-37 | UQCRQ | 27089 | ubiquinol-cytochrome c reductase complex III subunit VII |
| ENSG0000 | 1621.231 | 1.599975 | 0.121543 | 13.16383 | 1.42E-39 | 1.76E-36 | OTUD4 | 54726 | OTU deubiquitinase 4 |
| ENSG0000 | 158.9077 | 11.7479 | 0.902959 | 13.01044 | 1.07E-38 | 1.26E-35 | NA | NA | NA |
| ENSG0000 | 3060.633 | -3.91124 | 0.301263 | -12.9828 | 1.53E-38 | 1.73E-35 | NA | NA | NA |
| ENSG0000 | 13948.45 | -2.58024 | 0.199973 | -12.9029 | 4.33E-38 | 4.67E-35 | NA | NA | NA |
| ENSG0000 | 4952.073 | -2.34633 | 0.182492 | -12.8572 | 7.84E-38 | 8.10E-35 | MTCO2P1 | 107075310 | MT-CO2 pseudogene 12 |
| ENSG0000 | 3163.315 | -1.59058 | 0.125387 | -12.6854 | 7.13E-37 | 7.07E-34 | COX6B1 | 1340 | cytochrome c oxidase subunit 6B1 |
| ENSG0000 | 692.2106 | 1.680571 | 0.134411 | 12.5032 | 7.17E-36 | 6.84E-33 | RO60 | 6738 | Ro60, Y RNA binding protein |
| ENSG0000 | 1495.343 | 1.509476 | 0.123384 | 12.23398 | 2.05E-34 | 1.88E-31 | ACAP2 | 23527 | ArfGAP with coiled-coil, ankyrin repeat and PH domains 2 |
| ENSG0000 | 142693.6 | -2.92424 | 0.241552 | -12.106 | 9.81E-34 | 8.69E-31 | CYTB | 4519 | cytochrome b |
| ENSG0000 | 723.2157 | 1.539076 | 0.129954 | 11.84328 | 2.33E-32 | 1.99E-29 | NAA15 | 80155 | N-alpha-acetyltransferase 15, NatA auxiliary subunit |
| ENSG0000 | 531.1468 | 1.711242 | 0.144793 | 11.81855 | 3.13E-32 | 2.51E-29 | NAA30 | 122830 | N-alpha-acetyltransferase 30, NatC catalytic subunit |
| ENSG0000 | 5713.321 | -4.60086 | 0.389304 | -11.8182 | 3.14E-32 | 2.51E-29 | SNAI1 | 6615 | snail family transcriptional repressor 1 |
| ENSG0000 | 1406.287 | -1.80574 | 0.15353 | -11.7615 | 6.16E-32 | 4.63E-29 | BCL3 | 602 | BCL3 transcription coactivator |
| ENSG0000 | 127.7078 | 3.202471 | 0.272722 | 11.74261 | 7.71E-32 | 5.62E-29 | NPTX1 | 4884 | neuronal pentraxin 1 |
| ENSG0000 | 1117.224 | -9.59184 | 0.818986 | -11.7118 | 1.11E-31 | 7.85E-29 | HOXC10 | 3226 | homeobox C10 |
| ENSG0000 | 943.8171 | 2.781861 | 0.240943 | 11.54572 | 7.76E-31 | 5.34E-28 | ZNF281 | 23528 | zinc finger protein 281 |
| ENSG0000 | 4731.955 | -3.42369 | 0.297794 | -11.4968 | 1.37E-30 | 9.17E-28 | PIM1 | 5292 | Pim-1 proto-oncogene, serine/threonine kinase |
| ENSG0000 | 10140.7 | -2.49451 | 0.218086 | -11.4382 | 2.69E-30 | 1.76E-27 | KLF10 | 7071 | KLF transcription factor 10 |
| ENSG0000 | 1460.826 | -3.03682 | 0.265748 | -11.4275 | 3.05E-30 | 1.89E-27 | NA | NA | NA |
| ENSG0000 | 1589.296 | -2.32168 | 0.203263 | -11.4221 | 3.24E-30 | 1.96E-27 | NA | NA | NA |
| ENSG0000 | 136420 | -2.45231 | 0.214811 | -11.4161 | 3.47E-30 | 2.05E-27 | COX2 | 4513 | cytochrome c oxidase subunit II |
| ENSG0000 | 2216.288 | 2.00458 | 0.176327 | 11.36851 | 6.00E-30 | 3.46E-27 | CEP170 | 9859 | centrosomal protein 170 |
| ENSG0000 | 510187.8 | -2.6722 | 0.23553 | -11.3455 | 7.81E-30 | 4.40E-27 | COX1 | 4512 | cytochrome c oxidase subunit I |
| ENSG0000 | 103.0381 | 10.1574 | 0.899598 | 11.29105 | 1.45E-29 | 8.00E-27 | EIF1AY | 9086 | eukaryotic translation initiation factor 1A Y-linked |
| ENSG0000 | 5508.262 | -3.21768 | 0.285826 | -11.2575 | 2.13E-29 | 1.15E-26 | CSRNP1 | 64651 | cysteine and serine rich nuclear protein 1 |
| ENSG0000 | 8849.998 | -2.48533 | 0.22101 | -11.2453 | 2.44E-29 | 1.29E-26 | MIDN | 90007 | midnolin |
| ENSG0000 | 1072.409 | 1.809921 | 0.161426 | 11.21207 | 3.56E-29 | 1.84E-26 | KAT6A | 7994 | lysine acetyltransferase 6A |
| ENSG0000 | 101.7878 | 10.6225 | 0.949877 | 11.18303 | 4.94E-29 | 2.50E-26 | UTY | 7404 | ubiquitously transcribed tetratricopeptide repeat containing, Y-linked |
| ENSG0000 | 899.0424 | 1.658674 | 0.14841 | 11.17633 | 5.32E-29 | 2.64E-26 | QSER1 | 79832 | glutamine and serine rich 1 |
| ENSG0000 | 51957.04 | -3.19354 | 0.286589 | -11.1433 | 7.72E-29 | 3.68E-26 | MTND2P2 | 100652939 | MT-ND2 pseudogene 28 |
| ENSG0000 | 1080.429 | 1.774589 | 0.160908 | 11.02863 | 2.78E-28 | 1.28E-25 | MKLN1 | 4289 | muskelin 1 |
| ENSG0000 | 865.9303 | 2.049372 | 0.186697 | 10.97698 | 4.93E-28 | 2.21E-25 | ASXL2 | 55252 | ASXL transcriptional regulator 2 |
| ENSG0000 | 5173.153 | -4.17654 | 0.380515 | -10.976 | 4.98E-28 | 2.21E-25 | PER1 | 5187 | period circadian regulator 1 |
| ENSG0000 | 151.1404 | 8.342625 | 0.763524 | 10.92648 | 8.61E-28 | 3.75E-25 | PRKY | 5616 | protein kinase Y-linked (pseudogene) |
| ENSG0000 | 1536.854 | 1.645435 | 0.151745 | 10.84341 | 2.14E-27 | 9.01E-25 | PRKD3 | 23683 | protein kinase D3 |
| ENSG0000 | 4526.074 | -3.96342 | 0.366506 | -10.8141 | 2.95E-27 | 1.22E-24 | OSR2 | 116039 | odd-skipped related transciption factor 2 |
| ENSG0000 | 23080.74 | -2.62282 | 0.242807 | -10.8021 | 3.37E-27 | 1.37E-24 | JUNB | 3726 | JunB proto-oncogene, AP-1 transcription factor subunit |
| ENSG0000 | 346.8047 | 1.655766 | 0.153819 | 10.76438 | 5.07E-27 | 2.03E-24 | THAP5 | 168451 | THAP domain containing 5 |
| ENSG0000 | 6592.042 | -3.02651 | 0.281536 | -10.75 | 5.93E-27 | 2.33E-24 | SOCS3 | 9021 | suppressor of cytokine signaling 3 |
| ENSG0000 | 169780.4 | -2.57238 | 0.240825 | -10.6815 | 1.24E-26 | 4.74E-24 | MTCO1P1 | 107075141 | MT-CO1 pseudogene 12 |
| ENSG0000 | 9394.227 | -2.15364 | 0.202945 | -10.612 | 2.62E-26 | 9.56E-24 | ATP8 | 4509 | ATP synthase F0 subunit 8 |
| ENSG0000 | 755.3817 | 1.653034 | 0.156204 | 10.58253 | 3.59E-26 | 1.29E-23 | TBL1X | 6907 | transducin beta like 1 X-linked |
| ENSG0000 | 4352.045 | -1.80782 | 0.172375 | -10.4877 | 9.84E-26 | 3.48E-23 | POLR2L | 5441 | RNA polymerase II, I and III subunit L |
| ENSG0000 | 2026.408 | -1.74173 | 0.166719 | -10.4471 | 1.51E-25 | 5.27E-23 | NEU1 | 4758 | neuraminidase 1 |
| ENSG0000 | 275.5861 | 2.39791 | 0.230006 | 10.42542 | 1.90E-25 | 6.45E-23 | NA | NA | NA |
| ENSG0000 | 115136.2 | -2.52051 | 0.242693 | -10.3856 | 2.88E-25 | 9.66E-23 | ND5 | 4540 | NADH dehydrogenase subunit 5 |
| ENSG0000 | 1006.634 | 1.563197 | 0.151115 | 10.34445 | 4.43E-25 | 1.45E-22 | STK24 | 8428 | serine/threonine kinase 24 |
| ENSG0000 | 900.8513 | 1.547764 | 0.149706 | 10.33871 | 4.71E-25 | 1.52E-22 | FBXO11 | 80204 | F-box protein 11 |
| ENSG0000 | 12458.39 | -1.86508 | 0.181471 | -10.2775 | 8.90E-25 | 2.79E-22 | SERF2 | 10169 | small EDRK-rich factor 2 |
| ENSG0000 | 3070.963 | 2.689862 | 0.26266 | 10.24084 | 1.30E-24 | 4.03E-22 | WARS1 | 7453 | tryptophanyl-tRNA synthetase 1 |
| ENSG0000 | 1343.912 | 1.760651 | 0.172601 | 10.20068 | 1.97E-24 | 6.03E-22 | LRRC58 | 116064 | leucine rich repeat containing 58 |
| ENSG0000 | 748.4363 | -1.57886 | 0.155636 | -10.1445 | 3.50E-24 | 1.05E-21 | CCS | 9973 | copper chaperone for superoxide dismutase |
| ENSG0000 | 686.1102 | -4.10055 | 0.404759 | -10.1308 | 4.03E-24 | 1.19E-21 | CLIC3 | 9022 | chloride intracellular channel 3 |
| ENSG0000 | 93470.96 | -2.65252 | 0.261949 | -10.1261 | 4.23E-24 | 1.23E-21 | ND1 | 4535 | NADH dehydrogenase subunit 1 |
| ENSG0000 | 920.7717 | -1.66221 | 0.164653 | -10.0952 | 5.80E-24 | 1.65E-21 | ME3 | 10873 | malic enzyme 3 |
| ENSG0000 | 662.8334 | 1.774347 | 0.175865 | 10.08924 | 6.16E-24 | 1.74E-21 | EHD4 | 30844 | EH domain containing 4 |
| ENSG0000 | 1868.256 | 2.426443 | 0.240704 | 10.08062 | 6.73E-24 | 1.87E-21 | SYNJ2 | 8871 | synaptojanin 2 |
| ENSG0000 | 616.927 | 1.930152 | 0.192757 | 10.0134 | 1.33E-23 | 3.63E-21 | ASAP2 | 8853 | ArfGAP with SH3 domain, ankyrin repeat and PH domain 2 |
| ENSG0000 | 84.21003 | 3.024311 | 0.302063 | 10.01219 | 1.35E-23 | 3.63E-21 | GPM6B | 2824 | glycoprotein M6B |
| ENSG0000 | 1092.269 | -1.56029 | 0.156121 | -9.99407 | 1.62E-23 | 4.31E-21 | NDUFB1 | 4707 | NADH:ubiquinone oxidoreductase subunit B1 |
| ENSG0000 | 270.4014 | -2.56237 | 0.257087 | -9.96693 | 2.13E-23 | 5.61E-21 | CES4A | 283848 | carboxylesterase 4A |
| ENSG0000 | 886.4777 | -1.72693 | 0.1736 | -9.94775 | 2.58E-23 | 6.73E-21 | TNFSF12 | 8742 | TNF superfamily member 12 |
| ENSG0000 | 2118.129 | -1.64121 | 0.166908 | -9.83302 | 8.12E-23 | 2.07E-20 | PHPT1 | 29085 | phosphohistidine phosphatase 1 |
| ENSG0000 | 1728.303 | -1.52014 | 0.154938 | -9.81123 | 1.01E-22 | 2.54E-20 | JMJD6 | 23210 | jumonji domain containing 6, arginine demethylase and lysine hydroxylase |
| ENSG0000 | 210.2386 | -2.3317 | 0.237675 | -9.81045 | 1.02E-22 | 2.54E-20 | TMEM256 | 254863 | transmembrane protein 256 |
| ENSG0000 | 15255.63 | -4.57979 | 0.467232 | -9.80195 | 1.10E-22 | 2.74E-20 | NR4A1 | 3164 | nuclear receptor subfamily 4 group A member 1 |
| ENSG0000 | 16665.79 | -4.27657 | 0.438067 | -9.76237 | 1.63E-22 | 3.97E-20 | BHLHE40 | 8553 | basic helix-loop-helix family member e40 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 744.8151 | 2.646944 | 0.272639 | 9.70862 | 2.77E-22 | 6.67E-20 | NA | NA | NA |
| ENSG0000 | 2527.148 | 1.785204 | 0.184255 | 9.688744 | 3.37E-22 | 8.02E-20 | TAOK1 | 57551 | TAO kinase 1 |
| ENSG0000 | 354.8679 | 1.580226 | 0.16313 | 9.686902 | 3.43E-22 | 8.09E-20 | TGS1 | 96764 | trimethylguanosine synthase 1 |
| ENSG0000 | 882.7569 | -1.76649 | 0.184842 | -9.5568 | 1.21E-21 | 2.71E-19 | NDUFA3 | 4696 | NADH:ubiquinone oxidoreductase subunit A3 |
| ENSG0000 | 790.9217 | 1.501481 | 0.158127 | 9.495413 | 2.19E-21 | 4.81E-19 | JMY | 133746 | junction mediating and regulatory protein, p53 cofactor |
| ENSG0000 | 261.3183 | -4.76578 | 0.504644 | -9.44385 | 3.59E-21 | 7.75E-19 | IDI2-AS1 | 55853 | IDI2 antisense RNA 1 |
| ENSG0000 | 388.1229 | 1.571462 | 0.167222 | 9.397445 | 5.59E-21 | 1.18E-18 | APAF1 | 317 | apoptotic peptidase activating factor 1 |
| ENSG0000 | 57.64641 | 6.469493 | 0.693019 | 9.335235 | 1.01E-20 | 2.12E-18 | GALNT14 | 79623 | polypeptide N-acetylgalactosaminyltransferase 14 |
| ENSG0000 | 1640.883 | 2.058214 | 0.220978 | 9.314096 | 1.23E-20 | 2.54E-18 | SH3KBP1 | 30011 | SH3 domain containing kinase binding protein 1 |
| ENSG0000 | 24.25195 | 9.035691 | 0.970809 | 9.307382 | 1.31E-20 | 2.68E-18 | TTTY14 | 83869 | testis-specific transcript, Y-linked 14 |
| ENSG0000 | 1165.108 | -1.82892 | 0.197025 | -9.28268 | 1.65E-20 | 3.36E-18 | IFI27L2 | 83982 | interferon alpha inducible protein 27 like 2 |
| ENSG0000 | 12511.59 | -2.36102 | 0.2551 | -9.25527 | 2.14E-20 | 4.31E-18 | MTND1P2 | 100887749 | MT-ND1 pseudogene 23 |
| ENSG0000 | 6562.526 | 1.668028 | 0.181005 | 9.215388 | 3.10E-20 | 6.10E-18 | AXL | 558 | AXL receptor tyrosine kinase |
| ENSG0000 | 281.5735 | 2.261721 | 0.245575 | 9.20989 | 3.26E-20 | 6.37E-18 | CDYL2 | 124359 | chromodomain Y like 2 |
| ENSG0000 | 553.2377 | -1.54052 | 0.167334 | -9.20628 | 3.38E-20 | 6.54E-18 | NDUFA11 | 126328 | NADH:ubiquinone oxidoreductase subunit A11 |
| ENSG0000 | 387.6861 | 1.95829 | 0.213207 | 9.184918 | 4.12E-20 | 7.91E-18 | NBEAL1 | 65065 | neurobeachin like 1 |
| ENSG0000 | 95.84279 | 2.505626 | 0.272843 | 9.183394 | 4.18E-20 | 7.97E-18 | PM20D2 | 135293 | peptidase M20 domain containing 2 |
| ENSG0000 | 584.9485 | -1.80013 | 0.196609 | -9.15587 | 5.39E-20 | 1.02E-17 | LINC01503 | 100506119 | long intergenic non-protein coding RNA 1503 |
| ENSG0000 | 1802.796 | -4.47134 | 0.490978 | -9.10701 | 8.47E-20 | 1.58E-17 | ATF3 | 467 | activating transcription factor 3 |
| ENSG0000 | 3162.75 | 1.761101 | 0.193419 | 9.105125 | 8.62E-20 | 1.59E-17 | ARHGAP3 | 2909 | Rho GTPase activating protein 35 |
| ENSG0000 | 1238.011 | -1.51281 | 0.166239 | -9.10019 | 9.02E-20 | 1.66E-17 | LAMTOR5 | 10542 | late endosomal/lysosomal adaptor, MAPK and MTOR activat or 5 |
| ENSG0000 | 1193.78 | 1.797239 | 0.197563 | 9.097053 | 9.28E-20 | 1.69E-17 | SPTLC2 | 9517 | serine palmitoyltransferase long chain base subunit 2 |
| ENSG0000 | 952.5745 | -6.17252 | 0.678854 | -9.09256 | 9.67E-20 | 1.75E-17 | HEY1 | 23462 | hes related family bHLH transcription factor with YRPW motif 1 |
| ENSG0000 | 288.1785 | 1.782216 | 0.196273 | 9.08027 | 1.08E-19 | 1.93E-17 | NDC1 | 55706 | NDC1 transmembrane nucleoporin |
| ENSG0000 | 140.3093 | 2.427165 | 0.267952 | 9.058221 | 1.33E-19 | 2.35E-17 | E2F7 | 144455 | E2F transcription factor 7 |
| ENSG0000 | 152.7582 | -1.96478 | 0.217284 | -9.04246 | 1.53E-19 | 2.69E-17 | ZSCAN16- | 100129195 | ZSCAN16 antisense RNA 1 |
| ENSG0000 | 477.8323 | -5.12071 | 0.56799 | -9.01549 | 1.96E-19 | 3.42E-17 | TBX1 | 6899 | T-box transcription factor 1 |
| ENSG0000 | 595.4248 | -1.65043 | 0.183327 | -9.00262 | 2.20E-19 | 3.79E-17 | DYNLRB1 | 83658 | dynein light chain roadblock-type 1 |
| ENSG0000 | 551.1471 | -2.70268 | 0.300479 | -8.99457 | 2.37E-19 | 4.05E-17 | LOC10050 | 100507053 | uncharacterized LOC100507053 |
| ENSG0000 | 317.9368 | 1.817747 | 0.202871 | 8.960117 | 3.24E-19 | 5.36E-17 | PLAGL2 | 5326 | PLAG1 like zinc finger 2 |
| ENSG0000 | 479.1136 | -1.76568 | 0.197193 | -8.95406 | 3.43E-19 | 5.63E-17 | BLOC1S1 | 2647 | biogenesis of lysosomal organelles complex 1 subunit 1 |
| ENSG0000 | 795.4548 | 1.826571 | 0.204683 | 8.923922 | 4.50E-19 | 7.29E-17 | GTF3C4 | 9329 | general transcription factor IIIC subunit 4 |
| ENSG0000 | 1018.318 | 1.877267 | 0.210594 | 8.914151 | 4.92E-19 | 7.86E-17 | XIAP | 331 | X-linked inhibitor of apoptosis |
| ENSG0000 | 2822.808 | 1.899479 | 0.213479 | 8.897742 | 5.70E-19 | 9.06E-17 | ZBTB38 | 253461 | zinc finger and BTB domain containing 38 |
| ENSG0000 | 289.9603 | -5.1993 | 0.584525 | -8.89491 | 5.85E-19 | 9.23E-17 | HOXB7 | 3217 | homeobox B7 |
| ENSG0000 | 133.1694 | -4.91344 | 0.557896 | -8.80708 | 1.28E-18 | 2.00E-16 | NA | NA | NA |
| ENSG0000 | 66.23613 | 5.978278 | 0.678884 | 8.806032 | 1.30E-18 | 2.01E-16 | HOXD10 | 3236 | homeobox D10 |
| ENSG0000 | 118.3514 | -5.00746 | 0.568804 | -8.80349 | 1.33E-18 | 2.04E-16 | NA | NA | NA |
| ENSG0000 | 33.60359 | 3.509511 | 0.400294 | 8.767334 | 1.83E-18 | 2.77E-16 | CDCA7 | 83879 | cell division cycle associated 7 |
| ENSG0000 | 11557.3 | -3.25623 | 0.371673 | -8.76101 | 1.94E-18 | 2.91E-16 | ID3 | 3399 | inhibitor of DNA binding 3 |
| ENSG0000 | 1514.83 | -2.98554 | 0.342689 | -8.7121 | 2.98E-18 | 4.35E-16 | MAP3K8 | 1326 | mitogen-activated protein kinase kinase kinase 8 |
| ENSG0000 | 6182.552 | 2.554244 | 0.293427 | 8.70487 | 3.18E-18 | 4.61E-16 | CD109 | 135228 | CD109 molecule |
| ENSG0000 | 27442.15 | -1.56767 | 0.180145 | -8.70227 | 3.25E-18 | 4.69E-16 | CDKN1A | 1026 | cyclin dependent kinase inhibitor 1A |
| ENSG0000 | 826.0215 | -4.77212 | 0.548902 | -8.69393 | 3.50E-18 | 4.99E-16 | ABCA10 | 10349 | ATP binding cassette subfamily A member 10 |
| ENSG0000 | 119.2825 | -4.63107 | 0.534989 | -8.65638 | 4.87E-18 | 6.82E-16 | NA | NA | NA |
| ENSG0000 | 837.9095 | -1.63261 | 0.18869 | -8.65231 | 5.05E-18 | 7.03E-16 | ATP5ME | 521 | ATP synthase membrane subunit e |
| ENSG0000 | 2365.155 | -1.54089 | 0.178216 | -8.64621 | 5.32E-18 | 7.37E-16 | YPEL3 | 83719 | yippee like 3 |
| ENSG0000 | 1383.264 | 2.425339 | 0.281338 | 8.620738 | 6.65E-18 | 9.06E-16 | ABHD2 | 11057 | abhydrolase domain containing 2, acylglycerol lipase |
| ENSG0000 | 245.4669 | -3.70913 | 0.431696 | -8.592 | 8.55E-18 | 1.13E-15 | CACNB2 | 783 | calcium voltage-gated channel auxiliary subunit beta 2 |
| ENSG0000 | 191.9649 | 1.925377 | 0.224317 | 8.583279 | 9.22E-18 | 1.20E-15 | AGPAT5 | 55326 | 1-acylglycerol-3-phosphate O-acyltransferase 5 |
| ENSG0000 | 823.6506 | 1.890029 | 0.221016 | 8.551531 | 1.21E-17 | 1.57E-15 | SOCS6 | 9306 | suppressor of cytokine signaling 6 |
| ENSG0000 | 1761.531 | -3.05056 | 0.357231 | -8.53946 | 1.35E-17 | 1.73E-15 | RNA5-8SN | 109910381 | RNA, 5.8S ribosomal N3 |
| ENSG0000 | 3401.561 | 1.99767 | 0.234141 | 8.531896 | 1.44E-17 | 1.83E-15 | SLFN5 | 162394 | schlafen family member 5 |
| ENSG0000 | 1760.062 | -3.04931 | 0.357682 | -8.5252 | 1.53E-17 | 1.92E-15 | RNA5-8SN | 106632260 | RNA, 5.8S ribosomal N1 |
| ENSG0000 | 1760.618 | -3.04978 | 0.357758 | -8.52472 | 1.53E-17 | 1.92E-15 | RNA5-8SN | 109864281 | RNA, 5.8S ribosomal N2 |
| ENSG0000 | 120.0115 | -4.88681 | 0.573261 | -8.52458 | 1.53E-17 | 1.92E-15 | NA | NA | NA |
| ENSG0000 | 1759.15 | -3.04853 | 0.358208 | -8.51049 | 1.73E-17 | 2.12E-15 | LOC12490 | 124900510 | 5.8S ribosomal RNA |
| ENSG0000 | 1759.15 | -3.04853 | 0.358208 | -8.51049 | 1.73E-17 | 2.12E-15 | LOC12490 | 124900510 | 5.8S ribosomal RNA |
| ENSG0000 | 1759.15 | -3.04853 | 0.358208 | -8.51049 | 1.73E-17 | 2.12E-15 | RNA5-8SP | 109910384 | RNA, 5.8S ribosomal pseudogene 10 |
| ENSG0000 | 1758.746 | -3.04819 | 0.358383 | -8.50539 | 1.81E-17 | 2.19E-15 | RNA5-8SN | 100008587 | RNA, 5.8S ribosomal N5 |
| ENSG0000 | 1758.746 | -3.04819 | 0.358383 | -8.50539 | 1.81E-17 | 2.19E-15 | RNA5-8SN | 109864274 | RNA, 5.8S ribosomal N4 |
| ENSG0000 | 1728.475 | 1.949412 | 0.229326 | 8.5006 | 1.89E-17 | 2.27E-15 | NFAT5 | 10725 | nuclear factor of activated T cells 5 |
| ENSG0000 | 783.8837 | 1.515704 | 0.178575 | 8.487765 | 2.11E-17 | 2.52E-15 | ATP11C | 286410 | ATPase phospholipid transporting 11C |
| ENSG0000 | 785.663 | 1.659061 | 0.195679 | 8.478483 | 2.28E-17 | 2.72E-15 | ETV5 | 2119 | ETS variant transcription factor 5 |
| ENSG0000 | 254.6769 | -7.87073 | 0.930642 | -8.45731 | 2.74E-17 | 3.21E-15 | LEP | 3952 | leptin |
| ENSG0000 | 434.7011 | -2.70376 | 0.319768 | -8.45537 | 2.78E-17 | 3.25E-15 | HSD17B14 | 51171 | hydroxysteroid 17-beta dehydrogenase 14 |
| ENSG0000 | 232.5945 | 1.599664 | 0.189375 | 8.447085 | 2.99E-17 | 3.48E-15 | SEC63P1 | 100420341 | SEC63 homolog, protein translocation regulator pseudogene 1 |
| ENSG0000 | 791.7443 | 1.972778 | 0.234223 | 8.422632 | 3.68E-17 | 4.23E-15 | NEDD1 | 121441 | NEDD1 gamma-tubulin ring complex targeting factor |
| ENSG0000 | 1736.837 | -12.2186 | 1.451321 | -8.41893 | 3.80E-17 | 4.32E-15 | XIST | 7503 | X inactive specific transcript |
| ENSG0000 | 1370.121 | 1.926448 | 0.229001 | 8.412408 | 4.02E-17 | 4.55E-15 | ITPRIPL2 | 162073 | ITPRIP like 2 |
| ENSG0000 | 876.5494 | -3.54463 | 0.422034 | -8.39894 | 4.51E-17 | 5.03E-15 | RASD1 | 51655 | ras related dexamethasone induced 1 |
| ENSG0000 | 301.7987 | 1.764982 | 0.211184 | 8.357555 | 6.40E-17 | 6.96E-15 | MRTFB | 57496 | myocardin related transcription factor B |
| ENSG0000 | 1214.238 | -2.25174 | 0.269495 | -8.3554 | 6.52E-17 | 7.06E-15 | TMSB4XP4 | 7118 | TMSB4X pseudogene 4 |
| ENSG0000 | 581.2861 | 1.724352 | 0.207886 | 8.29472 | 1.09E-16 | 1.16E-14 | NRIP1 | 8204 | nuclear receptor interacting protein 1 |
| ENSG0000 | 479.371 | -1.81317 | 0.21871 | -8.29026 | 1.13E-16 | 1.20E-14 | MATCAP1 | 653319 | microtubule associated tyrosine carboxypeptidase 1 |
| ENSG0000 | 1475.804 | 2.027863 | 0.244759 | 8.285134 | 1.18E-16 | 1.24E-14 | HSPA13 | 6782 | heat shock protein family A (Hsp70) member 13 |
| ENSG0000 | 538.763 | 2.145508 | 0.259002 | 8.283746 | 1.19E-16 | 1.25E-14 | NA | NA | NA |
| ENSG0000 | 92.67046 | -2.62851 | 0.317605 | -8.27603 | 1.27E-16 | 1.33E-14 | RPL36AP4 | 441727 | ribosomal protein L36a pseudogene 45 |
| ENSG0000 | 94.18352 | -5.6889 | 0.687503 | -8.27472 | 1.29E-16 | 1.34E-14 | HOXC-AS1 | 100874363 | HOXC cluster antisense RNA 1 |
| ENSG0000 | 11445.74 | -3.82633 | 0.46251 | -8.27298 | 1.31E-16 | 1.35E-14 | ID1 | 3397 | inhibitor of DNA binding 1 |
| ENSG0000 | 2402.182 | -4.00104 | 0.484156 | -8.26394 | 1.41E-16 | 1.44E-14 | TRIB1 | 10221 | tribbles pseudokinase 1 |
| ENSG0000 | 29690.26 | -2.21302 | 0.268492 | -8.24242 | 1.69E-16 | 1.72E-14 | ND6 | 4541 | NADH dehydrogenase subunit 6 |
| ENSG0000 | 843.6818 | -2.79561 | 0.339189 | -8.24204 | 1.69E-16 | 1.72E-14 | NA | NA | NA |
| ENSG0000 | 213.3514 | 2.43977 | 0.296328 | 8.233333 | 1.82E-16 | 1.84E-14 | LRRC8C | 84230 | leucine rich repeat containing 8 VRAC subunit C |
| ENSG0000 | 140.9099 | 2.392717 | 0.290713 | 8.230516 | 1.86E-16 | 1.88E-14 | BRCA2 | 675 | BRCA2 DNA repair associated |
| ENSG0000 | 859.7062 | -2.10841 | 0.256309 | -8.22603 | 1.94E-16 | 1.93E-14 | NR2F1 | 7025 | nuclear receptor subfamily 2 group F member 1 |
| ENSG0000 | 552.1955 | 1.675027 | 0.203946 | 8.213095 | 2.16E-16 | 2.15E-14 | AFAP1 | 60312 | actin filament associated protein 1 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 124.9972 | -3.34374 | 0.407745 | -8.20057 | 2.39E-16 | 2.35E-14 | LINC02615 | 100507487 | long intergenic non-protein coding RNA 2615 |
| ENSG0000 | 421.3938 | 3.333808 | 0.407002 | 8.191126 | 2.59E-16 | 2.53E-14 | INSYN2B | 100131897 | inhibitory synaptic factor family member 2B |
| ENSG0000 | 381.777 | -2.35735 | 0.287854 | -8.1894 | 2.63E-16 | 2.54E-14 | NA | NA | NA |
| ENSG0000 | 2536.062 | 1.532345 | 0.18739 | 8.177315 | 2.90E-16 | 2.79E-14 | GOLGA4 | 2803 | golgin A4 |
| ENSG0000 | 497.931 | 3.091634 | 0.378095 | 8.176873 | 2.91E-16 | 2.79E-14 | ZNF770 | 54989 | zinc finger protein 770 |
| ENSG0000 | 828.6896 | 2.52389 | 0.308733 | 8.174982 | 2.96E-16 | 2.82E-14 | NA | NA | NA |
| ENSG0000 | 1617.83 | 1.525879 | 0.18791 | 8.12025 | 4.65E-16 | 4.34E-14 | CNOT1 | 23019 | CCR4-NOT transcription complex subunit 1 |
| ENSG0000 | 1525.242 | 1.644605 | 0.202942 | 8.103828 | 5.33E-16 | 4.89E-14 | AKAP11 | 11215 | A-kinase anchoring protein 11 |
| ENSG0000 | 99197.88 | -1.82957 | 0.226103 | -8.09173 | 5.88E-16 | 5.36E-14 | NA | NA | NA |
| ENSG0000 | 532.0844 | 1.591591 | 0.197 | 8.079134 | 6.52E-16 | 5.88E-14 | RPS27AP1 | 643358 | RPS27A pseudogene 16 |
| ENSG0000 | 89.34327 | 1.888525 | 0.234423 | 8.056071 | 7.88E-16 | 7.03E-14 | HNRNPKP | 644063 | heterogeneous nuclear ribonucleoprotein K pseudogene 4 |
| ENSG0000 | 560.0926 | 1.956532 | 0.243745 | 8.026951 | 9.99E-16 | 8.82E-14 | PI4K2B | 55300 | phosphatidylinositol 4-kinase type 2 beta |
| ENSG0000 | 187.0027 | -1.92135 | 0.239451 | -8.02395 | 1.02E-15 | 8.94E-14 | NA | NA | NA |
| ENSG0000 | 2001.595 | -1.85116 | 0.230705 | -8.02392 | 1.02E-15 | 8.94E-14 | NA | NA | NA |
| ENSG0000 | 104.4869 | 1.531246 | 0.190857 | 8.023003 | 1.03E-15 | 8.98E-14 | SUV39H2 | 79723 | SUV39H2 histone lysine methyltransferase |
| ENSG0000 | 75.55588 | 2.495096 | 0.31282 | 7.976136 | 1.51E-15 | 1.30E-13 | NA | NA | NA |
| ENSG0000 | 253.2461 | -2.16813 | 0.273112 | -7.9386 | 2.04E-15 | 1.72E-13 | NA | NA | NA |
| ENSG0000 | 866.6064 | 1.778529 | 0.224117 | 7.935728 | 2.09E-15 | 1.75E-13 | ZFHX3 | 463 | zinc finger homeobox 3 |
| ENSG0000 | 555.7485 | -2.35685 | 0.297219 | -7.92966 | 2.20E-15 | 1.82E-13 | SLC4A3 | 6508 | solute carrier family 4 member 3 |
| ENSG0000 | 755.0404 | 1.601232 | 0.201945 | 7.929066 | 2.21E-15 | 1.82E-13 | DENND4C | 55667 | DENN domain containing 4C |
| ENSG0000 | 643.3359 | -1.821 | 0.229702 | -7.92767 | 2.23E-15 | 1.84E-13 | PSENEN | 55851 | presenilin enhancer, gamma-secretase subunit |
| ENSG0000 | 2501.932 | -1.64545 | 0.207642 | -7.92446 | 2.29E-15 | 1.88E-13 | NRBP2 | 340371 | nuclear receptor binding protein 2 |
| ENSG0000 | 143.4934 | -5.46472 | 0.690601 | -7.91299 | 2.51E-15 | 2.05E-13 | HOXB5 | 3215 | homeobox B5 |
| ENSG0000 | 186.7282 | -1.58467 | 0.200473 | -7.90462 | 2.69E-15 | 2.18E-13 | AAMDC | 28971 | adipogenesis associated Mth938 domain containing |
| ENSG0000 | 675.9294 | 1.76748 | 0.223678 | 7.90188 | 2.75E-15 | 2.22E-13 | TRAF3 | 7187 | TNF receptor associated factor 3 |
| ENSG0000 | 14030.62 | -2.77823 | 0.352791 | -7.87499 | 3.41E-15 | 2.73E-13 | DUSP1 | 1843 | dual specificity phosphatase 1 |
| ENSG0000 | 630.0246 | 1.903581 | 0.242192 | 7.859814 | 3.85E-15 | 3.07E-13 | PPARA | 5465 | peroxisome proliferator activated receptor alpha |

Supp Table 4 WNT4siRNA vs DDC comparison

| ENSG | baseMean | log2FoldC | lfcSE | stat | pvalue | padj | symbol | entrez | genename |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 588.6115 | 2.919799 | 0.275605 | 10.59415 | 3.17E-26 | 6.11E-22 | JAM2 | 58494 | junctional adhesion molecule 2 |
| ENSG0000 | 544.9799 | -3.16295 | 0.394728 | -8.01299 | 1.12E-15 | 1.08E-11 | NA | NA | NA |
| ENSG0000 | 335.1462 | -4.22091 | 0.593949 | -7.10653 | 1.19E-12 | 7.65E-09 | DIRAS3 | 9077 | DIRAS family GTPase 3 |
| ENSG0000 | 37121.62 | 2.761846 | 0.419628 | 6.58166 | 4.65E-11 | 2.24E-07 | COL8A1 | 1295 | collagen type VIII alpha 1 chain |
| ENSG0000 | 1867.677 | 3.189123 | 0.49651 | 6.423083 | 1.34E-10 | 5.15E-07 | SERPINB7 | 8710 | serpin family B member 7 |
| ENSG0000 | 60.90818 | 5.935052 | 0.945701 | 6.275826 | 3.48E-10 | 1.12E-06 | PRR15 | 222171 | proline rich 15 |
| ENSG0000 | 1338.936 | -2.131 | 0.343118 | -6.2107 | 5.27E-10 | 1.45E-06 | NA | NA | NA |
| ENSG0000 | 53.25197 | 4.780003 | 0.787529 | 6.069621 | 1.28E-09 | 3.09E-06 | GALNT13 | 114805 | polypeptide N-acetylgalactosaminyltransferase 13 |
| ENSG0000 | 392.7971 | 6.63731 | 1.162268 | 5.710654 | 1.13E-08 | 2.41E-05 | CMPK2 | 129607 | cytidine/uridine monophosphate kinase 2 |
| ENSG0000 | 4106.952 | 6.678376 | 1.215098 | 5.496162 | 3.88E-08 | 7.48E-05 | IFIT2 | 3433 | interferon induced protein with tetratricopeptide repeats 2 |
| ENSG0000 | 627.161 | -2.05412 | 0.376547 | -5.45515 | 4.89E-08 | 8.57E-05 | NA | NA | NA |
| ENSG0000 | 428.8363 | 5.279972 | 0.973038 | 5.426276 | 5.75E-08 | 9.24E-05 | PRLR | 5618 | prolactin receptor |
| ENSG0000 | 3448.299 | 3.300067 | 0.613122 | 5.382395 | 7.35E-08 | 0.000109 | COL11A1 | 1301 | collagen type XI alpha 1 chain |
| ENSG0000 | 336.3491 | -2.24051 | 0.433854 | -5.1642 | 2.41E-07 | 0.000332 | NA | NA | NA |
| ENSG0000 | 387.8715 | 6.896905 | 1.36555 | 5.050642 | 4.40E-07 | 0.000501 | RSAD2 | 91543 | radical S-adenosyl methionine domain containing 2 |
| ENSG0000 | 120.1702 | -3.74475 | 0.742655 | -5.04238 | 4.60E-07 | 0.000501 | TRABD2A | 129293 | TraB domain containing 2A |
| ENSG0000 | 96.44115 | -2.76047 | 0.551535 | -5.00506 | 5.58E-07 | 0.000567 | SOX8 | 30812 | SRY-box transcription factor 8 |
| ENSG0000 | 3095.927 | 6.207052 | 1.254257 | 4.948789 | 7.47E-07 | 0.00072 | MX1 | 4599 | MX dynamin like GTPase 1 |
| ENSG0000 | 49.63955 | -5.16511 | 1.046269 | -4.93669 | 7.95E-07 | 0.000729 | ASS1P11 | 340274 | argininosuccinate synthetase 1 pseudogene 11 |
| ENSG0000 | 1490.055 | 6.597764 | 1.348187 | 4.893805 | 9.89E-07 | 0.000815 | IFI44L | 10964 | interferon induced protein 44 like |
| ENSG0000 | 157.0153 | 4.025698 | 0.824446 | 4.882916 | 1.05E-06 | 0.000815 | ISG20 | 3669 | interferon stimulated exonuclease gene 20 |
| ENSG0000 | 310.6004 | -2.08021 | 0.42612 | -4.88174 | 1.05E-06 | 0.000815 | NA | NA | NA |
| ENSG0000 | 43.1963 | 2.920035 | 0.598979 | 4.875024 | 1.09E-06 | 0.000815 | KCTD16 | 57528 | potassium channel tetramerization domain containing 16 |
| ENSG0000 | 1142.133 | 2.41888 | 0.496382 | 4.873025 | 1.10E-06 | 0.000815 | FBXO32 | 114907 | F-box protein 32 |
| ENSG0000 | 82.07448 | 3.72257 | 0.772718 | 4.817503 | 1.45E-06 | 0.001038 | ARFGEF3 | 57221 | ARFGEF family member 3 |
| ENSG0000 | 592.2542 | -4.5623 | 0.951406 | -4.79532 | 1.62E-06 | 0.001088 | CLEC3B | 7123 | C-type lectin domain family 3 member B |
| ENSG0000 | 25.47056 | 2.788501 | 0.581693 | 4.793767 | 1.64E-06 | 0.001088 | NA | NA | NA |
| ENSG0000 | 35.84607 | 4.056175 | 0.863736 | 4.696084 | 2.65E-06 | 0.001649 | KLHDC7B | 113730 | kelch domain containing 7B |
| ENSG0000 | 1129.826 | -1.7803 | 0.381103 | -4.67145 | 2.99E-06 | 0.001758 | PLEKHG4 | 25894 | pleckstrin homology and RhoGEF domain containing G4 |
| ENSG0000 | 164.8238 | -2.25931 | 0.483777 | -4.67016 | 3.01E-06 | 0.001758 | NA | NA | NA |
| ENSG0000 | 7396.525 | 1.765559 | 0.379418 | 4.653335 | 3.27E-06 | 0.001809 | SEMA3C | 10512 | semaphorin 3C |
| ENSG0000 | 116.7964 | -1.59783 | 0.343463 | -4.65212 | 3.29E-06 | 0.001809 | EEF1DP1 | 126037 | eukaryotic translation elongation factor 1 delta pseudogene 1 |
| ENSG0000 | 2292.891 | 4.317264 | 0.937492 | 4.605122 | 4.12E-06 | 0.002191 | RIGI | 23586 | RNA sensor RIG-I |
| ENSG0000 | 2254.642 | -1.92803 | 0.419054 | -4.60092 | 4.21E-06 | 0.002191 | NA | NA | NA |
| ENSG0000 | 22.51705 | 2.640494 | 0.576118 | 4.583252 | 4.58E-06 | 0.00226 | NA | NA | NA |
| ENSG0000 | 179.027 | -5.36627 | 1.170885 | -4.58309 | 4.58E-06 | 0.00226 | NA | NA | NA |
| ENSG0000 | 673.9449 | 1.694551 | 0.370133 | 4.578216 | 4.69E-06 | 0.00226 | CHAC1 | 79094 | ChaC glutathione specific gamma-glutamylcyclotransferase 1 |
| ENSG0000 | 1064.773 | -1.92326 | 0.424233 | -4.5335 | 5.80E-06 | 0.002634 | NA | NA | NA |
| ENSG0000 | 138.5584 | -2.67828 | 0.591124 | -4.53083 | 5.88E-06 | 0.002634 | RAMP1 | 10267 | receptor activity modifying protein 1 |
| ENSG0000 | 203.1265 | 1.608915 | 0.355811 | 4.521831 | 6.13E-06 | 0.002686 | NA | NA | NA |
| ENSG0000 | 1604.534 | -2.80678 | 0.625302 | -4.48869 | 7.17E-06 | 0.002882 | MATN2 | 4147 | matrilin 2 |
| ENSG0000 | 97.0892 | 4.805622 | 1.070793 | 4.487908 | 7.19E-06 | 0.002882 | RPS17P5 | 442216 | ribosomal protein S17 pseudogene 5 |
| ENSG0000 | 90.19179 | 2.915865 | 0.650285 | 4.483977 | 7.33E-06 | 0.002882 | ENPP4 | 22875 | ectonucleotide pyrophosphatase/phosphodiesterase 4 |
| ENSG0000 | 224.321 | -3.02547 | 0.675299 | -4.4802 | 7.46E-06 | 0.002882 | NA | NA | NA |
| ENSG0000 | 173.6768 | -2.11689 | 0.472554 | -4.47968 | 7.48E-06 | 0.002882 | NA | NA | NA |
| ENSG0000 | 164.8218 | -1.75691 | 0.392197 | -4.47966 | 7.48E-06 | 0.002882 | MIR381HG | 378881 | MIR381 host gene |
| ENSG0000 | 438.7593 | 2.030657 | 0.455442 | 4.458655 | 8.25E-06 | 0.003067 | ADGRL4 | 64123 | adhesion G protein-coupled receptor L4 |
| ENSG0000 | 844.3987 | -1.94389 | 0.436115 | -4.45727 | 8.30E-06 | 0.003067 | RPS26P31 | 645979 | ribosomal protein S26 pseudogene 31 |
| ENSG0000 | 214.1982 | -1.92354 | 0.431885 | -4.45384 | 8.43E-06 | 0.003067 | NA | NA | NA |
| ENSG0000 | 1606.407 | 5.398277 | 1.216997 | 4.435737 | 9.18E-06 | 0.003275 | SERPINB2 | 5055 | serpin family B member 2 |
| ENSG0000 | 425.5491 | -5.22689 | 1.180282 | -4.42851 | 9.49E-06 | 0.003325 | SLC14A1 | 6563 | solute carrier family 14 member 1 (Kidd blood group) |
| ENSG0000 | 904.8967 | -1.91083 | 0.431987 | -4.42336 | 9.72E-06 | 0.003343 | NA | NA | NA |
| ENSG0000 | 2379.451 | -1.87185 | 0.423528 | -4.41966 | 9.89E-06 | 0.003343 | NA | NA | NA |
| ENSG0000 | 3918.594 | 4.940953 | 1.119837 | 4.412207 | 1.02E-05 | 0.0034 | IFIT1 | 3434 | interferon induced protein with tetratricopeptide repeats 1 |
| ENSG0000 | 489.5228 | 2.818642 | 0.642329 | 4.388158 | 1.14E-05 | 0.003686 | DUSP4 | 1846 | dual specificity phosphatase 4 |
| ENSG0000 | 264.7415 | 4.095594 | 0.933509 | 4.387312 | 1.15E-05 | 0.003686 | LRRN3 | 54674 | leucine rich repeat neuronal 3 |
| ENSG0000 | 8.505744 | 6.37649 | 1.455636 | 4.380554 | 1.18E-05 | 0.003719 | SAA1 | 6288 | serum amyloid A1 |
| ENSG0000 | 65.39616 | 1.92243 | 0.439084 | 4.378277 | 1.20E-05 | 0.003719 | ZSCAN31 | 64288 | zinc finger and SCAN domain containing 31 |
| ENSG0000 | 4507.437 | 4.954956 | 1.134701 | 4.366751 | 1.26E-05 | 0.003858 | IFIT3 | 3437 | interferon induced protein with tetratricopeptide repeats 3 |
| ENSG0000 | 1362.254 | -1.77141 | 0.407438 | -4.34767 | 1.38E-05 | 0.004125 | PCOLCE2 | 26577 | procollagen C-endopeptidase enhancer 2 |
| ENSG0000 | 97.22831 | -1.60764 | 0.369976 | -4.34526 | 1.39E-05 | 0.004125 | NA | NA | NA |
| ENSG0000 | 562.9538 | -3.29323 | 0.758912 | -4.33941 | 1.43E-05 | 0.004158 | PRUNE2 | 158471 | prune homolog 2 with BCH domain |
| ENSG0000 | 61.14294 | -3.97846 | 0.91873 | -4.33039 | 1.49E-05 | 0.004158 | ESPNL | 339768 | espin like |
| ENSG0000 | 2453.547 | 1.735478 | 0.401807 | 4.319185 | 1.57E-05 | 0.004298 | COL8A2 | 1296 | collagen type VIII alpha 2 chain |
| ENSG0000 | 79.58316 | -1.95023 | 0.451778 | -4.31678 | 1.58E-05 | 0.004298 | RPS2P8 | 440589 | ribosomal protein S2 pseudogene 8 |
| ENSG0000 | 92.55862 | 3.402565 | 0.791203 | 4.300495 | 1.70E-05 | 0.004562 | KCNJ6 | 3763 | potassium inwardly rectifying channel subfamily J member 6 |
| ENSG0000 | 915.0482 | -1.90254 | 0.444561 | -4.2796 | 1.87E-05 | 0.004943 | NA | NA | NA |
| ENSG0000 | 2817.787 | 4.848604 | 1.135033 | 4.271773 | 1.94E-05 | 0.005051 | ISG15 | 9636 | ISG15 ubiquitin like modifier |
| ENSG0000 | 116.1363 | 2.565758 | 0.606374 | 4.231313 | 2.32E-05 | 0.005892 | RNF144B | 255488 | ring finger protein 144B |
| ENSG0000 | 264.6389 | 1.534453 | 0.363176 | 4.225089 | 2.39E-05 | 0.005979 | BCL7A | 605 | BAF chromatin remodeling complex subunit BCL7A |
| ENSG0000 | 1858.938 | -2.10094 | 0.49776 | -4.22079 | 2.43E-05 | 0.005983 | RPSAP61 | 644464 | ribosomal protein SA pseudogene 61 |
| ENSG0000 | 49.67347 | 2.353174 | 0.557736 | 4.219155 | 2.45E-05 | 0.005983 | STX11 | 8676 | syntaxin 11 |
| ENSG0000 | 29.02857 | 2.843177 | 0.675737 | 4.20752 | 2.58E-05 | 0.006189 | NA | NA | NA |
| ENSG0000 | 134.4477 | -7.64249 | 1.817101 | -4.20587 | 2.60E-05 | 0.006189 | LMX1B | 4010 | LIM homeobox transcription factor 1 beta |
| ENSG0000 | 1626.78 | -1.82358 | 0.435915 | -4.18335 | 2.87E-05 | 0.00667 | NA | NA | NA |
| ENSG0000 | 28.92304 | -5.412 | 1.294622 | -4.18037 | 2.91E-05 | 0.006678 | NA | NA | NA |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 89.78745 | -2.88757 | 0.6912 | -4.17762 | 2.95E-05 | 0.006679 | CEND1 | 51286 | cell cycle exit and neuronal differentiation 1 |
| ENSG0000 | 2084.587 | -2.00358 | 0.480117 | -4.17311 | 3.00E-05 | 0.006734 | EMILIN2 | 84034 | elastin microfibril interfacer 2 |
| ENSG0000 | 163.4372 | -5.16716 | 1.242363 | -4.15914 | 3.19E-05 | 0.007077 | PPP2R2B | 5521 | protein phosphatase 2 regulatory subunit Bbeta |
| ENSG0000 | 1187.545 | -1.81148 | 0.436227 | -4.1526 | 3.29E-05 | 0.0072 | WASH5P | 375690 | WASP family homolog 5, pseudogene |
| ENSG0000 | 17.21602 | 4.214509 | 1.018348 | 4.138575 | 3.49E-05 | 0.007484 | CXCL5 | 6374 | C-X-C motif chemokine ligand 5 |
| ENSG0000 | 225.3796 | 3.253603 | 0.788817 | 4.124661 | 3.71E-05 | 0.007864 | PARP8 | 79668 | poly(ADP-ribose) polymerase family member 8 |
| ENSG0000 | 520.2897 | 3.814356 | 0.931728 | 4.09385 | 4.24E-05 | 0.008888 | TNFSF4 | 7292 | TNF superfamily member 4 |
| ENSG0000 | 2589.674 | 5.167372 | 1.264417 | 4.086764 | 4.37E-05 | 0.009066 | OAS2 | 4939 | 2'-5'-oligoadenylate synthetase 2 |
| ENSG0000 | 353.717 | 2.250372 | 0.551911 | 4.077416 | 4.55E-05 | 0.009337 | SLC38A4 | 55089 | solute carrier family 38 member 4 |
| ENSG0000 | 57.97265 | -2.20493 | 0.542931 | -4.06116 | 4.88E-05 | 0.009907 | CTSH | 1512 | cathepsin H |

Supp Table 5 Scrambled siRNA vs DDC comparison

| ENSG | baseMean | log2FoldC | lfcSE | stat | pvalue | padj | symbol | entrez | genename |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 1168.029 | -10.5372 | 0.610108 | -17.271 | 7.77E-67 | 1.51E-62 | CSF3 | 1440 | colony stimulating factor 3 |
| ENSG0000 | 1005.208 | -5.70716 | 0.332953 | -17.141 | 7.34E-66 | 7.11E-62 | MMP10 | 4319 | matrix metallopeptidase 10 |
| ENSG0000 | 1507.56 | -10.8871 | 0.888332 | -12.2556 | 1.57E-34 | 1.01E-30 | CXCL5 | 6374 | C-X-C motif chemokine ligand 5 |
| ENSG0000 | 415.6995 | -6.79103 | 0.562622 | -12.0703 | 1.52E-33 | 7.23E-30 | CMPK2 | 129607 | cytidine/uridine monophosphate kinase 2 |
| ENSG0000 | 672.155 | -7.34696 | 0.609542 | -12.0533 | 1.86E-33 | 7.23E-30 | IL33 | 90865 | interleukin 33 |
| ENSG0000 | 4206.696 | -2.6799 | 0.281417 | -9.52287 | 1.68E-21 | 5.45E-18 | ABL2 | 27 | ABL proto-oncogene 2, non-receptor tyrosine kinase |
| ENSG0000 | 51591.71 | -10.3191 | 1.087965 | -9.48479 | 2.43E-21 | 6.73E-18 | CXCL8 | 3576 | C-X-C motif chemokine ligand 8 |
| ENSG0000 | 14433.35 | -8.69368 | 0.922506 | -9.42398 | 4.34E-21 | 1.05E-17 | SERPINB2 | 5055 | serpin family B member 2 |
| ENSG0000 | 509.2872 | 3.830383 | 0.411197 | 9.315203 | 1.22E-20 | 2.62E-17 | NA | NA | NA |
| ENSG0000 | 136302.8 | -6.59235 | 0.715008 | -9.21996 | 2.97E-20 | 5.76E-17 | MMP3 | 4314 | matrix metallopeptidase 3 |
| ENSG0000 | 592.8045 | -7.5861 | 0.841372 | -9.01635 | 1.94E-19 | 3.43E-16 | RSAD2 | 91543 | radical S-adenosyl methionine domain containing 2 |
| ENSG0000 | 1877.048 | -7.57834 | 0.873074 | -8.68006 | 3.96E-18 | 6.39E-15 | ESM1 | 11082 | endothelial cell specific molecule 1 |
| ENSG0000 | 1054.869 | -1.99607 | 0.234956 | -8.49551 | 1.97E-17 | 2.94E-14 | CLDN12 | 9069 | claudin 12 |
| ENSG0000 | 235764 | -6.47046 | 0.781984 | -8.27442 | 1.29E-16 | 1.79E-13 | MMP1 | 4312 | matrix metallopeptidase 1 |
| ENSG0000 | 521.7681 | 3.080998 | 0.378504 | 8.13993 | 3.96E-16 | 5.11E-13 | AMOT | 154796 | angiomotin |
| ENSG0000 | 515.7476 | 6.116866 | 0.755936 | 8.091778 | 5.88E-16 | 7.13E-13 | PRUNE2 | 158471 | prune homolog 2 with BCH domain |
| ENSG0000 | 6330.471 | 1.829488 | 0.226703 | 8.069959 | 7.03E-16 | 8.02E-13 | CREB3L1 | 90993 | cAMP responsive element binding protein 3 like 1 |
| ENSG0000 | 320.8763 | 4.440759 | 0.553981 | 8.016083 | 1.09E-15 | 1.18E-12 | NA | NA | NA |
| ENSG0000 | 2600.503 | -2.99547 | 0.377222 | -7.94089 | 2.01E-15 | 1.97E-12 | NAMPTP1 | 646309 | nicotinamide phosphoribosyltransferase pseudogene 1 |
| ENSG0000 | 1448.243 | 4.808625 | 0.605661 | 7.939467 | 2.03E-15 | 1.97E-12 | MATN2 | 4147 | matrilin 2 |
| ENSG0000 | 65.33425 | -4.17268 | 0.527294 | -7.9134 | 2.50E-15 | 2.31E-12 | MCTP1 | 79772 | multiple C2 and transmembrane domain containing 1 |
| ENSG0000 | 1418.688 | 3.732417 | 0.478301 | 7.803492 | 6.02E-15 | 5.31E-12 | LDB2 | 9079 | LIM domain binding 2 |
| ENSG0000 | 1004.075 | -1.91846 | 0.248068 | -7.73358 | 1.05E-14 | 8.82E-12 | BTG3 | 10950 | BTG anti-proliferation factor 3 |
| ENSG0000 | 6589.704 | -2.88631 | 0.373499 | -7.72775 | 1.09E-14 | 8.85E-12 | NAMPT | 10135 | nicotinamide phosphoribosyltransferase |
| ENSG0000 | 100.9507 | -4.33354 | 0.561914 | -7.7121 | 1.24E-14 | 9.60E-12 | DNER | 92737 | delta/notch like EGF repeat containing |
| ENSG0000 | 6450.94 | 1.95955 | 0.255957 | 7.655772 | 1.92E-14 | 1.43E-11 | TMEM119 | 338773 | transmembrane protein 119 |
| ENSG0000 | 13246.78 | 2.004448 | 0.26498 | 7.564516 | 3.89E-14 | 2.80E-11 | THY1 | 7070 | Thy-1 cell surface antigen |
| ENSG0000 | 171.2377 | 4.749533 | 0.634128 | 7.489867 | 6.89E-14 | 4.78E-11 | CPA4 | 51200 | carboxypeptidase A4 |
| ENSG0000 | 2623.8 | -9.06505 | 1.217801 | -7.44378 | 9.78E-14 | 6.54E-11 | IL24 | 11009 | interleukin 24 |
| ENSG0000 | 134.3159 | 5.344963 | 0.719434 | 7.429403 | 1.09E-13 | 6.72E-11 | HSPB3 | 8988 | heat shock protein family B (small) member 3 |
| ENSG0000 | 123.1106 | 6.0589 | 0.815666 | 7.428163 | 1.10E-13 | 6.72E-11 | RAMP1 | 10267 | receptor activity modifying protein 1 |
| ENSG0000 | 703.7069 | 2.078207 | 0.279811 | 7.42718 | 1.11E-13 | 6.72E-11 | GCNT1 | 2650 | glucosaminyl (N-acetyl) transferase 1 |
| ENSG0000 | 5408.923 | -4.26951 | 0.579757 | -7.36431 | 1.78E-13 | 1.05E-10 | PTGS2 | 5743 | prostaglandin-endoperoxide synthase 2 |
| ENSG0000 | 6187.989 | 1.99282 | 0.272043 | 7.325398 | 2.38E-13 | 1.36E-10 | ADGRA2 | 25960 | adhesion G protein-coupled receptor A2 |
| ENSG0000 | 586.5834 | 2.324923 | 0.320075 | 7.263688 | 3.77E-13 | 2.09E-10 | NA | NA | NA |
| ENSG0000 | 620.8999 | -2.13434 | 0.296836 | -7.19031 | 6.46E-13 | 3.48E-10 | SLC41A2 | 84102 | solute carrier family 41 member 2 |
| ENSG0000 | 4180.94 | -8.22828 | 1.146791 | -7.17505 | 7.23E-13 | 3.79E-10 | IL1B | 3553 | interleukin 1 beta |
| ENSG0000 | 11231.64 | -4.67565 | 0.656416 | -7.12299 | 1.06E-12 | 5.39E-10 | TFPI2 | 7980 | tissue factor pathway inhibitor 2 |
| ENSG0000 | 7591.908 | -4.016 | 0.569008 | -7.0579 | 1.69E-12 | 8.41E-10 | ITGA2 | 3673 | integrin subunit alpha 2 |
| ENSG0000 | 153.0336 | 4.345876 | 0.617373 | 7.039303 | 1.93E-12 | 9.37E-10 | ZNF423 | 23090 | zinc finger protein 423 |
| ENSG0000 | 1426.128 | -6.65393 | 0.949208 | -7.00998 | 2.38E-12 | 1.13E-09 | CXCL3 | 2921 | C-X-C motif chemokine ligand 3 |
| ENSG0000 | 28.78937 | -4.70407 | 0.67274 | -6.99241 | 2.70E-12 | 1.25E-09 | RCSD1 | 92241 | RCSD domain containing 1 |
| ENSG0000 | 1550.904 | -2.35151 | 0.33712 | -6.97528 | 3.05E-12 | 1.35E-09 | NAB1 | 4664 | NGFI-A binding protein 1 |
| ENSG0000 | 907.6342 | -4.47506 | 0.641647 | -6.97433 | 3.07E-12 | 1.35E-09 | IFIT2 | 3433 | interferon induced protein with tetratricopeptide repeats 2 |
| ENSG0000 | 349.827 | -2.10351 | 0.304402 | -6.91031 | 4.84E-12 | 2.08E-09 | NOTCH2N | 1.01E+08 | notch 2 N-terminal like C |
| ENSG0000 | 94.44857 | 3.622982 | 0.527575 | 6.867235 | 6.55E-12 | 2.76E-09 | NA | NA | NA |
| ENSG0000 | 7492.032 | 1.817056 | 0.265111 | 6.853939 | 7.18E-12 | 2.94E-09 | VGLL3 | 389136 | vestigial like family member 3 |
| ENSG0000 | 1277.097 | -2.91254 | 0.425596 | -6.84342 | 7.73E-12 | 3.06E-09 | ZC3H12C | 85463 | zinc finger CCCH-type containing 12C |
| ENSG0000 | 965.8331 | 7.179144 | 1.054235 | 6.809816 | 9.77E-12 | 3.79E-09 | AQP1 | 358 | aquaporin 1 (Colton blood group) |
| ENSG0000 | 813.8304 | 3.196494 | 0.470921 | 6.787754 | 1.14E-11 | 4.33E-09 | NA | NA | NA |
| ENSG0000 | 2022.749 | -5.64576 | 0.834261 | -6.76738 | 1.31E-11 | 4.89E-09 | MX1 | 4599 | MX dynamin like GTPase 1 |
| ENSG0000 | 111405.3 | 3.116195 | 0.466277 | 6.683144 | 2.34E-11 | 8.56E-09 | COL3A1 | 1281 | collagen type III alpha 1 chain |
| ENSG0000 | 2247.311 | -1.61976 | 0.243324 | -6.65679 | 2.80E-11 | 1.01E-08 | JMJD1C | 221037 | jumonji domain containing 1C |
| ENSG0000 | 768.6769 | 2.030174 | 0.307762 | 6.596579 | 4.21E-11 | 1.47E-08 | PEX6 | 5190 | peroxisomal biogenesis factor 6 |
| ENSG0000 | 888.7781 | -1.72018 | 0.260836 | -6.59488 | 4.26E-11 | 1.47E-08 | PIK3CD | 5293 | phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic sub unit delta |
| ENSG0000 | 1260.684 | 2.311246 | 0.351251 | 6.580036 | 4.70E-11 | 1.60E-08 | NA | NA | NA |
| ENSG0000 | 503.6104 | 2.633321 | 0.401113 | 6.565029 | 5.20E-11 | 1.74E-08 | IRX5 | 10265 | iroquois homeobox 5 |
| ENSG0000 | 208.5104 | 5.994375 | 0.921696 | 6.503637 | 7.84E-11 | 2.53E-08 | CMKLR1 | 1240 | chemerin chemokine-like receptor 1 |
| ENSG0000 | 1065.522 | -2.38012 | 0.367791 | -6.47139 | 9.71E-11 | 3.09E-08 | FAM167A | 83648 | family with sequence similarity 167 member A |
| ENSG0000 | 6026.42 | 1.940108 | 0.301207 | 6.441117 | 1.19E-10 | 3.71E-08 | MTCO3P1 | 1.07E+08 | MT-CO3 pseudogene 12 |
| ENSG0000 | 1614.308 | -1.52709 | 0.237621 | -6.42658 | 1.31E-10 | 4.02E-08 | CDK14 | 5218 | cyclin dependent kinase 14 |
| ENSG0000 | 7626.214 | -2.4811 | 0.387606 | -6.40109 | 1.54E-10 | 4.68E-08 | SLC39A14 | 23516 | solute carrier family 39 member 14 |
| ENSG0000 | 523.0037 | 2.846645 | 0.447549 | 6.360517 | 2.01E-10 | 5.97E-08 | RAB7B | 338382 | RAB7B, member RAS oncogene family |
| ENSG0000 | 362693.7 | 2.979077 | 0.468495 | 6.358823 | 2.03E-10 | 5.97E-08 | COL1A1 | 1277 | collagen type I alpha 1 chain |
| ENSG0000 | 6313.679 | -1.87998 | 0.296918 | -6.33164 | 2.43E-10 | 7.02E-08 | ELK3 | 2004 | ETS transcription factor ELK3 |
| ENSG0000 | 586.106 | -3.81362 | 0.602971 | -6.32471 | 2.54E-10 | 7.24E-08 | IRAK2 | 3656 | interleukin 1 receptor associated kinase 2 |
| ENSG0000 | 411.6157 | -2.6976 | 0.427927 | -6.30389 | 2.90E-10 | 8.16E-08 | SLC22A4 | 6583 | solute carrier family 22 member 4 |
| ENSG0000 | 1965.025 | -2.13094 | 0.338918 | -6.28746 | 3.23E-10 | 8.94E-08 | STEAP1 | 26872 | STEAP family member 1 |
| ENSG0000 | 1216.328 | -1.69657 | 0.270039 | -6.28269 | 3.33E-10 | 9.09E-08 | RASA2 | 5922 | RAS p21 protein activator 2 |
| ENSG0000 | 4650.984 | -2.23845 | 0.357476 | -6.26182 | 3.81E-10 | 1.03E-07 | RASSF8 | 11228 | Ras association domain family member 8 |
| ENSG0000 | 2627.732 | 1.552992 | 0.249694 | 6.219574 | 4.99E-10 | 1.32E-07 | TNS2 | 23371 | tensin 2 |
| ENSG0000 | 301.2517 | 2.985994 | 0.480403 | 6.215602 | 5.11E-10 | 1.34E-07 | NA | NA | NA |
| ENSG0000 | 203.4271 | -3.65231 | 0.590197 | -6.18829 | 6.08E-10 | 1.57E-07 | RNF144B | 255488 | ring finger protein 144B |
| ENSG0000 | 192.2146 | 3.335121 | 0.5393 | 6.184162 | 6.24E-10 | 1.59E-07 | MIR1915H | 399726 | MIR1915 host gene |
| ENSG0000 | 1589.535 | 5.223121 | 0.848797 | 6.15356 | 7.58E-10 | 1.91E-07 | RCAN2 | 10231 | regulator of calcineurin 2 |
| ENSG0000 | 127.564 | 2.722023 | 0.44257 | 6.150493 | 7.72E-10 | 1.92E-07 | GUCY1B1 | 2983 | guanylate cyclase 1 soluble subunit beta 1 |
| ENSG0000 | 6913.84 | 3.121612 | 0.508163 | 6.142934 | 8.10E-10 | 1.99E-07 | FHL1 | 2273 | four and a half LIM domains 1 |
| ENSG0000 | 816.1934 | -1.58501 | 0.259592 | -6.10577 | 1.02E-09 | 2.48E-07 | NR1D1 | 9572 | nuclear receptor subfamily 1 group D member 1 |
| ENSG0000 | 324.4863 | 3.548112 | 0.58583 | 6.05656 | 1.39E-09 | 3.33E-07 | DIRAS3 | 9077 | DIRAS family GTPase 3 |
| ENSG0000 | 265.4811 | 7.438376 | 1.23266 | 6.03441 | 1.60E-09 | 3.74E-07 | VCAM1 | 7412 | vascular cell adhesion molecule 1 |
| ENSG0000 | 670.1037 | -2.95277 | 0.489527 | -6.03188 | 1.62E-09 | 3.74E-07 | ADGRL4 | 64123 | adhesion G protein-coupled receptor L4 |
| ENSG0000 | 1361.864 | 1.564247 | 0.259333 | 6.031814 | 1.62E-09 | 3.74E-07 | RPS2P7 | 86781 | ribosomal protein S2 pseudogene 7 |
| ENSG0000 | 171.2698 | -2.85212 | 0.474637 | -6.00907 | 1.87E-09 | 4.26E-07 | NA | NA | NA |
| ENSG0000 | 149.0458 | 1.990744 | 0.332797 | 5.981849 | 2.21E-09 | 4.98E-07 | ERV3-1 | 2086 | endogenous retrovirus group 3 member 1, envelope |
| ENSG0000 | 3245.125 | -4.52274 | 0.757678 | -5.96921 | 2.38E-09 | 5.25E-07 | IFIT3 | 3437 | interferon induced protein with tetratricopeptide repeats 3 |
| ENSG0000 | 1070.626 | 2.718251 | 0.457347 | 5.943518 | 2.79E-09 | 6.08E-07 | SORCS2 | 57537 | sortilin related VPS10 domain containing receptor 2 |
| ENSG0000 | 1780.707 | -2.49862 | 0.421049 | -5.93428 | 2.95E-09 | 6.36E-07 | FAM180A | 389558 | family with sequence similarity 180 member A |
| ENSG0000 | 87.19447 | 4.584505 | 0.774009 | 5.923064 | 3.16E-09 | 6.74E-07 | SOX8 | 30812 | SRY-box transcription factor 8 |
| ENSG0000 | 7959.94 | -3.7809 | 0.63868 | -5.91986 | 3.22E-09 | 6.79E-07 | HAS2 | 3037 | hyaluronan synthase 2 |
| ENSG0000 | 1320.852 | 6.874068 | 1.163252 | 5.909352 | 3.43E-09 | 7.16E-07 | IRAG1 | 10335 | inositol 1,4,5-triphosphate receptor associated 1 |
| ENSG0000 | 2496.574 | 7.047558 | 1.193063 | 5.907112 | 3.48E-09 | 7.18E-07 | CCN5 | 8839 | cellular communication network factor 5 |
| ENSG0000 | 2010.406 | -1.76913 | 0.299655 | -5.9039 | 3.55E-09 | 7.25E-07 | PPIF | 10105 | peptidylprolyl isomerase F |
| ENSG0000 | 2750.921 | -1.61096 | 0.273039 | -5.9001 | 3.63E-09 | 7.27E-07 | SRGAP1 | 57522 | SLIT-ROBO Rho GTPase activating protein 1 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 28.58619 | -6.18392 | 1.048128 | -5.89997 | 3.64E-09 | 7.27E-07 | ACP7 | 390928 | acid phosphatase 7, tartrate resistant (putative) |
| ENSG0000 | 78.27323 | -4.07446 | 0.692292 | -5.88548 | 3.97E-09 | 7.86E-07 | NA | NA | NA |
| ENSG0000 | 1548.426 | -1.62025 | 0.275621 | -5.87855 | 4.14E-09 | 8.02E-07 | USP12 | 219333 | ubiquitin specific peptidase 12 |
| ENSG0000 | 47.84153 | -7.61246 | 1.295005 | -5.87832 | 4.14E-09 | 8.02E-07 | EPGN | 255324 | epithelial mitogen |
| ENSG0000 | 57.95545 | -2.53909 | 0.432028 | -5.87713 | 4.17E-09 | 8.02E-07 | NA | NA | NA |
| ENSG0000 | 208.7023 | 3.42278 | 0.582925 | 5.871729 | 4.31E-09 | 8.20E-07 | EEPD1 | 80820 | endonuclease/exonuclease/phosphatase family domain con aining 1 |
| ENSG0000 | 603.7238 | 1.664034 | 0.283682 | 5.865839 | 4.47E-09 | 8.41E-07 | SMARCD3 | 6604 | SWI/SNF related, matrix associated, actin dependent regula tor of chromatin, subfamily d, member 3 |
| ENSG0000 | 162.0974 | -4.58407 | 0.782196 | -5.86052 | 4.61E-09 | 8.61E-07 | WTAPP1 | 1E+08 | Wilms tumor 1 associated protein pseudogene 1 |
| ENSG0000 | 11236.48 | 2.252487 | 0.384581 | 5.856988 | 4.71E-09 | 8.71E-07 | MXRA8 | 54587 | matrix remodeling associated 8 |
| ENSG0000 | 510.7038 | 2.612881 | 0.447631 | 5.837132 | 5.31E-09 | 9.72E-07 | EPHB3 | 2049 | EPH receptor B3 |
| ENSG0000 | 2181.469 | -2.51579 | 0.431652 | -5.82828 | 5.60E-09 | 1.02E-06 | STEAP2 | 261729 | STEAP2 metalloreductase |
| ENSG0000 | 929.5504 | -4.59562 | 0.78934 | -5.8221 | 5.81E-09 | 1.04E-06 | HERC6 | 55008 | HECT and RLD domain containing E3 ubiquitin protein ligase family member 6 |
| ENSG0000 | 2134.035 | -3.83786 | 0.65971 | -5.8175 | 5.97E-09 | 1.06E-06 | TNFAIP3 | 7128 | TNF alpha induced protein 3 |
| ENSG0000 | 608.1858 | -2.80961 | 0.48324 | -5.81412 | 6.10E-09 | 1.07E-06 | GK | 2710 | glycerol kinase |
| ENSG0000 | 7109.319 | -6.13981 | 1.061102 | -5.78626 | 7.20E-09 | 1.26E-06 | CXCL1 | 2919 | C-X-C motif chemokine ligand 1 |
| ENSG0000 | 1497.039 | -1.52322 | 0.263537 | -5.77989 | 7.48E-09 | 1.29E-06 | TUT7 | 79670 | terminal uridylyl transferase 7 |
| ENSG0000 | 471.4712 | -1.60971 | 0.278858 | -5.77251 | 7.81E-09 | 1.34E-06 | STX3 | 6809 | syntaxin 3 |
| ENSG0000 | 457.4731 | 1.792259 | 0.310655 | 5.769285 | 7.96E-09 | 1.35E-06 | SHISA4 | 149345 | shisa family member 4 |
| ENSG0000 | 153.0274 | -4.70443 | 0.816291 | -5.76318 | 8.25E-09 | 1.39E-06 | KDR | 3791 | kinase insert domain receptor |
| ENSG0000 | 382.7588 | -3.16454 | 0.550424 | -5.74928 | 8.96E-09 | 1.50E-06 | BDKRB1 | 623 | bradykinin receptor B1 |
| ENSG0000 | 133.6896 | 1.928669 | 0.335931 | 5.741269 | 9.40E-09 | 1.56E-06 | PCDHGA2 | 56113 | protocadherin gamma subfamily A, 2 |
| ENSG0000 | 421.2459 | -2.22578 | 0.388265 | -5.73262 | 9.89E-09 | 1.61E-06 | SYNE2 | 23224 | spectrin repeat containing nuclear envelope protein 2 |
| ENSG0000 | 554.6798 | 6.923275 | 1.207748 | 5.732383 | 9.90E-09 | 1.61E-06 | CLEC3B | 7123 | C-type lectin domain family 3 member B |
| ENSG0000 | 43920.76 | 3.183188 | 0.556281 | 5.722267 | 1.05E-08 | 1.68E-06 | IGFBP4 | 3487 | insulin like growth factor binding protein 4 |
| ENSG0000 | 281.5728 | 6.718055 | 1.174032 | 5.722206 | 1.05E-08 | 1.68E-06 | COL21A1 | 81578 | collagen type XXI alpha 1 chain |
| ENSG0000 | 11859.47 | 2.274125 | 0.397446 | 5.721842 | 1.05E-08 | 1.68E-06 | PCDH18 | 54510 | protocadherin 18 |
| ENSG0000 | 380.1146 | -4.66268 | 0.815139 | -5.7201 | 1.06E-08 | 1.68E-06 | IL1RN | 3557 | interleukin 1 receptor antagonist |
| ENSG0000 | 58.65115 | -4.45649 | 0.781426 | -5.70302 | 1.18E-08 | 1.84E-06 | NA | NA | NA |
| ENSG0000 | 7080.654 | -2.21775 | 0.389262 | -5.69731 | 1.22E-08 | 1.89E-06 | ATP13A3 | 79572 | ATPase 13A3 |
| ENSG0000 | 620.8264 | -2.56674 | 0.450612 | -5.69611 | 1.23E-08 | 1.89E-06 | PKIA | 5569 | cAMP-dependent protein kinase inhibitor alpha |
| ENSG0000 | 314.5929 | 3.204325 | 0.56282 | 5.693334 | 1.25E-08 | 1.90E-06 | PODNL1 | 79883 | podocan like 1 |
| ENSG0000 | 912.8341 | -3.5966 | 0.631979 | -5.69102 | 1.26E-08 | 1.91E-06 | ICAM1 | 3383 | intercellular adhesion molecule 1 |
| ENSG0000 | 782.4684 | -3.59428 | 0.632277 | -5.68465 | 1.31E-08 | 1.97E-06 | FZD8 | 8325 | frizzled class receptor 8 |
| ENSG0000 | 217.814 | 5.29464 | 0.93321 | 5.673581 | 1.40E-08 | 2.09E-06 | MAP2K6 | 5608 | mitogen-activated protein kinase kinase 6 |
| ENSG0000 | 4939.82 | 1.697591 | 0.299297 | 5.671928 | 1.41E-08 | 2.09E-06 | SDC3 | 9672 | syndecan 3 |
| ENSG0000 | 334.099 | -2.16751 | 0.382384 | -5.66842 | 1.44E-08 | 2.12E-06 | BCL7A | 605 | BAF chromatin remodeling complex subunit BCL7A |
| ENSG0000 | 419.0386 | 3.32147 | 0.587423 | 5.654312 | 1.56E-08 | 2.28E-06 | PLEKHA6 | 22874 | pleckstrin homology domain containing A6 |
| ENSG0000 | 552.5362 | 2.028557 | 0.359152 | 5.648184 | 1.62E-08 | 2.35E-06 | SMAD6 | 4091 | SMAD family member 6 |
| ENSG0000 | 208.1331 | 3.884714 | 0.689047 | 5.637809 | 1.72E-08 | 2.47E-06 | NA | NA | NA |
| ENSG0000 | 614.6565 | 1.819656 | 0.323828 | 5.619204 | 1.92E-08 | 2.74E-06 | TMEM8B | 51754 | transmembrane protein 8B |
| ENSG0000 | 6262.492 | 4.706641 | 0.838369 | 5.614046 | 1.98E-08 | 2.80E-06 | PTGIS | 5740 | prostaglandin I2 synthase |
| ENSG0000 | 846.5349 | 4.76009 | 0.849431 | 5.603859 | 2.10E-08 | 2.95E-06 | GPRC5B | 51704 | G protein-coupled receptor class C group 5 member B |
| ENSG0000 | 1208.826 | -1.81157 | 0.324367 | -5.58495 | 2.34E-08 | 3.26E-06 | OGFRL1 | 79627 | opioid growth factor receptor like 1 |
| ENSG0000 | 1892.63 | -4.08789 | 0.733982 | -5.56947 | 2.56E-08 | 3.54E-06 | RIGI | 23586 | RNA sensor RIG-I |
| ENSG0000 | 335.1264 | -2.0514 | 0.36894 | -5.56024 | 2.69E-08 | 3.69E-06 | TMEM38B | 55151 | transmembrane protein 38B |
| ENSG0000 | 1024.076 | -1.60627 | 0.289484 | -5.54873 | 2.88E-08 | 3.90E-06 | OSTM1 | 28962 | osteoclastogenesis associated transmembrane protein 1 |
| ENSG0000 | 1962.231 | -4.58504 | 0.82731 | -5.54211 | 2.99E-08 | 4.03E-06 | IL11 | 3589 | interleukin 11 |
| ENSG0000 | 1161.6 | -2.44173 | 0.441866 | -5.52595 | 3.28E-08 | 4.38E-06 | PITPNC1 | 26207 | phosphatidylinositol transfer protein cytoplasmic 1 |
| ENSG0000 | 10893.84 | 1.989618 | 0.360133 | 5.524668 | 3.30E-08 | 4.38E-06 | ISLR | 3671 | immunoglobulin superfamily containing leucine rich repeat |
| ENSG0000 | 36.85995 | -6.53792 | 1.183584 | -5.52383 | 3.32E-08 | 4.38E-06 | NA | NA | NA |
| ENSG0000 | 827.9129 | -2.27555 | 0.412174 | -5.52085 | 3.37E-08 | 4.41E-06 | SLC43A3 | 29015 | solute carrier family 43 member 3 |
| ENSG0000 | 20.91888 | -8.49499 | 1.53893 | -5.52006 | 3.39E-08 | 4.41E-06 | SERPINB4 | 6318 | serpin family B member 4 |
| ENSG0000 | 1082.561 | -3.29313 | 0.597199 | -5.51429 | 3.50E-08 | 4.53E-06 | AMPD3 | 272 | adenosine monophosphate deaminase 3 |
| ENSG0000 | 92.78829 | -2.78203 | 0.508223 | -5.47403 | 4.40E-08 | 5.65E-06 | GPR3 | 2827 | G protein-coupled receptor 3 |
| ENSG0000 | 11486.88 | 1.845062 | 0.337169 | 5.472213 | 4.44E-08 | 5.67E-06 | FBLN5 | 10516 | fibulin 5 |
| ENSG0000 | 488.5641 | 5.378301 | 0.983392 | 5.469132 | 4.52E-08 | 5.71E-06 | ECM2 | 1842 | extracellular matrix protein 2 |
| ENSG0000 | 43.98496 | 3.126994 | 0.571813 | 5.468561 | 4.54E-08 | 5.71E-06 | NA | NA | NA |
| ENSG0000 | 15338.22 | 1.782492 | 0.327007 | 5.450922 | 5.01E-08 | 6.27E-06 | MTATP6P | 1.06E+08 | MT-ATP6 pseudogene 1 |
| ENSG0000 | 147.1733 | -4.97263 | 0.913495 | -5.44352 | 5.22E-08 | 6.49E-06 | IL1A | 3552 | interleukin 1 alpha |
| ENSG0000 | 237.2657 | -1.61718 | 0.297185 | -5.44167 | 5.28E-08 | 6.52E-06 | CGAS | 115004 | cyclic GMP-AMP synthase |
| ENSG0000 | 706.2378 | 2.050467 | 0.377284 | 5.434814 | 5.49E-08 | 6.69E-06 | TRIB2 | 28951 | tribbles pseudokinase 2 |
| ENSG0000 | 493.682 | 2.20487 | 0.406262 | 5.427209 | 5.72E-08 | 6.94E-06 | RPS2P55 | 286444 | ribosomal protein S2 pseudogene 55 |
| ENSG0000 | 200.8441 | -6.04468 | 1.114328 | -5.42451 | 5.81E-08 | 7.00E-06 | HERC5 | 51191 | HECT and RLD domain containing E3 ubiquitin protein ligase 5 |
| ENSG0000 | 179.7517 | 7.927756 | 1.465703 | 5.408843 | 6.34E-08 | 7.59E-06 | TRIL | 9865 | TLR4 interactor with leucine rich repeats |
| ENSG0000 | 19.25483 | -6.92244 | 1.282479 | -5.39771 | 6.75E-08 | 7.97E-06 | IVL | 3713 | involucrin |
| ENSG0000 | 966.0746 | -2.9113 | 0.539406 | -5.39724 | 6.77E-08 | 7.97E-06 | PDCD1LG2 | 80380 | programmed cell death 1 ligand 2 |
| ENSG0000 | 74.43011 | 2.217427 | 0.410871 | 5.396898 | 6.78E-08 | 7.97E-06 | RPS2P8 | 440589 | ribosomal protein S2 pseudogene 8 |
| ENSG0000 | 7669.592 | -2.6519 | 0.491944 | -5.39065 | 7.02E-08 | 8.20E-06 | CEP170 | 9859 | centrosomal protein 170 |
| ENSG0000 | 197.0703 | 2.975688 | 0.55303 | 5.380701 | 7.42E-08 | 8.59E-06 | IER5L | 389792 | immediate early response 5 like |
| ENSG0000 | 477.394 | 2.577582 | 0.479128 | 5.379739 | 7.46E-08 | 8.59E-06 | MAB21L1 | 4081 | mab-21 like 1 |
| ENSG0000 | 51606.95 | 1.974446 | 0.367055 | 5.379162 | 7.48E-08 | 8.59E-06 | COX3 | 4514 | cytochrome c oxidase subunit III |
| ENSG0000 | 107.608 | -2.02464 | 0.377574 | -5.36223 | 8.22E-08 | 9.38E-06 | MARCHF3 | 115123 | membrane associated ring-CH-type finger 3 |
| ENSG0000 | 127.4317 | -6.19137 | 1.156604 | -5.35306 | 8.65E-08 | 9.81E-06 | C15orf48 | 84419 | chromosome 15 open reading frame 48 |
| ENSG0000 | 2499.744 | -1.73753 | 0.324869 | -5.3484 | 8.87E-08 | 1.00E-05 | GSTO1 | 9446 | glutathione S-transferase omega 1 |
| ENSG0000 | 186.1033 | -4.38623 | 0.82224 | -5.33449 | 9.58E-08 | 1.07E-05 | PPP4R4 | 57718 | protein phosphatase 4 regulatory subunit 4 |
| ENSG0000 | 155.2325 | -5.05611 | 0.947837 | -5.33437 | 9.59E-08 | 1.07E-05 | ADTRP | 84830 | androgen dependent TFPI regulating protein |
| ENSG0000 | 813.834 | -3.90813 | 0.733674 | -5.3268 | 1.00E-07 | 1.11E-05 | GDNF | 2668 | glial cell derived neurotrophic factor |
| ENSG0000 | 335.5006 | -2.77171 | 0.52062 | -5.32387 | 1.02E-07 | 1.12E-05 | KCNJ15 | 3772 | potassium inwardly rectifying channel subfamily J member 15 |
| ENSG0000 | 1445.491 | -1.82726 | 0.343983 | -5.31206 | 1.08E-07 | 1.19E-05 | DUSP10 | 11221 | dual specificity phosphatase 10 |
| ENSG0000 | 1468.83 | 6.821042 | 1.286211 | 5.303207 | 1.14E-07 | 1.24E-05 | OLFML2A | 169611 | olfactomedin like 2A |
| ENSG0000 | 36.93723 | -4.25442 | 0.802684 | -5.30025 | 1.16E-07 | 1.25E-05 | TMCC3 | 57458 | transmembrane and coiled-coil domain family 3 |
| ENSG0000 | 277.0177 | 4.028306 | 0.760463 | 5.297175 | 1.18E-07 | 1.27E-05 | BMF | 90427 | Bcl2 modifying factor |
| ENSG0000 | 2438.323 | -2.79465 | 0.527946 | -5.29344 | 1.20E-07 | 1.28E-05 | ITPRIP | 85450 | inositol 1,4,5-trisphosphate receptor interacting protein |
| ENSG0000 | 1049.346 | -5.4755 | 1.034502 | -5.29289 | 1.20E-07 | 1.28E-05 | CXCL2 | 2920 | C-X-C motif chemokine ligand 2 |
| ENSG0000 | 2449.07 | -4.70946 | 0.890289 | -5.28981 | 1.22E-07 | 1.30E-05 | ISG15 | 9636 | ISG15 ubiquitin like modifier |
| ENSG0000 | 974.5155 | -1.80436 | 0.341322 | -5.28637 | 1.25E-07 | 1.32E-05 | IRAK3 | 11213 | interleukin 1 receptor associated kinase 3 |
| ENSG0000 | 221.4948 | -2.14082 | 0.406119 | -5.27139 | 1.35E-07 | 1.41E-05 | NOTCH2N | 388677 | notch 2 N-terminal like A |
| ENSG0000 | 203.2792 | 2.748772 | 0.521494 | 5.270952 | 1.36E-07 | 1.41E-05 | PCDHGA7 | 56108 | protocadherin gamma subfamily A, 7 |
| ENSG0000 | 309.3064 | 2.175202 | 0.415404 | 5.236353 | 1.64E-07 | 1.68E-05 | TSPOAP1 | 9256 | TSPO associated protein 1 |
| ENSG0000 | 213.4245 | 1.628126 | 0.311153 | 5.232553 | 1.67E-07 | 1.71E-05 | OSBPL7 | 114881 | oxysterol binding protein like 7 |
| ENSG0000 | 14673.71 | -3.66303 | 0.700458 | -5.22947 | 1.70E-07 | 1.73E-05 | STC1 | 6781 | stanniocalcin 1 |
| ENSG0000 | 243.9768 | 1.911898 | 0.365763 | 5.227144 | 1.72E-07 | 1.74E-05 | CORO6 | 84940 | coronin 6 |
| ENSG0000 | 44.07743 | 4.304517 | 0.824104 | 5.223268 | 1.76E-07 | 1.77E-05 | LINC00842 | 643650 | long intergenic non-protein coding RNA 842 |
| ENSG0000 | 1771.066 | -4.66208 | 0.895384 | -5.2068 | 1.92E-07 | 1.92E-05 | OAS2 | 4939 | 2'-5'-oligoadenylate synthetase 2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 3183.818 | 2.108196 | 0.405083 | 5.204352 | 1.95E-07 | 1.94E-05 | SSC5D | 284297 | scavenger receptor cysteine rich family member with 5 dom ains |
| ENSG0000 | 1053.543 | -2.35148 | 0.452447 | -5.19725 | 2.02E-07 | 2.00E-05 | FBXO32 | 114907 | F-box protein 32 |
| ENSG0000 | 33.4723 | -7.73193 | 1.490568 | -5.18724 | 2.13E-07 | 2.10E-05 | MUC13 | 56667 | mucin 13, cell surface associated |
| ENSG0000 | 96.03064 | -4.78508 | 0.923046 | -5.18401 | 2.17E-07 | 2.13E-05 | PTPN22 | 26191 | protein tyrosine phosphatase non-receptor type 22 |
| ENSG0000 | 881.8898 | -5.89147 | 1.137604 | -5.17884 | 2.23E-07 | 2.18E-05 | IFI44L | 10964 | interferon induced protein 44 like |
| ENSG0000 | 355.5621 | 3.663582 | 0.708403 | 5.171607 | 2.32E-07 | 2.25E-05 | NA | NA | NA |
| ENSG0000 | 2757.135 | 3.878189 | 0.751944 | 5.157548 | 2.50E-07 | 2.40E-05 | PODN | 127435 | podocan |
| ENSG0000 | 2349.456 | -5.95561 | 1.15476 | -5.15745 | 2.50E-07 | 2.40E-05 | CXCL6 | 6372 | C-X-C motif chemokine ligand 6 |
| ENSG0000 | 165.5569 | 2.775147 | 0.538247 | 5.1559 | 2.52E-07 | 2.41E-05 | LOC72839 | 728392 | uncharacterized LOC728392 |
| ENSG0000 | 84.18152 | -5.50176 | 1.067488 | -5.15394 | 2.55E-07 | 2.43E-05 | NA | NA | NA |
| ENSG0000 | 108.4969 | -7.38842 | 1.43502 | -5.14865 | 2.62E-07 | 2.48E-05 | CCL5 | 6352 | C-C motif chemokine ligand 5 |
| ENSG0000 | 2037.784 | 1.927662 | 0.374452 | 5.147958 | 2.63E-07 | 2.48E-05 | TSHZ1 | 10194 | teashirt zinc finger homeobox 1 |
| ENSG0000 | 207.9726 | -4.54869 | 0.884094 | -5.14503 | 2.67E-07 | 2.51E-05 | ISG20 | 3669 | interferon stimulated exonuclease gene 20 |

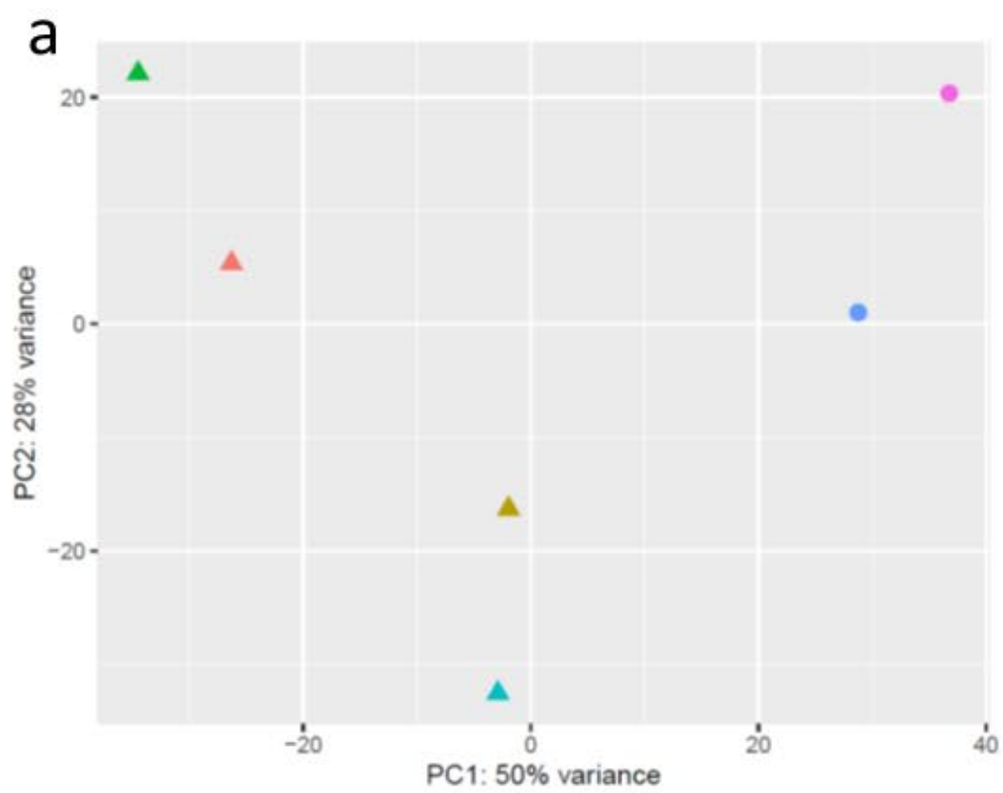
Supp Table 6 DDC and WNT4siRNA vs NS comparison

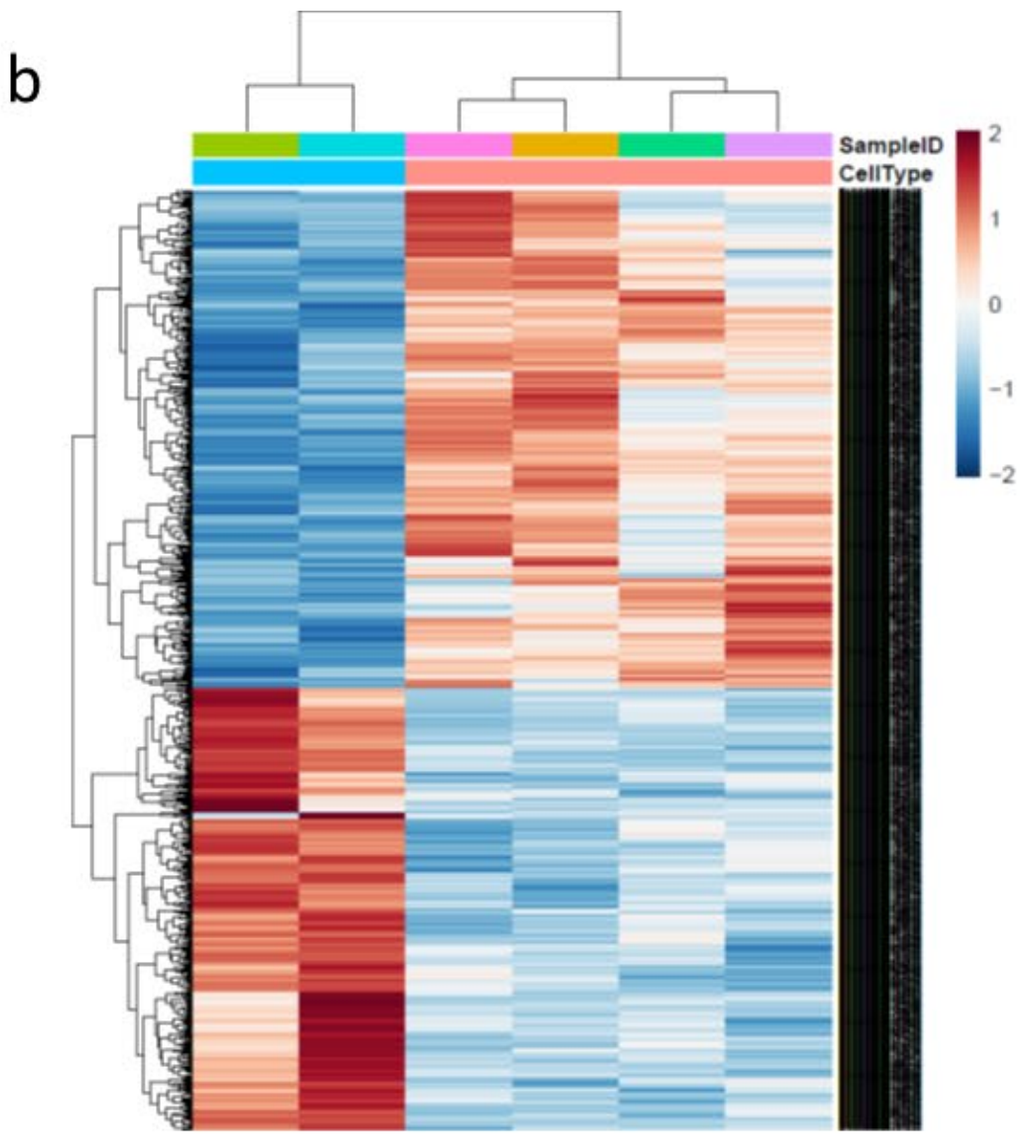
| ENSG | baseMean | log2FoldC | lfcSE | stat | pvalue | padj | symbol | entrez | genename |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 7092.185 | -2.95219 | 0.153863 | -19.1872 | 4.74E-82 | 1.26E-77 | JUND | 3727 | JunD proto-oncogene, AP-1 transcription factor subunit |
| ENSG0000 | 3687.573 | -4.03054 | 0.244854 | -16.461 | 6.99E-61 | 9.33E-57 | PER1 | 5187 | period circadian regulator 1 |
| ENSG0000 | 6660.578 | -2.59509 | 0.16516 | -15.7126 | 1.24E-55 | 1.10E-51 | MIDN | 90007 | midnolin |
| ENSG0000 | 3929.167 | -3.6428 | 0.246894 | -14.7545 | 2.88E-49 | 1.92E-45 | CSRNP1 | 64651 | cysteine and serine rich nuclear protein 1 |
| ENSG0000 | 164.4153 | 6.301101 | 0.448211 | 14.05834 | 6.85E-45 | 3.04E-41 | HOXD10 | 3236 | homeobox D10 |
| ENSG0000 | 5379.871 | -4.79807 | 0.357314 | -13.4281 | 4.14E-41 | 1.58E-37 | HES1 | 3280 | hes family bHLH transcription factor 1 |
| ENSG0000 | 7525.247 | -2.74704 | 0.209049 | -13.1406 | 1.93E-39 | 4.67E-36 | KLF10 | 7071 | KLF transcription factor 10 |
| ENSG0000 | 2252.277 | -3.32323 | 0.255814 | -12.9908 | 1.38E-38 | 3.07E-35 | NA | NA | NA |
| ENSG0000 | 2253.087 | 1.924225 | 0.151369 | 12.71213 | 5.06E-37 | 9.65E-34 | SH3KBP1 | 30011 | SH3 domain containing kinase binding protein 1 |
| ENSG0000 | 462.3468 | 1.917948 | 0.152885 | 12.54504 | 4.23E-36 | 7.53E-33 | MRTFB | 57496 | myocardin related transcription factor B |
| ENSG0000 | 253.6934 | 1.568032 | 0.125943 | 12.45037 | 1.39E-35 | 2.32E-32 | GSPT2 | 23708 | G1 to S phase transition 2 |
| ENSG0000 | 11579.98 | -4.92605 | 0.39709 | -12.4054 | 2.44E-35 | 3.84E-32 | BHLHE40 | 8553 | basic helix-loop-helix family member e40 |
| ENSG0000 | 46.20752 | -4.97305 | 0.404546 | -12.2929 | 9.89E-35 | 1.32E-31 | HOXC-AS2 | 100874364 | HOXC cluster antisense RNA 2 |
| ENSG0000 | 85.40483 | -4.0215 | 0.329397 | -12.2087 | 2.79E-34 | 3.55E-31 | NA | NA | NA |
| ENSG0000 | 67.24331 | -3.36031 | 0.27655 | -12.1508 | 5.68E-34 | 6.89E-31 | NA | NA | NA |
| ENSG0000 | 85.01013 | -4.01758 | 0.335618 | -11.9707 | 5.06E-33 | 5.87E-30 | NA | NA | NA |
| ENSG0000 | 859.9455 | 1.800857 | 0.152477 | 11.81065 | 3.44E-32 | 3.82E-29 | PPARA | 5465 | peroxisome proliferator activated receptor alpha |
| ENSG0000 | 72.13668 | 5.694354 | 0.482513 | 11.80146 | 3.84E-32 | 4.09E-29 | HOXD11 | 3237 | homeobox D11 |
| ENSG0000 | 8624.911 | 2.331578 | 0.198289 | 11.75846 | 6.39E-32 | 6.56E-29 | CD109 | 135228 | CD109 molecule |
| ENSG0000 | 97.97632 | -10.1206 | 0.862289 | -11.7369 | 8.25E-32 | 8.15E-29 | HOXB8 | 3218 | homeobox B8 |
| ENSG0000 | 220.6859 | -10.3286 | 0.914281 | -11.2969 | 1.36E-29 | 1.25E-26 | HOXB-AS3 | 404266 | HOXB cluster antisense RNA 3 |
| ENSG0000 | 324.6969 | -2.76053 | 0.245187 | -11.2589 | 2.09E-29 | 1.86E-26 | HSD17B14 | 51171 | hydroxysteroid 17-beta dehydrogenase 14 |
| ENSG0000 | 83.61923 | -5.7925 | 0.514721 | -11.2537 | 2.22E-29 | 1.91E-26 | NA | NA | NA |
| ENSG0000 | 247.6473 | 1.655776 | 0.148322 | 11.16341 | 6.16E-29 | 4.98E-26 | KBTBD6 | 89890 | kelch repeat and BTB domain containing 6 |
| ENSG0000 | 1658.007 | -1.66432 | 0.150788 | -11.0375 | 2.52E-28 | 1.98E-25 | NEU1 | 4758 | neuraminidase 1 |
| ENSG0000 | 3454.408 | -3.31453 | 0.300697 | -11.0229 | 2.97E-28 | 2.26E-25 | PIM1 | 5292 | Pim-1 proto-oncogene, serine/threonine kinase |
| ENSG0000 | 3596.02 | 1.868287 | 0.169727 | 11.00757 | 3.51E-28 | 2.60E-25 | PTPN13 | 5783 | protein tyrosine phosphatase non-receptor type 13 |
| ENSG0000 | 87447.84 | -2.33129 | 0.212542 | -10.9686 | 5.41E-28 | 3.90E-25 | ND2 | 4536 | NADH dehydrogenase subunit 2 |
| ENSG0000 | 1253.448 | -4.93851 | 0.451127 | -10.9471 | 6.86E-28 | 4.82E-25 | ATF3 | 467 | activating transcription factor 3 |
| ENSG0000 | 189.2784 | -10.5889 | 0.968528 | -10.9329 | 8.02E-28 | 5.49E-25 | HES5 | 388585 | hes family bHLH transcription factor 5 |
| ENSG0000 | 174.0571 | -9.50512 | 0.878262 | -10.8227 | 2.69E-27 | 1.75E-24 | LEP | 3952 | leptin |
| ENSG0000 | 1110.343 | -3.10203 | 0.288977 | -10.7345 | 7.01E-27 | 4.45E-24 | MAP3K8 | 1326 | mitogen-activated protein kinase kinase kinase 8 |
| ENSG0000 | 215.6158 | 1.723243 | 0.1643 | 10.48841 | 9.77E-26 | 5.43E-23 | PDP2 | 57546 | pyruvate dehydrogenase phosphatase catalytic subunit 2 |
| ENSG0000 | 580.283 | 2.959255 | 0.283089 | 10.45346 | 1.41E-25 | 7.69E-23 | INSYN2B | 100131897 | inhibitory synaptic factor family member 2B |
| ENSG0000 | 86.68672 | -3.8656 | 0.369958 | -10.4487 | 1.48E-25 | 7.83E-23 | NA | NA | NA |
| ENSG0000 | 40066.09 | -2.56735 | 0.246678 | -10.4077 | 2.29E-25 | 1.17E-22 | MTND2P2 | 100652939 | MT-ND2 pseudogene 28 |
| ENSG0000 | 285.2176 | -6.58902 | 0.634827 | -10.3792 | 3.08E-25 | 1.52E-22 | NA | NA | NA |
| ENSG0000 | 96.37068 | -3.82912 | 0.371764 | -10.2999 | 7.06E-25 | 3.36E-22 | NA | NA | NA |
| ENSG0000 | 807.581 | -1.56595 | 0.153543 | -10.1988 | 2.01E-24 | 9.23E-22 | PTS | 5805 | 6-pyruvoyltetrahydropterin  synthase |
| ENSG0000 | 1726.975 | -3.78825 | 0.373999 | -10.129 | 4.11E-24 | 1.83E-21 | TRIB1 | 10221 | tribbles pseudokinase 1 |
| ENSG0000 | 1340.141 | -2.37635 | 0.236935 | -10.0295 | 1.13E-23 | 4.79E-21 | GDPD5 | 81544 | glycerophosphodiester phosphodiesterase domain containing 5 |
| ENSG0000 | 636.5039 | -1.98502 | 0.1982 | -10.0152 | 1.31E-23 | 5.45E-21 | DHRS7B | 25979 | dehydrogenase/reductase 7B |
| ENSG0000 | 241.6855 | -1.76426 | 0.176313 | -10.0064 | 1.43E-23 | 5.86E-21 | NA | NA | NA |
| ENSG0000 | 339.3983 | -4.059 | 0.408942 | -9.92562 | 3.22E-23 | 1.28E-20 | TNFSF9 | 8744 | TNF superfamily member 9 |
| ENSG0000 | 1172.894 | -4.29376 | 0.434961 | -9.87161 | 5.53E-23 | 2.14E-20 | SIK1 | 150094 | salt inducible kinase 1 |
| ENSG0000 | 2575.176 | 2.052588 | 0.208091 | 9.863874 | 5.97E-23 | 2.28E-20 | ITPRID2 | 6744 | ITPR interacting domain containing 2 |
| ENSG0000 | 127548.3 | 1.891958 | 0.193015 | 9.802139 | 1.10E-22 | 4.08E-20 | COL6A3 | 1293 | collagen type VI alpha 3 chain |
| ENSG0000 | 1295.753 | -4.31393 | 0.442368 | -9.7519 | 1.81E-22 | 6.62E-20 | LOC10272 | 102724428 | salt inducible kinase 1B (putative) |
| ENSG0000 | 1408.029 | -1.60236 | 0.164493 | -9.74119 | 2.01E-22 | 7.16E-20 | JMJD6 | 23210 | jumonji domain containing 6, arginine demethylase and lysine hy |
| ENSG0000 | 355.0853 | -5.10984 | 0.527317 | -9.69027 | 3.32E-22 | 1.13E-19 | USP2 | 9099 | ubiquitin specific peptidase 2 |
| ENSG0000 | 111591.1 | -2.36731 | 0.244716 | -9.67367 | 3.90E-22 | 1.32E-19 | CYTB | 4519 | cytochrome b |
| ENSG0000 | 42.4667 | -3.22266 | 0.333905 | -9.65141 | 4.85E-22 | 1.62E-19 | NA | NA | NA |
| ENSG0000 | 2446.155 | -1.67187 | 0.174038 | -9.60631 | 7.52E-22 | 2.47E-19 | DDAH2 | 23564 | dimethylarginine dimethylaminohydrolase 2 |
| ENSG0000 | 1047.191 | 1.655974 | 0.174315 | 9.499873 | 2.10E-21 | 6.60E-19 | TBL1X | 6907 | transducin beta like 1 X-linked |
| ENSG0000 | 554.3629 | -1.62649 | 0.172326 | -9.43846 | 3.78E-21 | 1.17E-18 | ZNF408 | 79797 | zinc finger protein 408 |
| ENSG0000 | 71.81072 | -5.34691 | 0.567053 | -9.4293 | 4.13E-21 | 1.27E-18 | NA | NA | NA |
| ENSG0000 | 126.9158 | -1.62568 | 0.173687 | -9.35984 | 7.99E-21 | 2.34E-18 | ZNF433 | 163059 | zinc finger protein 433 |
| ENSG0000 | 666.0285 | -5.23011 | 0.559046 | -9.35542 | 8.33E-21 | 2.41E-18 | HEY1 | 23462 | hes related family bHLH transcription factor with YRPW motif 1 |
| ENSG0000 | 2055.557 | 14.40432 | 1.541457 | 9.344614 | 9.22E-21 | 2.65E-18 | RPS4Y1 | 6192 | ribosomal protein S4 Y-linked 1 |
| ENSG0000 | 225.8776 | -1.60284 | 0.171632 | -9.33883 | 9.74E-21 | 2.76E-18 | FAM89B | 23625 | family with sequence similarity 89 member B |
| ENSG0000 | 6938.828 | -1.96071 | 0.210065 | -9.33382 | 1.02E-20 | 2.87E-18 | PPP1R15A | 23645 | protein phosphatase 1 regulatory subunit 15A |
| ENSG0000 | 249.9822 | 7.396459 | 0.792883 | 9.328568 | 1.07E-20 | 2.98E-18 | ZFY | 7544 | zinc finger protein Y-linked |
| ENSG0000 | 22442.19 | -1.59892 | 0.171877 | -9.30269 | 1.37E-20 | 3.73E-18 | CDKN1A | 1026 | cyclin dependent kinase inhibitor 1A |
| ENSG0000 | 189.4332 | -3.76859 | 0.407233 | -9.25413 | 2.16E-20 | 5.76E-18 | IDI2-AS1 | 55853 | IDI2 antisense RNA 1 |
| ENSG0000 | 25.62998 | -3.78014 | 0.410549 | -9.20753 | 3.34E-20 | 8.69E-18 | NA | NA | NA |
| ENSG0000 | 393.6198 | 5.885268 | 0.639222 | 9.206922 | 3.36E-20 | 8.69E-18 | HOXA13 | 3209 | homeobox A13 |
| ENSG0000 | 877.6898 | -1.53523 | 0.166869 | -9.20023 | 3.57E-20 | 9.08E-18 | SLC25A25 | 114789 | solute carrier family 25 member 25 |
| ENSG0000 | 494.8073 | 1.680036 | 0.183485 | 9.156237 | 5.37E-20 | 1.34E-17 | CRYBG3 | 131544 | crystallin beta-gamma domain containing 3 |
| ENSG0000 | 11850.54 | -3.83091 | 0.419374 | -9.13481 | 6.55E-20 | 1.62E-17 | GADD45B | 4616 | growth arrest and DNA damage inducible beta |
| ENSG0000 | 22184.14 | -2.17906 | 0.240104 | -9.07547 | 1.13E-19 | 2.77E-17 | ND4L | 4539 | NADH dehydrogenase subunit 4L |
| ENSG0000 | 979.0427 | -1.93446 | 0.213735 | -9.0507 | 1.42E-19 | 3.45E-17 | TMSB4XP4 | 7118 | TMSB4X pseudogene 4 |
| ENSG0000 | 269.2674 | 8.144297 | 0.902521 | 9.023941 | 1.81E-19 | 4.36E-17 | PRKY | 5616 | protein kinase Y-linked (pseudogene) |
| ENSG0000 | 1299.56 | -3.03353 | 0.336351 | -9.01894 | 1.90E-19 | 4.52E-17 | RNA5-8SN | 109910381 | RNA, 5.8S ribosomal N3 |
| ENSG0000 | 103.6433 | 5.765136 | 0.639362 | 9.017016 | 1.93E-19 | 4.56E-17 | GALNT18 | 374378 | polypeptide N-acetylgalactosaminyltransferase 18 |
| ENSG0000 | 1298.936 | -3.03275 | 0.336537 | -9.01165 | 2.03E-19 | 4.75E-17 | RNA5-8SN | 109864281 | RNA, 5.8S ribosomal N2 |
| ENSG0000 | 1298.403 | -3.03383 | 0.337242 | -8.99601 | 2.34E-19 | 5.43E-17 | RNA5-8SN | 106632260 | RNA, 5.8S ribosomal N1 |
| ENSG0000 | 171.548 | 1.621782 | 0.180386 | 8.990602 | 2.46E-19 | 5.61E-17 | ZBTB39 | 9880 | zinc finger and BTB domain containing 39 |
| ENSG0000 | 1297.78 | -3.03305 | 0.337427 | -8.98875 | 2.50E-19 | 5.61E-17 | LOC12490 | 124900510 | 5.8S ribosomal RNA |
| ENSG0000 | 1297.78 | -3.03305 | 0.337427 | -8.98875 | 2.50E-19 | 5.61E-17 | LOC12490 | 124900510 | 5.8S ribosomal RNA |
| ENSG0000 | 1297.78 | -3.03305 | 0.337427 | -8.98875 | 2.50E-19 | 5.61E-17 | RNA5-8SP | 109910384 | RNA, 5.8S ribosomal pseudogene 10 |
| ENSG0000 | 1297.504 | -3.03271 | 0.337489 | -8.98609 | 2.56E-19 | 5.65E-17 | RNA5-8SN | 100008587 | RNA, 5.8S ribosomal N5 |
| ENSG0000 | 1297.504 | -3.03271 | 0.337489 | -8.98609 | 2.56E-19 | 5.65E-17 | RNA5-8SN | 109864274 | RNA, 5.8S ribosomal N4 |

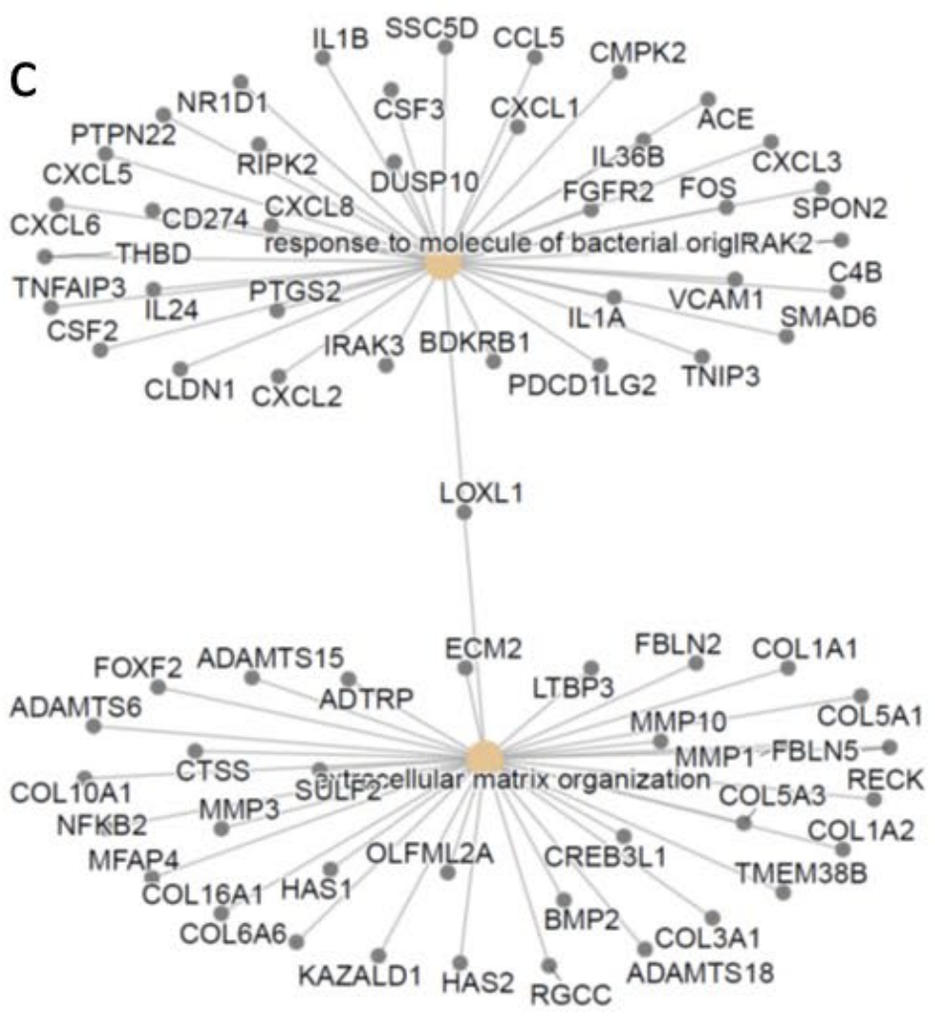
roxylase

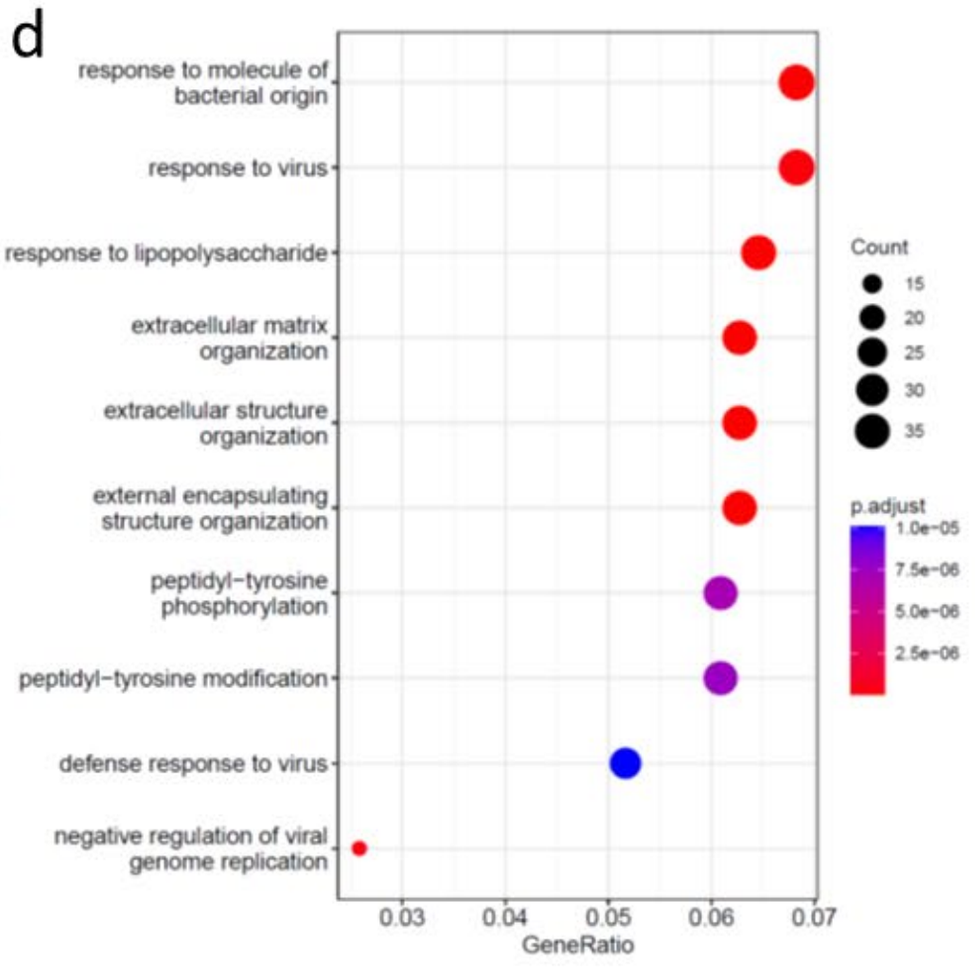
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 502.2939 | -3.58579 | 0.39921 | -8.98221 | 2.65E-19 | 5.80E-17 | CHRD | 8646 | chordin |
| ENSG0000 | 955.0993 | 1.501076 | 0.168926 | 8.885997 | 6.34E-19 | 1.33E-16 | GTF3C4 | 9329 | general transcription factor IIIC subunit 4 |
| ENSG0000 | 26.6834 | -5.35569 | 0.604877 | -8.85417 | 8.43E-19 | 1.74E-16 | LOC10537 | 105370047 | uncharacterized LOC105370047 |
| ENSG0000 | 96.9312 | -2.7406 | 0.309588 | -8.85242 | 8.56E-19 | 1.76E-16 | CD14 | 929 | CD14 molecule |
| ENSG0000 | 1529.119 | -2.69878 | 0.30514 | -8.8444 | 9.20E-19 | 1.87E-16 | CLCF1 | 23529 | cardiotrophin like cytokine factor 1 |
| ENSG0000 | 2444.189 | 2.117748 | 0.240581 | 8.802636 | 1.34E-18 | 2.70E-16 | SYNJ2 | 8871 | synaptojanin 2 |
| ENSG0000 | 758.1371 | 1.622454 | 0.185227 | 8.759251 | 1.97E-18 | 3.88E-16 | ASAP2 | 8853 | ArfGAP with SH3 domain, ankyrin repeat and PH domain 2 |
| ENSG0000 | 73171.24 | -2.28385 | 0.261804 | -8.72353 | 2.70E-18 | 5.29E-16 | ND1 | 4535 | NADH dehydrogenase subunit 1 |
| ENSG0000 | 65.49598 | 5.63471 | 0.646954 | 8.709593 | 3.05E-18 | 5.85E-16 | GALNT14 | 79623 | polypeptide N-acetylgalactosaminyltransferase 14 |
| ENSG0000 | 45.99147 | 1.892202 | 0.21751 | 8.699372 | 3.34E-18 | 6.32E-16 | NA | NA | NA |
| ENSG0000 | 316.7845 | 4.809651 | 0.5535 | 8.68952 | 3.64E-18 | 6.84E-16 | AFF2 | 2334 | ALF transcription elongation factor 2 |
| ENSG0000 | 482.1564 | -3.93787 | 0.454853 | -8.65745 | 4.82E-18 | 8.88E-16 | RRAD | 6236 | RRAD, Ras related glycolysis inhibitor and calcium channel regulat or |
| ENSG0000 | 26.13387 | 8.109467 | 0.937493 | 8.650162 | 5.14E-18 | 9.40E-16 | HOXD13 | 3239 | homeobox D13 |
| ENSG0000 | 76.18241 | -3.62983 | 0.421711 | -8.60738 | 7.48E-18 | 1.33E-15 | SEMA6A | 57556 | semaphorin 6A |
| ENSG0000 | 141.955 | 2.397848 | 0.278877 | 8.598222 | 8.10E-18 | 1.43E-15 | PM20D2 | 135293 | peptidase M20 domain containing 2 |
| ENSG0000 | 9867.907 | -2.13242 | 0.248227 | -8.59058 | 8.65E-18 | 1.52E-15 | MTND1P2 | 100887749 | MT-ND1 pseudogene 23 |
| ENSG0000 | 24.16245 | -3.41638 | 0.398603 | -8.57087 | 1.03E-17 | 1.78E-15 | CCDC148 | 130940 | coiled-coil domain containing 148 |
| ENSG0000 | 1159.25 | -2.26773 | 0.265175 | -8.55182 | 1.21E-17 | 2.07E-15 | NA | NA | NA |
| ENSG0000 | 1010.053 | 1.61258 | 0.188906 | 8.536428 | 1.38E-17 | 2.34E-15 | ASXL2 | 55252 | ASXL transcriptional regulator 2 |
| ENSG0000 | 53.22622 | 4.181076 | 0.491348 | 8.509397 | 1.75E-17 | 2.90E-15 | FRMD3 | 257019 | FERM domain containing 3 |
| ENSG0000 | 1096.429 | -1.73534 | 0.204497 | -8.4859 | 2.14E-17 | 3.46E-15 | CASTOR2 | 729438 | cytosolic arginine sensor for mTORC1 subunit 2 |
| ENSG0000 | 37.33692 | 1.958221 | 0.230817 | 8.483854 | 2.18E-17 | 3.48E-15 | RPL7L1P8 | 402152 | ribosomal protein L7 like 1 pseudogene 8 |
| ENSG0000 | 923.4151 | 2.354164 | 0.27834 | 8.457885 | 2.72E-17 | 4.28E-15 | TBX5-AS1 | 255480 | TBX5 antisense RNA 1 |
| ENSG0000 | 29599.82 | -5.7782 | 0.683176 | -8.45784 | 2.72E-17 | 4.28E-15 | FOSB | 2354 | FosB proto-oncogene, AP-1 transcription factor subunit |
| ENSG0000 | 65.76035 | -5.26009 | 0.624112 | -8.42812 | 3.51E-17 | 5.48E-15 | HOXC-AS1 | 100874363 | HOXC cluster antisense RNA 1 |
| ENSG0000 | 79.50866 | 3.77575 | 0.448174 | 8.424745 | 3.62E-17 | 5.61E-15 | ICAM5 | 7087 | intercellular adhesion molecule 5 |
| ENSG0000 | 1595.657 | -3.21939 | 0.384193 | -8.37961 | 5.31E-17 | 8.01E-15 | PLAC9 | 219348 | placenta associated 9 |
| ENSG0000 | 698.2541 | 2.240252 | 0.267664 | 8.369642 | 5.78E-17 | 8.66E-15 | NHSL2 | 340527 | NHS like 2 |
| ENSG0000 | 121.4218 | -1.58494 | 0.189599 | -8.35944 | 6.30E-17 | 9.39E-15 | C4orf48 | 401115 | chromosome 4 open reading frame 48 |
| ENSG0000 | 5752.596 | -2.60995 | 0.312699 | -8.34651 | 7.03E-17 | 1.04E-14 | INSIG1 | 3638 | insulin induced gene 1 |
| ENSG0000 | 293.5769 | 1.743462 | 0.208962 | 8.343448 | 7.22E-17 | 1.06E-14 | PTER | 9317 | phosphotriesterase related |
| ENSG0000 | 459.965 | 3.673196 | 0.440509 | 8.338527 | 7.52E-17 | 1.10E-14 | UBASH3B | 84959 | ubiquitin associated and SH3 domain containing B |
| ENSG0000 | 280.7702 | 6.379967 | 0.765482 | 8.33458 | 7.78E-17 | 1.13E-14 | VAT1L | 57687 | vesicle amine transport 1 like |
| ENSG0000 | 391.9776 | -2.3091 | 0.277797 | -8.31218 | 9.40E-17 | 1.36E-14 | NA | NA | NA |
| ENSG0000 | 205.7029 | 2.41698 | 0.291569 | 8.289569 | 1.14E-16 | 1.62E-14 | RHOU | 58480 | ras homolog family member U |
| ENSG0000 | 341.4118 | -4.16787 | 0.504594 | -8.25984 | 1.46E-16 | 2.03E-14 | TBX1 | 6899 | T-box transcription factor 1 |
| ENSG0000 | 1172.414 | 1.838384 | 0.222711 | 8.254581 | 1.52E-16 | 2.11E-14 | PPP2R3A | 5523 | protein phosphatase 2 regulatory subunit B''alpha |
| ENSG0000 | 58.4698 | 2.415476 | 0.292845 | 8.248297 | 1.61E-16 | 2.18E-14 | ZNF543 | 125919 | zinc finger protein 543 |
| ENSG0000 | 374.3433 | 2.615238 | 0.318483 | 8.211559 | 2.18E-16 | 2.91E-14 | SIX4 | 51804 | SIX homeobox 4 |
| ENSG0000 | 75.50882 | -2.17535 | 0.26517 | -8.20361 | 2.33E-16 | 3.07E-14 | GASK1B-A | 285505 | GASK1B antisense RNA 1 |
| ENSG0000 | 488.4314 | 1.678629 | 0.205373 | 8.173546 | 2.99E-16 | 3.86E-14 | GCC1 | 79571 | GRIP and coiled-coil domain containing 1 |
| ENSG0000 | 1076.812 | 1.500651 | 0.183659 | 8.170836 | 3.06E-16 | 3.93E-14 | PTGR3 | 284273 | prostaglandin reductase 3 |
| ENSG0000 | 728.4688 | -5.40283 | 0.662507 | -8.15513 | 3.49E-16 | 4.43E-14 | INMT | 11185 | indolethylamine N-methyltransferase |
| ENSG0000 | 66.55601 | -2.59048 | 0.318479 | -8.1339 | 4.16E-16 | 5.16E-14 | NA | NA | NA |
| ENSG0000 | 76.82237 | -9.28712 | 1.14574 | -8.10578 | 5.24E-16 | 6.47E-14 | CAPN6 | 827 | calpain 6 |
| ENSG0000 | 38.46636 | 4.21863 | 0.520827 | 8.099872 | 5.50E-16 | 6.76E-14 | SORL1 | 6653 | sortilin related receptor 1 |
| ENSG0000 | 25745.23 | -3.5284 | 0.436234 | -8.08831 | 6.05E-16 | 7.37E-14 | ZFP36 | 7538 | ZFP36 ring finger protein |
| ENSG0000 | 233.5962 | -3.68558 | 0.456741 | -8.06929 | 7.07E-16 | 8.54E-14 | LIMS3 | 96626 | LIM zinc finger domain containing 3 |
| ENSG0000 | 855.618 | 1.585005 | 0.196793 | 8.054179 | 8.00E-16 | 9.62E-14 | UBE4A | 9354 | ubiquitination factor E4A |
| ENSG0000 | 195.4302 | 1.50464 | 0.186926 | 8.049372 | 8.32E-16 | 9.96E-14 | ZNF780A | 284323 | zinc finger protein 780A |
| ENSG0000 | 50.068 | -3.40878 | 0.42448 | -8.03048 | 9.71E-16 | 1.15E-13 | IL20RA | 53832 | interleukin 20 receptor subunit alpha |
| ENSG0000 | 36.93249 | -4.71987 | 0.58826 | -8.02343 | 1.03E-15 | 1.21E-13 | ITIH3 | 3699 | inter-alpha-trypsin inhibitor heavy chain 3 |
| ENSG0000 | 3155.176 | -2.58825 | 0.323525 | -8.00016 | 1.24E-15 | 1.45E-13 | IDI1 | 3422 | isopentenyl-diphosphate delta isomerase 1 |
| ENSG0000 | 452.9632 | 1.511538 | 0.189098 | 7.99343 | 1.31E-15 | 1.53E-13 | HMG20A | 10363 | high mobility group 20A |
| ENSG0000 | 24.80366 | -6.27338 | 0.786837 | -7.97291 | 1.55E-15 | 1.77E-13 | NA | NA | NA |
| ENSG0000 | 1495.734 | 3.284871 | 0.412781 | 7.957894 | 1.75E-15 | 1.98E-13 | CA12 | 771 | carbonic anhydrase 12 |
| ENSG0000 | 1262.082 | 2.874779 | 0.361969 | 7.942061 | 1.99E-15 | 2.22E-13 | EHD3 | 30845 | EH domain containing 3 |
| ENSG0000 | 92.19252 | 2.035511 | 0.256474 | 7.936506 | 2.08E-15 | 2.30E-13 | ZNF501 | 115560 | zinc finger protein 501 |
| ENSG0000 | 38.7552 | -5.32841 | 0.672099 | -7.92802 | 2.23E-15 | 2.46E-13 | NA | NA | NA |
| ENSG0000 | 158.6501 | 9.745303 | 1.230309 | 7.921019 | 2.36E-15 | 2.58E-13 | EIF1AY | 9086 | eukaryotic translation initiation factor 1A Y-linked |
| ENSG0000 | 396.0662 | -2.9069 | 0.367142 | -7.91765 | 2.42E-15 | 2.64E-13 | CDKN1C | 1028 | cyclin dependent kinase inhibitor 1C |
| ENSG0000 | 70.18285 | -3.03033 | 0.383518 | -7.9014 | 2.76E-15 | 2.96E-13 | ATP6V1FN | 100130705 | ATP6V1F neighbor |
| ENSG0000 | 1662.764 | -2.32073 | 0.294239 | -7.88722 | 3.09E-15 | 3.30E-13 | KCNE4 | 23704 | potassium voltage-gated channel subfamily E regulatory subunit 4 |
| ENSG0000 | 1387.29 | -1.97461 | 0.250502 | -7.88262 | 3.21E-15 | 3.41E-13 | PLK3 | 1263 | polo like kinase 3 |
| ENSG0000 | 108.6193 | 2.009315 | 0.255325 | 7.869641 | 3.56E-15 | 3.77E-13 | SUPT16HP | 400011 | SPT16 homolog, facilitates chromatin remodeling subunit pseudo gene 1 |
| ENSG0000 | 226.3886 | -3.69663 | 0.469841 | -7.86784 | 3.61E-15 | 3.81E-13 | LIMS4 | 100288695 | LIM zinc finger domain containing 4 |
| ENSG0000 | 4338.137 | -2.43188 | 0.309606 | -7.85476 | 4.01E-15 | 4.17E-13 | SAT1 | 6303 | spermidine/spermine N1-acetyltransferase 1 |
| ENSG0000 | 80.29728 | 3.980059 | 0.506772 | 7.853746 | 4.04E-15 | 4.19E-13 | CDCA7 | 83879 | cell division cycle associated 7 |
| ENSG0000 | 25.72405 | -5.73831 | 0.731238 | -7.84739 | 4.25E-15 | 4.38E-13 | NA | NA | NA |
| ENSG0000 | 120.4304 | -1.80974 | 0.231031 | -7.83331 | 4.75E-15 | 4.86E-13 | ZNF682 | 91120 | zinc finger protein 682 |
| ENSG0000 | 1004.733 | -1.52499 | 0.195109 | -7.81612 | 5.45E-15 | 5.53E-13 | ARL4D | 379 | ADP ribosylation factor like GTPase 4D |
| ENSG0000 | 362.4217 | 2.38233 | 0.305558 | 7.796661 | 6.36E-15 | 6.38E-13 | FRMD4A | 55691 | FERM domain containing 4A |
| ENSG0000 | 270.048 | 1.669865 | 0.214203 | 7.795717 | 6.40E-15 | 6.40E-13 | CSNK2A3 | 283106 | casein kinase 2 alpha 3 |
| ENSG0000 | 50.48811 | -3.95574 | 0.508251 | -7.78303 | 7.08E-15 | 7.00E-13 | NA | NA | NA |
| ENSG0000 | 842.7186 | 10.43356 | 1.341132 | 7.779665 | 7.27E-15 | 7.16E-13 | DDX3Y | 8653 | DEAD-box helicase 3 Y-linked |
| ENSG0000 | 34.04279 | -3.83835 | 0.493865 | -7.77206 | 7.72E-15 | 7.55E-13 | NA | NA | NA |
| ENSG0000 | 33.59549 | 1.893819 | 0.243892 | 7.764976 | 8.17E-15 | 7.95E-13 | RPL7L1P9 | 100128899 | ribosomal protein L7 like 1 pseudogene 9 |
| ENSG0000 | 350.8249 | -3.71987 | 0.479689 | -7.75476 | 8.85E-15 | 8.56E-13 | EML6 | 400954 | EMAP like 6 |
| ENSG0000 | 113.8876 | 1.513447 | 0.195806 | 7.729303 | 1.08E-14 | 1.03E-12 | SARM1 | 23098 | sterile alpha and TIR motif containing 1 |
| ENSG0000 | 138440.6 | -1.94644 | 0.25215 | -7.71935 | 1.17E-14 | 1.09E-12 | MTCO1P1 | 107075141 | MT-CO1 pseudogene 12 |
| ENSG0000 | 71.83479 | 1.579016 | 0.204708 | 7.713505 | 1.22E-14 | 1.14E-12 | LINC02987 | 101927151 | long intergenic non-protein coding RNA 2987 |
| ENSG0000 | 111.4915 | -4.75875 | 0.617037 | -7.71225 | 1.24E-14 | 1.15E-12 | EXPH5 | 23086 | exophilin 5 |
| ENSG0000 | 583.0137 | -4.50554 | 0.584917 | -7.70287 | 1.33E-14 | 1.22E-12 | ABCA10 | 10349 | ATP binding cassette subfamily A member 10 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENSG0000 | 1021.71 | -5.41592 | 0.704335 | -7.68941 | 1.48E-14 | 1.36E-12 | FABP3 | 2170 | fatty acid binding protein 3 |
| ENSG0000 | 2512.268 | 5.031316 | 0.656509 | 7.663744 | 1.81E-14 | 1.62E-12 | ENPP1 | 5167 | ectonucleotide pyrophosphatase/phosphodiesterase 1 |
| ENSG0000 | 175.1274 | 2.328193 | 0.303895 | 7.661165 | 1.84E-14 | 1.65E-12 | MBNL3 | 55796 | muscleblind like splicing regulator 3 |
| ENSG0000 | 196797.3 | -1.985 | 0.259341 | -7.65402 | 1.95E-14 | 1.73E-12 | ND4 | 4538 | NADH dehydrogenase subunit 4 |
| ENSG0000 | 46.81836 | -1.64439 | 0.21501 | -7.64795 | 2.04E-14 | 1.80E-12 | ATP6AP1- | 158960 | ATP6AP1 divergent transcript |
| ENSG0000 | 75.6988 | -4.76642 | 0.62364 | -7.6429 | 2.12E-14 | 1.85E-12 | TMEM88 | 92162 | transmembrane protein 88 |
| ENSG0000 | 517.4082 | 2.660464 | 0.348417 | 7.635868 | 2.24E-14 | 1.94E-12 | THSD4 | 79875 | thrombospondin type 1 domain containing 4 |
| ENSG0000 | 57.43588 | 4.468204 | 0.585473 | 7.63179 | 2.32E-14 | 1.99E-12 | NA | NA | NA |
| ENSG0000 | 45.33787 | -4.60448 | 0.603406 | -7.63081 | 2.33E-14 | 2.00E-12 | NA | NA | NA |
| ENSG0000 | 69.98122 | -2.33145 | 0.305848 | -7.62292 | 2.48E-14 | 2.12E-12 | NA | NA | NA |
| ENSG0000 | 42.17259 | -1.79207 | 0.236563 | -7.57543 | 3.58E-14 | 3.01E-12 | NA | NA | NA |
| ENSG0000 | 40.06613 | 2.333696 | 0.308159 | 7.573023 | 3.65E-14 | 3.06E-12 | MAP10 | 54627 | microtubule associated protein 10 |
| ENSG0000 | 32.12284 | -2.69676 | 0.356154 | -7.57188 | 3.68E-14 | 3.07E-12 | NA | NA | NA |
| ENSG0000 | 49.14957 | 9.01836 | 1.191069 | 7.571654 | 3.69E-14 | 3.07E-12 | NA | NA | NA |
| ENSG0000 | 95.99523 | 8.543133 | 1.130256 | 7.558583 | 4.07E-14 | 3.38E-12 | SHOX | 6473 | short stature homeobox |
| ENSG0000 | 235.5587 | 2.447341 | 0.324015 | 7.553168 | 4.25E-14 | 3.50E-12 | CNIH3 | 149111 | cornichon family AMPA receptor auxiliary protein 3 |
| ENSG0000 | 53.93909 | -7.80817 | 1.034709 | -7.54625 | 4.48E-14 | 3.66E-12 | NPNT | 255743 | nephronectin |
| ENSG0000 | 6411.784 | -2.23815 | 0.29661 | -7.54576 | 4.50E-14 | 3.66E-12 | CCNL1 | 57018 | cyclin L1 |
| ENSG0000 | 23.86668 | -3.47719 | 0.461035 | -7.54213 | 4.62E-14 | 3.74E-12 | FLJ12825 | 440101 | uncharacterized LOC440101 |
| ENSG0000 | 20.54272 | -4.22768 | 0.560646 | -7.54073 | 4.67E-14 | 3.76E-12 | NA | NA | NA |
| ENSG0000 | 376.4658 | -1.6855 | 0.22357 | -7.53905 | 4.73E-14 | 3.79E-12 | INTS6L | 203522 | integrator complex subunit 6 like |
| ENSG0000 | 70.35851 | 1.763044 | 0.234265 | 7.525847 | 5.24E-14 | 4.17E-12 | NA | NA | NA |
| ENSG0000 | 417249 | -1.95067 | 0.259456 | -7.51831 | 5.55E-14 | 4.37E-12 | COX1 | 4512 | cytochrome c oxidase subunit I |
| ENSG0000 | 261.196 | 1.708592 | 0.227848 | 7.498828 | 6.44E-14 | 5.05E-12 | ZBTB6 | 10773 | zinc finger and BTB domain containing 6 |
| ENSG0000 | 46.21098 | 1.947751 | 0.260064 | 7.489517 | 6.91E-14 | 5.39E-12 | NA | NA | NA |
| ENSG0000 | 2768.068 | -3.19402 | 0.42661 | -7.48697 | 7.05E-14 | 5.48E-12 | ZC3H12A | 80149 | zinc finger CCCH-type containing 12A |
| ENSG0000 | 23.09838 | -3.31275 | 0.442513 | -7.48622 | 7.09E-14 | 5.48E-12 | SLC52A1 | 55065 | solute carrier family 52 member 1 |
| ENSG0000 | 670.1142 | -2.74418 | 0.366604 | -7.48541 | 7.13E-14 | 5.50E-12 | RASD1 | 51655 | ras related dexamethasone induced 1 |
| ENSG0000 | 160.75 | 1.798934 | 0.241361 | 7.453289 | 9.10E-14 | 6.84E-12 | NA | NA | NA |
| ENSG0000 | 1137.111 | 1.777016 | 0.23851 | 7.450502 | 9.30E-14 | 6.97E-12 | SYT11 | 23208 | synaptotagmin 11 |
| ENSG0000 | 454.2461 | -2.23233 | 0.299989 | -7.44136 | 9.97E-14 | 7.45E-12 | SLC19A2 | 10560 | solute carrier family 19 member 2 |
| ENSG0000 | 575.7942 | 2.457668 | 0.331007 | 7.424833 | 1.13E-13 | 8.37E-12 | ZNF770 | 54989 | zinc finger protein 770 |
| ENSG0000 | 1346.564 | 2.552883 | 0.343988 | 7.421423 | 1.16E-13 | 8.54E-12 | ZNF281 | 23528 | zinc finger protein 281 |
| ENSG0000 | 572.4333 | 10.36745 | 1.397806 | 7.416948 | 1.20E-13 | 8.81E-12 | USP9Y | 8287 | ubiquitin specific peptidase 9 Y-linked |




*Supp Figure 1.* **Differentially expressed genes identified in Dupuytren disease cord fibroblasts compared to WNT4scrambledsiRNA.** (A) PCA analysis of the DDC fibroblasts and ScramsiRNA (triangle is DDC, circle is ScramsiRNA). (B) Heatmap showing clustering of significantly differentially expressed genes in DDC (cream) vs ScramsiRNA (blue) fibroblasts. (C) Concept network plot representing the expression of genes from functional categories associated with extracellular matrix. The selected genes were identified based on GO analysis. (D) GO analysis identified over-representative GO terms for the DEGs in treated fibroblasts. The top 10 significantly enriched GO terms in the biological pathway are shown and include extracellular matrix and structure and organization.