

Figure S1. Locomotor behavior of sham and SNI mice 2 months after surgery. Locomotor habituation was assessed for one hour in mice 2 months after SNI or sham surgery. N = 5 per group, Data are expressed as mean \pm SEM.

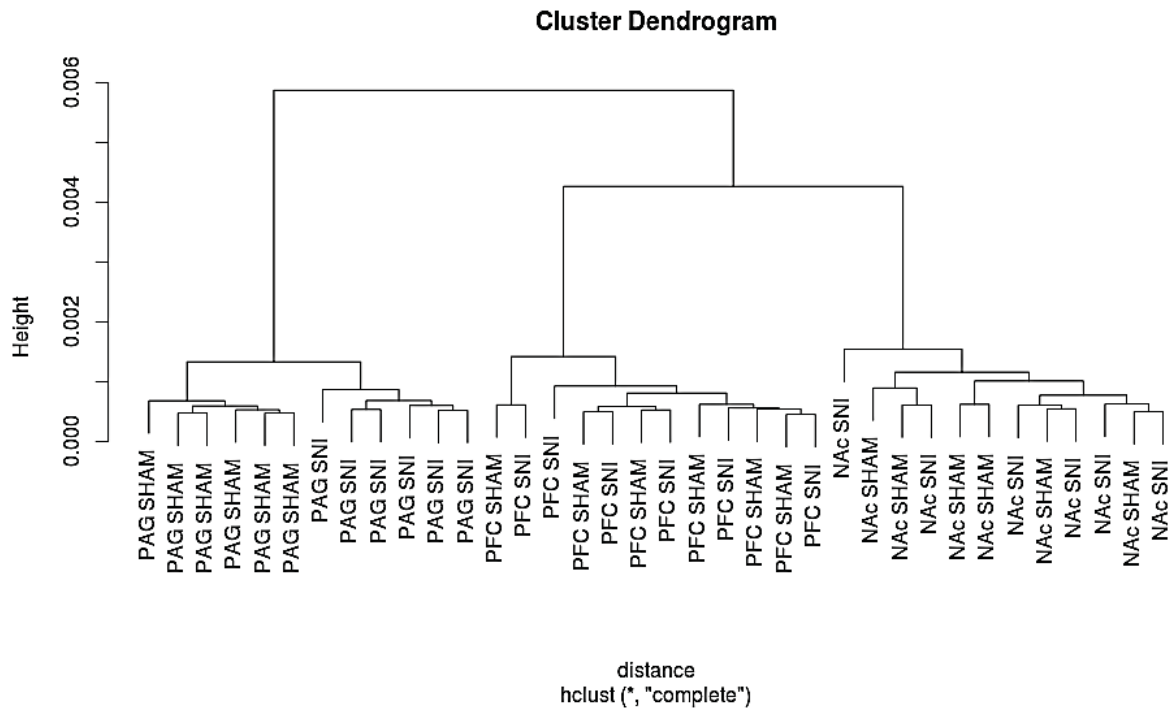


Figure S2. Column dendrogram for all three brain regions. Hierarchical clustering of gene expression profiles as determined through Pearson correlation coefficients. The arrangements of the clades indicate that gene patterns clustered uniquely for each brain region. Gene expression patterns in the PAG and NAc showed the most robust differences between sham and SNI treated mice, whilst DE genes in the mPFC showed greater similarity between groups.

Table S1. Differentially expressed genes in the mPFC, NAc, and PAG of SNI mice. Complete list of DE genes that showed FC of 1.50 or greater in the mPFC, NAc, and PAG of SNI mice.

| mPFC | external_gene_id | log2FC | FC | AveExpr | P.Value |
|-----------------------|------------------|----------|----------|----------|----------|
| ENSMUSG00000058626.10 | Capn11 | 2.351805 | 5.104625 | 0.328104 | 0.002263 |
| ENSMUSG00000034641.2 | Cd300ld | 1.575531 | 2.980451 | -3.82159 | 0.016193 |
| ENSMUSG00000073125.4 | Xlr3b | 1.385817 | 2.613198 | -0.00093 | 0.042877 |
| ENSMUSG00000037542.7 | Aldh8a1 | 1.159123 | 2.233216 | -3.33632 | 0.008496 |
| ENSMUSG00000075044.5 | Slc22a29 | 1.080023 | 2.11407 | -3.66601 | 0.041185 |
| ENSMUSG00000057836.6 | Xlr3a | 1.020806 | 2.029053 | -1.24965 | 0.02624 |
| ENSMUSG00000028874.8 | Fgr | 1.005971 | 2.008294 | -2.33355 | 0.005461 |
| ENSMUSG00000004709.9 | Cd244 | 0.960003 | 1.945314 | -3.53597 | 0.044854 |
| ENSMUSG00000073492.2 | Gm10521 | 0.955432 | 1.93916 | -2.23007 | 0.001711 |
| ENSMUSG00000058443.4 | Rpl10-ps3 | 0.940412 | 1.919076 | -2.2514 | 0.002408 |
| ENSMUSG00000025091.3 | Pnliprp2 | 0.888817 | 1.851657 | -3.04778 | 0.004311 |
| ENSMUSG00000026358.7 | Rgs1 | 0.848096 | 1.800123 | -3.52889 | 0.03282 |
| ENSMUSG00000009248.5 | Ascl2 | 0.845636 | 1.797056 | -3.5554 | 0.04076 |
| ENSMUSG00000034205.10 | Loxl2 | 0.840834 | 1.791085 | -3.42598 | 0.050171 |
| ENSMUSG00000024379.3 | Tslp | 0.838597 | 1.78831 | -3.23299 | 0.04375 |
| ENSMUSG00000034829.7 | Nxn1 | 0.834472 | 1.783205 | -3.43611 | 0.003945 |
| ENSMUSG00000029378.4 | Areg | 0.833684 | 1.782231 | -3.70839 | 0.026322 |
| ENSMUSG00000068079.5 | Tcf15 | 0.832492 | 1.780759 | -2.80007 | 0.047012 |
| ENSMUSG00000073058.2 | Gm10463 | 0.819753 | 1.765103 | -3.00379 | 0.039958 |
| ENSMUSG00000097918.1 | Ascl5 | 0.817028 | 1.761773 | -3.03344 | 0.026308 |
| ENSMUSG00000024027.7 | Glp1r | 0.799404 | 1.740382 | -3.14692 | 0.041238 |
| ENSMUSG00000096169.1 | Gm4461 | 0.752103 | 1.684246 | -3.44562 | 0.03135 |
| ENSMUSG00000032068.8 | 1600029D21Rik | 0.742804 | 1.673425 | -2.67245 | 0.024026 |
| ENSMUSG00000071537.3 | Klrg2 | 0.718675 | 1.64567 | -3.09847 | 0.047156 |
| ENSMUSG00000021678.8 | F2rl1 | 0.718366 | 1.645318 | -2.70261 | 0.036169 |
| ENSMUSG00000021322.7 | Aoah | 0.714788 | 1.641242 | -2.67088 | 0.05236 |
| ENSMUSG00000094686.1 | Ccl21a | 0.709138 | 1.634827 | -2.80128 | 0.026702 |
| ENSMUSG00000032023.7 | 4931429I11Rik | 0.68292 | 1.605386 | -2.6627 | 0.048571 |
| ENSMUSG00000071640.2 | Stxbp3b | 0.679668 | 1.601771 | -2.04222 | 0.016445 |
| ENSMUSG00000047880.8 | Cxcr5 | 0.67216 | 1.593456 | -1.74037 | 0.002517 |
| ENSMUSG00000095315.1 | Gm10130 | 0.67122 | 1.592419 | -2.44533 | 0.028501 |
| ENSMUSG00000021359.9 | Tfap2a | 0.62632 | 1.543623 | -2.67897 | 0.053367 |
| ENSMUSG00000072855.2 | Gm10430 | 0.61595 | 1.532567 | -1.3422 | 0.014923 |
| ENSMUSG00000026271.9 | Gpr35 | 0.614463 | 1.530988 | -1.68488 | 0.033772 |
| ENSMUSG00000085111.2 | Ascl4 | 0.612964 | 1.529398 | -2.3787 | 0.033082 |
| ENSMUSG00000091306.2 | Gm17606 | 0.609744 | 1.525988 | -2.89878 | 0.04194 |
| ENSMUSG00000022061.8 | Nkx3-1 | -0.58902 | 0.664797 | 0.094171 | 0.033358 |
| ENSMUSG00000074647.3 | Fam83c | -0.59185 | 0.66349 | -1.58784 | 0.04273 |
| ENSMUSG00000030351.4 | Tspan11 | -0.59987 | 0.659813 | -0.23996 | 0.036759 |
| ENSMUSG00000035365.9 | Parpbb | -0.60394 | 0.657955 | -0.5154 | 0.016605 |
| ENSMUSG00000091803.1 | Cox16 | -0.60495 | 0.657495 | -0.98243 | 0.040075 |

| | | | | | |
|-----------------------|---------------|----------|----------|----------|----------|
| ENSMUSG00000068259.2 | Olfr461 | -0.62473 | 0.648542 | -3.35448 | 0.045856 |
| ENSMUSG00000050304.2 | Slc25a2 | -0.62586 | 0.648033 | -2.86409 | 0.036708 |
| ENSMUSG00000024190.6 | Dusp1 | -0.6396 | 0.64189 | 4.813289 | 0.018745 |
| ENSMUSG00000006764.8 | Tph2 | -0.65168 | 0.636539 | -0.76439 | 0.006844 |
| ENSMUSG00000051354.7 | Samd3 | -0.66299 | 0.631569 | -1.16193 | 0.011938 |
| ENSMUSG00000032346.7 | Ooep | -0.66301 | 0.631559 | -2.82671 | 0.031915 |
| ENSMUSG00000030433.8 | Sbk2 | -0.6645 | 0.630906 | -2.69586 | 0.036571 |
| ENSMUSG00000027209.11 | Fam227b | -0.66459 | 0.630867 | -2.51995 | 0.014976 |
| ENSMUSG00000095562.1 | Gm21887 | -0.67565 | 0.626052 | -3.19892 | 0.052282 |
| ENSMUSG00000030236.8 | Slco1b2 | -0.67709 | 0.625424 | -2.46616 | 0.020973 |
| ENSMUSG00000027202.6 | Slc12a1 | -0.68592 | 0.62161 | -2.29605 | 0.039184 |
| ENSMUSG00000039321.1 | Uts2r | -0.69258 | 0.618745 | -3.06506 | 0.052595 |
| ENSMUSG00000094595.1 | Fsbp | -0.69455 | 0.617903 | -2.795 | 0.043074 |
| ENSMUSG00000020423.6 | Btg2 | -0.70136 | 0.614992 | 4.115864 | 0.004262 |
| ENSMUSG00000042351.8 | Grap2 | -0.71627 | 0.608668 | -2.73718 | 0.015508 |
| ENSMUSG00000028195.3 | Cyr61 | -0.72537 | 0.604842 | 1.908723 | 0.003363 |
| ENSMUSG00000074643.6 | Cpne1 | -0.74221 | 0.597823 | -1.77271 | 0.023302 |
| ENSMUSG00000074516.5 | Gm10709 | -0.76405 | 0.588839 | -2.66745 | 0.054857 |
| ENSMUSG00000070524.1 | Fcrlb | -0.76603 | 0.588034 | -1.88169 | 0.005902 |
| ENSMUSG00000033182.6 | Kbtbd12 | -0.77328 | 0.585086 | -1.59909 | 0.017463 |
| ENSMUSG00000045903.8 | Npas4 | -0.78842 | 0.578977 | 4.557401 | 0.000687 |
| ENSMUSG00000090369.2 | 4933411K16Rik | -0.78848 | 0.578954 | -2.07343 | 0.019163 |
| ENSMUSG00000043727.5 | F830045P16Rik | -0.79249 | 0.577347 | -2.56954 | 0.003835 |
| ENSMUSG00000074577.3 | Fam65c | -0.80262 | 0.573309 | -2.6608 | 0.039498 |
| ENSMUSG00000066382.3 | lqcf5 | -0.80959 | 0.570545 | -2.74579 | 0.015556 |
| ENSMUSG00000045440.3 | Insm2 | -0.83726 | 0.559705 | -3.55 | 0.034033 |
| ENSMUSG00000031293.7 | Rs1 | -0.84703 | 0.555929 | -2.10951 | 0.021597 |
| ENSMUSG00000008932.9 | Slc1a7 | -0.86524 | 0.548954 | -3.43902 | 0.054956 |
| ENSMUSG00000090843.2 | Gm17673 | -0.87521 | 0.545176 | -3.39576 | 0.016156 |
| ENSMUSG00000040489.5 | Sox30 | -0.8917 | 0.53898 | -2.85099 | 0.023618 |
| ENSMUSG00000025726.5 | Slc28a1 | -0.89811 | 0.536591 | -1.69824 | 0.029293 |
| ENSMUSG00000078452.4 | Raet1d | -0.90232 | 0.535026 | -3.37335 | 0.012521 |
| ENSMUSG00000049709.3 | Nlrp10 | -0.90366 | 0.534527 | -2.91311 | 0.027199 |
| ENSMUSG00000054892.8 | Txk | -0.90668 | 0.53341 | -1.37609 | 0.003092 |
| ENSMUSG00000046085.7 | 4931422A03Rik | -0.91626 | 0.52988 | -1.73092 | 0.004932 |
| ENSMUSG00000043230.2 | Fam124b | -0.93452 | 0.523218 | -3.39321 | 0.038345 |
| ENSMUSG00000073090.3 | Gm7932 | -0.93589 | 0.522721 | -3.28384 | 0.010951 |
| ENSMUSG00000066677.5 | Pydc3 | -0.95663 | 0.515261 | -3.31529 | 0.008909 |
| ENSMUSG00000037005.10 | Xpnpep2 | -0.97244 | 0.509645 | -3.2858 | 0.037065 |
| ENSMUSG00000059408.2 | Mrgprh | -0.9912 | 0.503059 | -3.10393 | 0.007473 |
| ENSMUSG00000042096.9 | Dao | -1.01017 | 0.496487 | -3.2424 | 0.020991 |
| ENSMUSG00000025479.8 | Cyp2e1 | -1.06017 | 0.479575 | -2.58092 | 0.002897 |
| ENSMUSG00000046694.6 | Fam46b | -1.0778 | 0.47375 | -3.04016 | 0.005925 |
| ENSMUSG00000051076.7 | Vtcn1 | -1.09189 | 0.469145 | -2.76325 | 0.05075 |
| ENSMUSG00000047104.4 | Pbp2 | -1.15686 | 0.448489 | -3.50998 | 0.034291 |
| ENSMUSG00000025735.7 | Rhbd11 | -1.32703 | 0.398587 | -3.59175 | 0.040061 |
| ENSMUSG00000039699.7 | Batf2 | -1.36862 | 0.387262 | -2.89847 | 0.001171 |
| ENSMUSG0000000303.6 | Cdhl | -1.38403 | 0.383146 | -2.25625 | 0.034924 |

NAC

| | external_gene_id | log2FC | FC | P.Value |
|-----------------------|------------------|----------|----------|----------|
| ENSMUSG00000058626.10 | Capn11 | 2.468784 | 5.535772 | 0.002433 |
| ENSMUSG00000067768.6 | Xlr4b | 2.187837 | 4.556219 | 0.000611 |
| ENSMUSG00000028362.2 | Tnfsf8 | 1.499404 | 2.82726 | 0.023997 |
| ENSMUSG00000000982.5 | Ccl3 | 1.075569 | 2.107554 | 0.036111 |
| ENSMUSG00000035262.4 | Amh | 0.827586 | 1.774713 | 0.018318 |
| ENSMUSG00000020676.2 | Ccl11 | 0.821185 | 1.766857 | 0.053124 |
| ENSMUSG00000025386.2 | Pde6g | 0.818617 | 1.763714 | 0.007498 |
| ENSMUSG00000058669.7 | Nkx2-9 | 0.793797 | 1.733631 | 0.051756 |
| ENSMUSG00000022218.9 | Tgm1 | 0.782538 | 1.720154 | 0.026583 |
| ENSMUSG00000031493.9 | Ggn | 0.754143 | 1.686629 | 0.031053 |
| ENSMUSG00000027368.6 | Dusp2 | 0.695268 | 1.619185 | 0.004027 |
| ENSMUSG00000020698.5 | Cct6b | 0.668572 | 1.589499 | 0.017126 |
| ENSMUSG00000074529.4 | C330013J21Rik | 0.634029 | 1.551892 | 0.021355 |
| ENSMUSG00000028459.5 | Cd72 | -0.585 | 0.66665 | 0.032348 |
| ENSMUSG00000048520.10 | Fbxl13 | -0.58753 | 0.66548 | 0.047733 |
| ENSMUSG00000028327.8 | 1300002K09Rik | -0.59688 | 0.661181 | 0.049897 |
| ENSMUSG00000028989.3 | Angptl7 | -0.60182 | 0.658923 | 0.009762 |
| ENSMUSG00000046610.8 | Oacyl | -0.60414 | 0.657863 | 0.009653 |
| ENSMUSG00000024209.9 | 1700061G19Rik | -0.60827 | 0.655984 | 0.001405 |
| ENSMUSG00000078160.2 | Gm16503 | -0.62164 | 0.64993 | 0.016894 |
| ENSMUSG00000028369.9 | Svep1 | -0.62459 | 0.648604 | 0.02419 |
| ENSMUSG00000066319.5 | Rtp3 | -0.62731 | 0.64738 | 0.032504 |
| ENSMUSG00000004707.8 | Ly9 | -0.62825 | 0.646963 | 0.041151 |
| ENSMUSG00000068428.6 | Gmnc | -0.63106 | 0.645703 | 0.038795 |
| ENSMUSG00000029299.8 | Abcg3 | -0.63197 | 0.645294 | 0.007088 |
| ENSMUSG00000032346.7 | Ooep | -0.6405 | 0.64149 | 0.023525 |
| ENSMUSG00000079699.2 | Gm6592 | -0.64286 | 0.640444 | 0.006387 |
| ENSMUSG00000028487.12 | Bnc2 | -0.65085 | 0.636907 | 0.048012 |
| ENSMUSG00000007034.9 | Slc44a4 | -0.65391 | 0.635557 | 0.041466 |
| ENSMUSG00000060878.2 | Olfr1420 | -0.66793 | 0.629409 | 0.045377 |
| ENSMUSG00000025983.5 | Ccdc150 | -0.66928 | 0.62882 | 0.02533 |
| ENSMUSG00000031504.5 | Rab20 | -0.67459 | 0.62651 | 0.0317 |
| ENSMUSG00000079362.3 | Gbp6 | -0.6758 | 0.625985 | 0.028605 |
| ENSMUSG00000020185.10 | E2f7 | -0.67901 | 0.624595 | 0.049122 |
| ENSMUSG00000059060.7 | Rad51b | -0.67928 | 0.624475 | 0.044158 |
| ENSMUSG00000035498.9 | Cdcp1 | -0.68159 | 0.623476 | 0.00617 |
| ENSMUSG00000029660.7 | Tex26 | -0.6829 | 0.622911 | 0.029234 |
| ENSMUSG00000021250.7 | Fos | -0.69007 | 0.619824 | 0.018334 |
| ENSMUSG00000021898.8 | Asb14 | -0.69192 | 0.619027 | 0.027464 |
| ENSMUSG00000046794.8 | Ppp1r3b | -0.6967 | 0.616983 | 0.015292 |
| ENSMUSG00000050747.8 | Trim15 | -0.7 | 0.615571 | 0.003827 |
| ENSMUSG00000020423.6 | Btg2 | -0.70268 | 0.614431 | 0.000743 |
| ENSMUSG00000027204.7 | Fbn1 | -0.70607 | 0.612986 | 0.001662 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG0000000159.9 | Igsf5 | -0.71187 | 0.610528 | 0.010622 |
| ENSMUSG00000091649.2 | Phf11b | -0.71714 | 0.608301 | 0.043182 |
| ENSMUSG00000050520.4 | Cldn8 | -0.72135 | 0.60653 | 0.037831 |
| ENSMUSG00000022993.6 | 4930415O20Rik | -0.72467 | 0.605135 | 0.0437 |
| ENSMUSG00000029477.8 | Morn3 | -0.72585 | 0.604642 | 0.021086 |
| ENSMUSG00000050195.8 | Scd4 | -0.72639 | 0.604413 | 0.023771 |
| ENSMUSG00000056498.7 | Tmem154 | -0.729 | 0.603322 | 0.0073 |
| ENSMUSG00000089768.2 | Tmsb15b1 | -0.72996 | 0.602922 | 0.012159 |
| ENSMUSG00000027485.9 | Bpifb1 | -0.73223 | 0.601972 | 0.042557 |
| ENSMUSG00000024391.7 | Apom | -0.73702 | 0.599977 | 0.035989 |
| ENSMUSG00000032372.8 | Plscr2 | -0.7404 | 0.598575 | 0.028653 |
| ENSMUSG00000040152.8 | Thbs1 | -0.74221 | 0.597821 | 0.037067 |
| ENSMUSG00000079286.1 | Gm11084 | -0.74295 | 0.597516 | 0.008858 |
| ENSMUSG00000091243.1 | Vgll3 | -0.74335 | 0.597353 | 0.010845 |
| ENSMUSG00000049685.7 | Cyp2g1 | -0.74707 | 0.595811 | 0.030997 |
| ENSMUSG00000056569.4 | Mpz | -0.7514 | 0.594028 | 0.046447 |
| ENSMUSG00000040987.8 | Mill2 | -0.75466 | 0.592687 | 0.00214 |
| ENSMUSG00000031554.11 | Adam5 | -0.75883 | 0.590974 | 0.032935 |
| ENSMUSG00000021322.7 | Aoah | -0.76534 | 0.588313 | 0.012035 |
| ENSMUSG00000096169.1 | Gm4461 | -0.77921 | 0.582684 | 0.023174 |
| ENSMUSG00000048400.6 | Prss54 | -0.78733 | 0.579417 | 0.023405 |
| ENSMUSG00000029685.9 | Asb15 | -0.79988 | 0.574395 | 0.019942 |
| ENSMUSG00000031250.8 | Tnmd | -0.81799 | 0.567233 | 0.044918 |
| ENSMUSG00000090523.2 | Gypc | -0.81823 | 0.567139 | 0.0299 |
| ENSMUSG00000020592.8 | Sdc1 | -0.81956 | 0.566615 | 0.011481 |
| ENSMUSG00000073528.2 | Gm10530 | -0.82304 | 0.565251 | 0.041965 |
| ENSMUSG00000041482.10 | Piezo2 | -0.84751 | 0.555744 | 0.00796 |
| ENSMUSG00000074414.3 | Gm10691 | -0.86139 | 0.550424 | 0.021328 |
| ENSMUSG0000004842.12 | Pou1f1 | -0.86874 | 0.547626 | 0.031685 |
| ENSMUSG00000094832.1 | Gm21846 | -0.87299 | 0.546016 | 0.035004 |
| ENSMUSG00000022129.3 | Dct | -0.88434 | 0.541735 | 0.018281 |
| ENSMUSG00000047518.3 | Slfn1 | -0.90705 | 0.533273 | 0.004705 |
| ENSMUSG00000022945.5 | Chaf1b | -0.91041 | 0.532033 | 0.030699 |
| ENSMUSG00000037167.5 | Spaca5 | -0.91063 | 0.531952 | 0.026001 |
| ENSMUSG00000024134.10 | Six2 | -0.91808 | 0.529212 | 0.048355 |
| ENSMUSG00000068606.5 | Gm4841 | -0.92624 | 0.526228 | 0.004458 |
| ENSMUSG00000043366.7 | Olfr78 | -0.93068 | 0.524611 | 0.009479 |
| ENSMUSG00000025479.8 | Cyp2e1 | -0.93136 | 0.524363 | 0.000845 |
| ENSMUSG00000072812.4 | Ahnak2 | -0.93224 | 0.524043 | 0.017767 |
| ENSMUSG00000096655.1 | 1700065D16Rik | -0.93308 | 0.52374 | 0.035995 |
| ENSMUSG00000072978.2 | Gm5830 | -0.93645 | 0.522516 | 0.045571 |
| ENSMUSG00000051397.4 | Tacstd2 | -0.95524 | 0.515756 | 0.034395 |
| ENSMUSG00000019787.8 | Trdn | -0.96386 | 0.512683 | 0.00305 |
| ENSMUSG00000055555.1 | 4930502E18Rik | -0.97446 | 0.50893 | 0.009944 |
| ENSMUSG00000046908.5 | Ltb4r1 | -0.9753 | 0.508636 | 0.0429 |
| ENSMUSG00000074207.4 | Adh1 | -0.99202 | 0.502772 | 0.022689 |
| ENSMUSG00000024672.5 | Ms4a7 | -1.01927 | 0.493366 | 0.005635 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000070469.5 | Adamtsl3 | -1.03313 | 0.488648 | 0.0205 |
| ENSMUSG00000021867.10 | Tmem254b | -1.05118 | 0.482574 | 0.003287 |
| ENSMUSG00000043003.7 | Rasef | -1.05538 | 0.481171 | 0.007634 |
| ENSMUSG00000051906.8 | Cd209f | -1.06336 | 0.478515 | 0.019525 |
| ENSMUSG00000050612.5 | Txndc2 | -1.07292 | 0.475355 | 0.025864 |
| ENSMUSG00000037440.7 | Vnn1 | -1.07679 | 0.474081 | 0.051531 |
| ENSMUSG00000050010.7 | Shisa3 | -1.08464 | 0.47151 | 0.000244 |
| ENSMUSG00000090942.1 | F830016B08Rik | -1.08863 | 0.470207 | 0.050399 |
| ENSMUSG00000044748.8 | Defb1 | -1.11267 | 0.462437 | 0.01732 |
| ENSMUSG00000042254.8 | Cilp | -1.14667 | 0.451666 | 0.047818 |
| ENSMUSG00000075596.2 | B130006D01Rik | -1.14704 | 0.45155 | 0.028046 |
| ENSMUSG00000019989.7 | Enpp3 | -1.1625 | 0.446737 | 0.02494 |
| ENSMUSG00000045394.8 | Epcam | -1.17939 | 0.441537 | 0.039164 |
| ENSMUSG00000032053.7 | Pou2af1 | -1.20583 | 0.433521 | 0.007214 |
| ENSMUSG00000006574.9 | Slc4a1 | -1.21994 | 0.4293 | 0.03834 |
| ENSMUSG00000071489.1 | Ptgdr | -1.23112 | 0.425987 | 0.01348 |
| ENSMUSG00000047696.10 | Ccdc144b | -1.23406 | 0.425119 | 0.028246 |
| ENSMUSG00000027868.5 | Tbx15 | -1.24192 | 0.42281 | 0.006956 |
| ENSMUSG00000086277.2 | 4930558K02Rik | -1.25293 | 0.419595 | 0.052339 |
| ENSMUSG00000024682.3 | Gif | -1.26139 | 0.417141 | 0.043828 |
| ENSMUSG00000074780.1 | Anapc15-ps | -1.27369 | 0.4136 | 0.004833 |
| ENSMUSG00000026308.8 | Klhl30 | -1.35184 | 0.391793 | 0.0439 |
| ENSMUSG00000004814.7 | Ccl24 | -1.35244 | 0.391629 | 0.043651 |
| ENSMUSG00000079666.2 | 1700015F17Rik | -1.36965 | 0.386986 | 0.003856 |
| ENSMUSG00000090675.1 | Olf111 | -1.38224 | 0.383623 | 0.018533 |
| ENSMUSG00000000673.8 | Haa0 | -1.4242 | 0.372627 | 0.027691 |
| ENSMUSG00000031461.4 | Myom2 | -1.53722 | 0.344549 | 0.016164 |
| ENSMUSG00000000739.7 | Sult5a1 | -1.56601 | 0.337741 | 0.011845 |
| ENSMUSG00000040569.7 | Slc26a7 | -1.66589 | 0.31515 | 0.052087 |
| ENSMUSG00000031491.9 | Chrna6 | -1.69329 | 0.309222 | 0.005918 |
| ENSMUSG00000010122.8 | Slc47a1 | -1.74838 | 0.297636 | 0.044713 |
| ENSMUSG00000053839.1 | Gm9924 | -1.98929 | 0.251862 | 0.023299 |
| ENSMUSG00000032561.8 | Acpp | -2.13722 | 0.227318 | 0.01095 |

PAG

| | external_gene_id | log2FC | FC | P.Value |
|-----------------------|------------------|----------|----------|----------|
| ENSMUSG00000095098.1 | Ccdc85b | 2.373726 | 5.18278 | 1.72E-07 |
| ENSMUSG00000057863.5 | Rpl36 | 2.17968 | 4.530529 | 3.11E-08 |
| ENSMUSG00000044927.5 | H1fx | 2.178735 | 4.527562 | 4.32E-05 |
| ENSMUSG00000042737.3 | Dpm3 | 1.97326 | 3.926543 | 3.29E-07 |
| ENSMUSG00000062933.6 | Gm10123 | 1.96972 | 3.916921 | 2.36E-08 |
| ENSMUSG00000090273.2 | Prr22 | 1.918708 | 3.780844 | 1.9E-06 |
| ENSMUSG00000034686.7 | Prr7 | 1.86193 | 3.634937 | 0.000737 |
| ENSMUSG00000050896.6 | Rtn4rl2 | 1.742154 | 3.345342 | 0.011161 |
| ENSMUSG00000089762.2 | Ier5l | 1.694386 | 3.23639 | 0.013068 |
| ENSMUSG00000096768.1 | Erdr1 | 1.689564 | 3.225593 | 0.000371 |
| ENSMUSG00000039278.10 | Pcsk1n | 1.64862 | 3.135337 | 9.68E-06 |
| ENSMUSG00000031762.6 | Mt2 | 1.64302 | 3.123189 | 2.54E-07 |
| ENSMUSG00000040794.5 | C1qtnf4 | 1.588789 | 3.007969 | 0.000196 |
| ENSMUSG00000051062.5 | Fbll1 | 1.588593 | 3.007558 | 7.43E-08 |
| ENSMUSG00000093803.1 | Ppp2r3d | 1.541041 | 2.910045 | 0.010783 |
| ENSMUSG00000042293.7 | Gm5617 | 1.505598 | 2.839423 | 6.85E-05 |
| ENSMUSG00000023009.8 | Nckap5l | 1.480063 | 2.789609 | 9.15E-08 |
| ENSMUSG00000031765.7 | Mt1 | 1.448893 | 2.729986 | 2.73E-07 |
| ENSMUSG00000020308.5 | Tpgs1 | 1.40992 | 2.657225 | 2.67E-05 |
| ENSMUSG00000058626.10 | Capn11 | 1.380202 | 2.603048 | 0.007258 |
| ENSMUSG00000032997.10 | Chpf | 1.380051 | 2.602776 | 4.69E-07 |
| ENSMUSG00000029163.7 | Emilin1 | 1.370683 | 2.58593 | 4.2E-06 |
| ENSMUSG00000023153.3 | Tmem52 | 1.357026 | 2.561567 | 0.001788 |
| ENSMUSG00000049036.6 | Tmem121 | 1.338503 | 2.528888 | 2.2E-07 |
| ENSMUSG00000070858.5 | Gm1673 | 1.33089 | 2.515579 | 0.000734 |
| ENSMUSG00000047085.8 | Lrrc4b | 1.326416 | 2.507789 | 4.17E-08 |
| ENSMUSG00000075227.5 | Znhit2 | 1.316832 | 2.491184 | 6.55E-08 |
| ENSMUSG00000020153.8 | Ndufs7 | 1.290091 | 2.445434 | 3.06E-08 |
| ENSMUSG00000034892.8 | Rps29 | 1.284882 | 2.436621 | 1.79E-09 |
| ENSMUSG00000071230.4 | Npw | 1.277202 | 2.423684 | 0.010115 |
| ENSMUSG00000094035.1 | Ldlrad2 | 1.276766 | 2.422952 | 4.97E-05 |
| ENSMUSG00000034041.4 | Lyl1 | 1.269709 | 2.411129 | 1.29E-05 |
| ENSMUSG00000071273.3 | Gm5145 | 1.262654 | 2.399367 | 0.005364 |
| ENSMUSG00000047654.5 | Tssk6 | 1.256286 | 2.3888 | 0.016348 |
| ENSMUSG00000004931.10 | Apba3 | 1.254586 | 2.385987 | 2.54E-06 |
| ENSMUSG00000035711.4 | Dok3 | 1.252747 | 2.382948 | 2.05E-05 |
| ENSMUSG00000020327.3 | Fgf22 | 1.235783 | 2.355091 | 0.000169 |
| ENSMUSG00000038742.6 | Angptl6 | 1.229047 | 2.344121 | 2.53E-06 |
| ENSMUSG00000050105.5 | Grrp1 | 1.224071 | 2.336049 | 0.000816 |
| ENSMUSG00000034762.3 | Glis1 | 1.223078 | 2.334443 | 0.001275 |
| ENSMUSG00000032291.8 | Crabp1 | 1.214858 | 2.32118 | 0.027963 |
| ENSMUSG00000024736.8 | Tmem132a | 1.21452 | 2.320636 | 4.55E-08 |
| ENSMUSG00000040860.10 | Crocc | 1.214117 | 2.319987 | 1.94E-07 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000043811.5 | Rtn4r | 1.212859 | 2.317965 | 1.24E-05 |
| ENSMUSG00000040714.7 | Klc3 | 1.210352 | 2.313941 | 7.75E-06 |
| ENSMUSG00000068758.7 | Il3ra | 1.203873 | 2.303573 | 7.19E-06 |
| ENSMUSG00000050138.7 | Kcnk12 | 1.198597 | 2.295164 | 0.000372 |
| ENSMUSG00000019261.2 | Map1s | 1.194086 | 2.287998 | 1.08E-06 |
| ENSMUSG00000045045.7 | Lrfn4 | 1.192873 | 2.286075 | 4.5E-06 |
| ENSMUSG00000020782.12 | Llgl2 | 1.189019 | 2.279976 | 0.000379 |
| ENSMUSG00000050201.3 | Otop2 | 1.182178 | 2.269191 | 0.033235 |
| ENSMUSG00000032717.8 | Mdfi | 1.164872 | 2.242133 | 0.004163 |
| ENSMUSG00000029797.6 | Sspo | 1.162427 | 2.238337 | 0.000316 |
| ENSMUSG00000087075.1 | A230065H16Rik | 1.157243 | 2.230309 | 1.34E-06 |
| ENSMUSG00000059479.6 | B3gnt8 | 1.151003 | 2.220683 | 0.002546 |
| ENSMUSG00000072875.1 | Gpr27 | 1.150805 | 2.220377 | 0.000255 |
| ENSMUSG00000047721.7 | Bola2 | 1.133303 | 2.193604 | 1.35E-07 |
| ENSMUSG00000041309.11 | Nkx6-2 | 1.132554 | 2.192465 | 1.68E-06 |
| ENSMUSG00000050212.4 | Eva1b | 1.128247 | 2.18593 | 0.007427 |
| ENSMUSG00000043099.4 | Hic1 | 1.098572 | 2.141426 | 0.000135 |
| ENSMUSG00000002799.5 | Jag2 | 1.094639 | 2.135597 | 8.59E-07 |
| ENSMUSG00000070003.6 | Ssbp4 | 1.086802 | 2.124027 | 8.02E-08 |
| ENSMUSG00000042388.8 | Dlgap3 | 1.082369 | 2.11751 | 6.72E-07 |
| ENSMUSG00000052837.5 | Junb | 1.079854 | 2.113822 | 0.001169 |
| ENSMUSG00000030727.6 | Rabep2 | 1.07712 | 2.10982 | 2.98E-07 |
| ENSMUSG00000007721.5 | Ccdc124 | 1.076794 | 2.109343 | 9.55E-08 |
| ENSMUSG00000032643.6 | Fhl3 | 1.070835 | 2.100649 | 0.010492 |
| ENSMUSG00000007892.7 | Rplp1 | 1.066511 | 2.094362 | 5.18E-09 |
| ENSMUSG00000007944.7 | Ttc9b | 1.064995 | 2.092162 | 1.65E-07 |
| ENSMUSG00000029372.6 | Ppbp | 1.063971 | 2.090678 | 0.024274 |
| ENSMUSG00000023046.6 | Igfbp6 | 1.060571 | 2.085757 | 2.73E-05 |
| ENSMUSG00000078570.4 | 1110065P20Rik | 1.059274 | 2.083882 | 4.91E-05 |
| ENSMUSG00000091449.2 | Gm10269 | 1.057522 | 2.081354 | 0.000873 |
| ENSMUSG00000026068.5 | Il18rap | 1.057354 | 2.081111 | 0.003384 |
| ENSMUSG00000049562.5 | Ap5b1 | 1.054435 | 2.076905 | 4.82E-05 |
| ENSMUSG00000025650.6 | Col7a1 | 1.049624 | 2.06999 | 5.75E-06 |
| ENSMUSG00000001270.8 | Ckb | 1.047037 | 2.066281 | 1.53E-07 |
| ENSMUSG00000038676.2 | Ucn | 1.043752 | 2.061582 | 0.0407 |
| ENSMUSG00000006235.5 | Epor | 1.043101 | 2.060652 | 4.2E-07 |
| ENSMUSG00000044628.4 | Rnf208 | 1.040338 | 2.056709 | 1.93E-08 |
| ENSMUSG00000029675.9 | Eln | 1.03764 | 2.052867 | 8.58E-06 |
| ENSMUSG00000035640.12 | Dos | 1.037053 | 2.052032 | 6.12E-08 |
| ENSMUSG00000020219.6 | Timm13 | 1.035976 | 2.0505 | 4.65E-08 |
| ENSMUSG00000069378.7 | Prdm6 | 1.035094 | 2.049247 | 0.016327 |
| ENSMUSG00000030600.9 | Lrfn1 | 1.034218 | 2.048004 | 8.26E-06 |
| ENSMUSG00000095795.1 | Park2 | 1.033688 | 2.047251 | 0.001624 |
| ENSMUSG00000021492.9 | F12 | 1.03356 | 2.047069 | 0.001306 |
| ENSMUSG00000002104.5 | Rapsn | 1.027088 | 2.037906 | 0.002522 |
| ENSMUSG00000071192.5 | Wfikkn1 | 1.022508 | 2.031447 | 0.005684 |
| ENSMUSG00000010651.4 | Acaa1b | 1.018585 | 2.025931 | 0.000162 |

| | | | | |
|-----------------------|----------|----------|----------|----------|
| ENSMUSG00000024955.7 | Esrra | 1.017145 | 2.02391 | 4.17E-06 |
| ENSMUSG00000007950.8 | Abhd8 | 1.01413 | 2.019684 | 7.39E-08 |
| ENSMUSG00000033726.8 | Emx1 | 1.009873 | 2.013734 | 0.005679 |
| ENSMUSG00000048967.9 | Yjefn3 | 1.009263 | 2.012882 | 0.00631 |
| ENSMUSG00000013833.9 | Med16 | 1.009159 | 2.012738 | 2.92E-07 |
| ENSMUSG00000021280.8 | Exoc3l4 | 1.006197 | 2.00861 | 2.97E-06 |
| ENSMUSG00000047428.8 | Dlk2 | 1.003883 | 2.00539 | 1.56E-06 |
| ENSMUSG00000041556.8 | Fbxo2 | 1.003752 | 2.005208 | 1.17E-07 |
| ENSMUSG00000040364.6 | Sec1 | 0.999664 | 1.999534 | 0.003157 |
| ENSMUSG00000039781.8 | Azi1 | 0.996835 | 1.995617 | 1.02E-07 |
| ENSMUSG00000037692.8 | Ahdc1 | 0.993332 | 1.990778 | 8.45E-07 |
| ENSMUSG00000024925.4 | Rnaseh2c | 0.989053 | 1.984882 | 1.29E-06 |
| ENSMUSG00000007039.6 | Ddah2 | 0.985222 | 1.979618 | 1.83E-06 |
| ENSMUSG000000071531.2 | Gprin2 | 0.984161 | 1.978163 | 0.00027 |
| ENSMUSG00000037843.6 | Vstm2l | 0.982596 | 1.976018 | 1.87E-07 |
| ENSMUSG000000070720.3 | Tmem200b | 0.980749 | 1.97349 | 0.007574 |
| ENSMUSG00000062044.7 | Lmtk3 | 0.97876 | 1.970771 | 8.09E-09 |
| ENSMUSG00000040488.10 | Ltbp4 | 0.976446 | 1.967612 | 1.05E-08 |
| ENSMUSG00000003379.7 | Cd79a | 0.975705 | 1.966602 | 0.005004 |
| ENSMUSG00000001988.8 | Npas1 | 0.975449 | 1.966254 | 9.53E-08 |
| ENSMUSG00000020877.5 | Scrn2 | 0.975314 | 1.966069 | 8.45E-07 |
| ENSMUSG00000022580.6 | Rhpn1 | 0.973759 | 1.963951 | 9.56E-06 |
| ENSMUSG00000020216.7 | Jsrp1 | 0.973699 | 1.96387 | 0.005289 |
| ENSMUSG00000007872.3 | Id3 | 0.972524 | 1.962271 | 1.38E-06 |
| ENSMUSG00000053175.10 | Bcl3 | 0.97202 | 1.961585 | 0.013859 |
| ENSMUSG00000031706.6 | Rfx1 | 0.971259 | 1.960551 | 8.16E-08 |
| ENSMUSG00000031490.5 | Eif4ebp1 | 0.970546 | 1.959583 | 0.001859 |
| ENSMUSG00000055839.5 | Tceb2 | 0.967771 | 1.955816 | 3.02E-08 |
| ENSMUSG00000024330.10 | Col11a2 | 0.965546 | 1.952803 | 4.24E-09 |
| ENSMUSG00000019158.8 | Tmem160 | 0.965133 | 1.952243 | 2.62E-07 |
| ENSMUSG00000033307.6 | Mif | 0.964636 | 1.951571 | 6.71E-08 |
| ENSMUSG00000024247.8 | Pkdcc | 0.959696 | 1.9449 | 9.9E-08 |
| ENSMUSG00000009246.8 | Trpm5 | 0.957287 | 1.941656 | 0.018598 |
| ENSMUSG00000040690.9 | Col16a1 | 0.957191 | 1.941526 | 5.09E-09 |
| ENSMUSG00000022568.10 | Scrib | 0.956983 | 1.941246 | 1.82E-08 |
| ENSMUSG00000021493.9 | Pdlim7 | 0.956979 | 1.941241 | 3.77E-08 |
| ENSMUSG00000029725.4 | Ppp1r35 | 0.95544 | 1.939172 | 3.61E-05 |
| ENSMUSG00000078291.1 | Gm3940 | 0.955111 | 1.938728 | 0.000104 |
| ENSMUSG00000039476.7 | Prrx2 | 0.954444 | 1.937833 | 0.007155 |
| ENSMUSG00000013766.5 | Ly6g6e | 0.950773 | 1.932908 | 0.00401 |
| ENSMUSG00000074406.4 | Zfp628 | 0.950254 | 1.932213 | 2.14E-06 |
| ENSMUSG00000033467.8 | Crlf2 | 0.950019 | 1.931898 | 0.00064 |
| ENSMUSG00000030785.7 | Cox6a2 | 0.948434 | 1.929776 | 0.01489 |
| ENSMUSG00000035342.7 | Lzts2 | 0.943783 | 1.923566 | 5.97E-06 |
| ENSMUSG00000040938.10 | Slc16a11 | 0.943052 | 1.92259 | 1.47E-07 |
| ENSMUSG00000025876.9 | Unc5a | 0.938297 | 1.916264 | 9.8E-07 |
| ENSMUSG00000007603.8 | Dus3l | 0.933459 | 1.909849 | 1.19E-08 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000044139.11 | Prss53 | 0.932255 | 1.908256 | 0.011886 |
| ENSMUSG00000026961.6 | Lrrc26 | 0.928818 | 1.903716 | 0.004217 |
| ENSMUSG00000037326.9 | Capn15 | 0.928166 | 1.902855 | 2.05E-05 |
| ENSMUSG00000003344.8 | Btbd2 | 0.927038 | 1.901368 | 4.46E-07 |
| ENSMUSG00000047394.7 | Odf3b | 0.926438 | 1.900578 | 1.02E-06 |
| ENSMUSG00000035745.2 | Grin3b | 0.92588 | 1.899843 | 0.00172 |
| ENSMUSG00000007833.7 | Aldh16a1 | 0.922944 | 1.89598 | 2.83E-06 |
| ENSMUSG00000046215.2 | Rprml | 0.92075 | 1.893099 | 0.001159 |
| ENSMUSG00000063171.3 | Rps4y2 | 0.919317 | 1.89122 | 1.45E-06 |
| ENSMUSG00000002043.10 | Trappc6a | 0.917323 | 1.888607 | 2.34E-06 |
| ENSMUSG00000026630.4 | Batf3 | 0.914218 | 1.884547 | 0.013074 |
| ENSMUSG00000035557.9 | Krt17 | 0.912626 | 1.882468 | 0.01021 |
| ENSMUSG00000035206.9 | Sppl2b | 0.912012 | 1.881668 | 2.34E-07 |
| ENSMUSG00000058441.7 | Panx2 | 0.911871 | 1.881484 | 1.27E-06 |
| ENSMUSG00000023911.6 | Flywch2 | 0.910363 | 1.879518 | 6.1E-09 |
| ENSMUSG00000020167.8 | Tcf3 | 0.909982 | 1.879022 | 3.49E-07 |
| ENSMUSG00000043614.7 | Vps37d | 0.907361 | 1.875612 | 4.83E-06 |
| ENSMUSG00000024301.9 | Kifc5b | 0.907222 | 1.875431 | 0.000166 |
| ENSMUSG00000028763.11 | Hspg2 | 0.905457 | 1.873137 | 6.6E-05 |
| ENSMUSG00000035486.8 | Plk5 | 0.904204 | 1.871511 | 9.84E-08 |
| ENSMUSG00000002083.6 | Bbc3 | 0.903764 | 1.870941 | 0.000839 |
| ENSMUSG00000039798.1 | 2600006K01Rik | 0.903713 | 1.870875 | 0.004665 |
| ENSMUSG00000063802.4 | Hspbp1 | 0.903185 | 1.870191 | 9.41E-07 |
| ENSMUSG00000091680.2 | Klhdc7b | 0.902761 | 1.86964 | 0.000431 |
| ENSMUSG00000020090.5 | Npffr1 | 0.902644 | 1.869489 | 0.002747 |
| ENSMUSG00000062859.8 | Tcp11 | 0.901753 | 1.868334 | 9E-06 |
| ENSMUSG00000035041.8 | Creb3l3 | 0.900413 | 1.866601 | 0.006471 |
| ENSMUSG00000054612.3 | Mgmt | 0.898019 | 1.863506 | 0.000206 |
| ENSMUSG00000029478.10 | Ncor2 | 0.894493 | 1.858957 | 4.66E-05 |
| ENSMUSG00000034771.9 | Tle2 | 0.894384 | 1.858816 | 1.08E-07 |
| ENSMUSG00000025727.8 | A930017K11Rik | 0.894077 | 1.858421 | 1.41E-05 |
| ENSMUSG00000007837.4 | Prrg2 | 0.893125 | 1.857194 | 3.55E-07 |
| ENSMUSG00000029547.6 | Ints1 | 0.889994 | 1.853169 | 3.58E-06 |
| ENSMUSG00000023990.12 | Tfeb | 0.887809 | 1.850364 | 5.14E-06 |
| ENSMUSG00000001053.9 | N4bp3 | 0.887375 | 1.849807 | 5E-07 |
| ENSMUSG00000035172.9 | Plekhh3 | 0.887157 | 1.849527 | 5.6E-08 |
| ENSMUSG00000031822.12 | Gse1 | 0.887097 | 1.84945 | 3.48E-05 |
| ENSMUSG00000028063.9 | Lmna | 0.885924 | 1.847948 | 1.07E-07 |
| ENSMUSG00000029060.11 | Mib2 | 0.88515 | 1.846956 | 4.84E-08 |
| ENSMUSG00000037621.7 | Atoh8 | 0.88442 | 1.846022 | 0.005012 |
| ENSMUSG00000052629.4 | Gm9885 | 0.88411 | 1.845626 | 1.15E-06 |
| ENSMUSG00000047281.3 | Sfn | 0.880994 | 1.841643 | 0.000172 |
| ENSMUSG00000034227.7 | Foxj1 | 0.880704 | 1.841274 | 9.11E-08 |
| ENSMUSG00000035478.8 | Mbd3 | 0.879381 | 1.839586 | 1.35E-07 |
| ENSMUSG00000042178.5 | Armc5 | 0.879373 | 1.839576 | 8.32E-07 |
| ENSMUSG00000003346.8 | Abhd17a | 0.879244 | 1.839412 | 1.51E-08 |
| ENSMUSG00000069919.7 | Hba-a1 | 0.879082 | 1.839205 | 0.000589 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000011751.10 | Sptbn4 | 0.877489 | 1.837174 | 9.11E-08 |
| ENSMUSG00000031832.8 | Taf1c | 0.875626 | 1.834804 | 8.13E-06 |
| ENSMUSG00000051074.2 | 4930579K19Rik | 0.873699 | 1.832355 | 0.005653 |
| ENSMUSG00000040390.7 | Map3k10 | 0.873002 | 1.83147 | 2.23E-07 |
| ENSMUSG00000074001.2 | Klhl40 | 0.870121 | 1.827817 | 0.000699 |
| ENSMUSG00000078440.3 | Dohh | 0.869998 | 1.82766 | 1.96E-08 |
| ENSMUSG00000039577.11 | Nphp4 | 0.869928 | 1.827572 | 1.01E-06 |
| ENSMUSG00000012777.8 | Acpt | 0.867448 | 1.824432 | 0.014858 |
| ENSMUSG00000079334.2 | Nat6 | 0.864374 | 1.820549 | 3.58E-07 |
| ENSMUSG00000020178.5 | Adora2a | 0.863102 | 1.818945 | 0.000738 |
| ENSMUSG00000029597.8 | Sds | 0.860874 | 1.816138 | 0.003478 |
| ENSMUSG00000038259.4 | Gdf5 | 0.859772 | 1.814752 | 0.002109 |
| ENSMUSG00000019539.4 | Rcn3 | 0.85948 | 1.814385 | 7.6E-05 |
| ENSMUSG00000006519.10 | Cyba | 0.857199 | 1.811518 | 1.53E-06 |
| ENSMUSG00000036186.5 | Fam69b | 0.856859 | 1.811091 | 2.53E-07 |
| ENSMUSG00000035697.8 | Hmha1 | 0.856491 | 1.810629 | 1.33E-05 |
| ENSMUSG00000063382.5 | Bcl9l | 0.8554 | 1.80926 | 3.12E-06 |
| ENSMUSG00000032105.4 | Pdzd3 | 0.855381 | 1.809237 | 0.000535 |
| ENSMUSG00000033029.6 | 1700088E04Rik | 0.855103 | 1.808888 | 0.000424 |
| ENSMUSG00000028041.11 | Adam15 | 0.854463 | 1.808086 | 1.32E-07 |
| ENSMUSG00000024121.7 | Atp6v0c | 0.853141 | 1.806429 | 4.1E-07 |
| ENSMUSG00000038037.4 | Socs1 | 0.852741 | 1.805929 | 0.030371 |
| ENSMUSG00000025732.5 | Fam195a | 0.851801 | 1.804753 | 4.54E-06 |
| ENSMUSG00000027654.2 | Fam83d | 0.851044 | 1.803806 | 0.001461 |
| ENSMUSG00000027570.9 | Col9a3 | 0.850522 | 1.803154 | 9.48E-05 |
| ENSMUSG00000044279.9 | Crb3 | 0.849841 | 1.802302 | 0.005826 |
| ENSMUSG00000051703.8 | Tmem198 | 0.847922 | 1.799907 | 3.37E-08 |
| ENSMUSG00000049577.8 | Zfpm1 | 0.847617 | 1.799526 | 1.31E-05 |
| ENSMUSG00000058709.5 | Egln2 | 0.847269 | 1.799092 | 1.14E-07 |
| ENSMUSG00000045455.7 | Gm9797 | 0.847089 | 1.798868 | 0.031806 |
| ENSMUSG00000034471.6 | Caskin2 | 0.846837 | 1.798553 | 1.02E-06 |
| ENSMUSG0000004951.10 | Hspb1 | 0.846525 | 1.798164 | 0.014607 |
| ENSMUSG00000044216.6 | Kcnj4 | 0.846217 | 1.797781 | 0.000461 |
| ENSMUSG00000020329.6 | Polrmt | 0.84482 | 1.796041 | 8.93E-08 |
| ENSMUSG00000060601.6 | Nr1h2 | 0.840741 | 1.79097 | 6.68E-07 |
| ENSMUSG00000017723.5 | Wfdc2 | 0.838135 | 1.787738 | 0.042215 |
| ENSMUSG00000020131.8 | Pcsk4 | 0.837311 | 1.786717 | 7.21E-05 |
| ENSMUSG00000028661.8 | Epha8 | 0.836661 | 1.785913 | 2.91E-07 |
| ENSMUSG00000034685.4 | Fam171a2 | 0.836599 | 1.785835 | 8.2E-07 |
| ENSMUSG00000057342.7 | Sphk2 | 0.832764 | 1.781094 | 1.6E-06 |
| ENSMUSG00000020238.8 | Ncln | 0.832367 | 1.780604 | 4.63E-08 |
| ENSMUSG00000015337.5 | Endog | 0.831563 | 1.779612 | 0.000169 |
| ENSMUSG00000084883.1 | Ccdc85c | 0.830388 | 1.778164 | 1.36E-05 |
| ENSMUSG00000005320.9 | Fgfr4 | 0.828628 | 1.775996 | 0.00193 |
| ENSMUSG00000019080.7 | Mfsd3 | 0.826522 | 1.773404 | 6.12E-07 |
| ENSMUSG00000024871.4 | Doc2g | 0.825401 | 1.772028 | 8.86E-05 |
| ENSMUSG00000057411.8 | Fam173a | 0.825274 | 1.771871 | 2.82E-09 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000048921.5 | Zfp689 | 0.823324 | 1.769478 | 1.69E-05 |
| ENSMUSG00000034748.10 | Sirt6 | 0.823261 | 1.769401 | 4.35E-07 |
| ENSMUSG00000033819.9 | Ppp1r16a | 0.821699 | 1.767487 | 7.35E-08 |
| ENSMUSG00000020766.4 | Galk1 | 0.820798 | 1.766383 | 1.81E-07 |
| ENSMUSG00000030681.12 | Mvp | 0.819514 | 1.764812 | 5.65E-06 |
| ENSMUSG00000044034.5 | Npb | 0.818879 | 1.764035 | 0.008449 |
| ENSMUSG00000036887.5 | C1qa | 0.814724 | 1.758962 | 2.45E-06 |
| ENSMUSG00000049686.8 | Orai1 | 0.814484 | 1.758669 | 7.54E-06 |
| ENSMUSG00000025171.1 | Ubtd1 | 0.813884 | 1.757938 | 1.38E-07 |
| ENSMUSG00000047822.7 | Gm6484 | 0.813373 | 1.757315 | 0.013932 |
| ENSMUSG00000034786.11 | Gpsm3 | 0.813284 | 1.757207 | 4.09E-05 |
| ENSMUSG00000052911.4 | Lamb2 | 0.812684 | 1.756476 | 1.98E-06 |
| ENSMUSG00000046574.7 | Prr12 | 0.812587 | 1.756358 | 3.47E-06 |
| ENSMUSG00000020282.12 | Rhbdf1 | 0.812266 | 1.755967 | 2.18E-07 |
| ENSMUSG00000020758.9 | Itgb4 | 0.811545 | 1.75509 | 3.12E-07 |
| ENSMUSG00000047676.5 | Rpsa-ps10 | 0.809545 | 1.752659 | 9.71E-08 |
| ENSMUSG00000028049.9 | Scamp3 | 0.808908 | 1.751885 | 8.89E-08 |
| ENSMUSG00000042462.4 | Dctpp1 | 0.808086 | 1.750887 | 2.47E-06 |
| ENSMUSG00000060034.4 | Ctf2 | 0.806344 | 1.748774 | 0.022409 |
| ENSMUSG00000051184.6 | Zfp524 | 0.806331 | 1.748759 | 0.000475 |
| ENSMUSG00000023047.4 | Amhr2 | 0.805732 | 1.748032 | 3.98E-05 |
| ENSMUSG00000035085.4 | 1700020L24Rik | 0.80557 | 1.747836 | 0.005491 |
| ENSMUSG00000037344.7 | Slc12a9 | 0.804874 | 1.746993 | 1.46E-08 |
| ENSMUSG00000029343.11 | Crybb1 | 0.803978 | 1.745909 | 0.003123 |
| ENSMUSG00000030030.4 | 1700003E16Rik | 0.803661 | 1.745525 | 1.37E-07 |
| ENSMUSG00000028919.5 | Arhgef19 | 0.802159 | 1.743709 | 2.05E-06 |
| ENSMUSG00000020135.7 | Apc2 | 0.801987 | 1.743501 | 2.38E-06 |
| ENSMUSG00000021453.2 | Gadd45g | 0.800172 | 1.741308 | 3.12E-05 |
| ENSMUSG00000048826.6 | Dact2 | 0.799812 | 1.740874 | 2.32E-08 |
| ENSMUSG00000039483.4 | Asb6 | 0.799238 | 1.740182 | 5.02E-08 |
| ENSMUSG00000002250.9 | Ppard | 0.798147 | 1.738866 | 1.35E-08 |
| ENSMUSG00000036480.9 | Prss56 | 0.797729 | 1.738362 | 0.003978 |
| ENSMUSG00000006589.7 | Aprt | 0.797117 | 1.737625 | 8.38E-08 |
| ENSMUSG00000025409.8 | Mbd6 | 0.796781 | 1.73722 | 1.26E-07 |
| ENSMUSG00000025375.9 | Aatk | 0.796456 | 1.73683 | 9.73E-09 |
| ENSMUSG00000041716.7 | Gm20604 | 0.796237 | 1.736565 | 0.036387 |
| ENSMUSG00000040972.8 | Igsf21 | 0.794826 | 1.734868 | 2.03E-06 |
| ENSMUSG00000073423.3 | Zfp414 | 0.794777 | 1.734809 | 4.67E-07 |
| ENSMUSG00000031805.11 | Jak3 | 0.794182 | 1.734094 | 0.00018 |
| ENSMUSG00000001802.10 | Lrp3 | 0.794032 | 1.733914 | 7.21E-08 |
| ENSMUSG00000003345.9 | Csnk1g2 | 0.793857 | 1.733704 | 1.19E-07 |
| ENSMUSG00000028833.7 | Ncdn | 0.793655 | 1.733461 | 3.37E-08 |
| ENSMUSG00000038502.9 | Ptov1 | 0.793405 | 1.733161 | 1.19E-08 |
| ENSMUSG00000053310.5 | Nrgn | 0.791622 | 1.73102 | 4.73E-07 |
| ENSMUSG00000036622.9 | Atp13a2 | 0.790955 | 1.73022 | 3.12E-07 |
| ENSMUSG00000031842.7 | Pde4c | 0.79073 | 1.72995 | 0.001374 |
| ENSMUSG00000062115.9 | Rai1 | 0.790331 | 1.729471 | 8.15E-06 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000050423.10 | Ppp1r3g | 0.78966 | 1.728667 | 0.000614 |
| ENSMUSG00000035960.7 | Apex1 | 0.787546 | 1.726135 | 2.97E-06 |
| ENSMUSG00000035835.8 | BC005764 | 0.786937 | 1.725407 | 1.19E-07 |
| ENSMUSG00000028445.7 | Enho | 0.786114 | 1.724424 | 7.55E-07 |
| ENSMUSG00000022561.6 | Gpaa1 | 0.785541 | 1.723738 | 6.65E-09 |
| ENSMUSG00000037579.6 | Kcnh3 | 0.784976 | 1.723063 | 0.000141 |
| ENSMUSG00000035969.9 | Rusc2 | 0.784404 | 1.722381 | 7.94E-07 |
| ENSMUSG00000044496.6 | 2510039O18Rik | 0.783688 | 1.721526 | 6.12E-08 |
| ENSMUSG00000056665.1 | Them6 | 0.783047 | 1.720762 | 2.58E-07 |
| ENSMUSG00000063457.8 | Rps15 | 0.782993 | 1.720697 | 1.87E-08 |
| ENSMUSG00000086784.1 | Isoc2a | 0.782553 | 1.720172 | 6.85E-07 |
| ENSMUSG00000034216.6 | Vps18 | 0.782522 | 1.720135 | 1.42E-06 |
| ENSMUSG00000074577.3 | Fam65c | 0.781923 | 1.719422 | 0.030126 |
| ENSMUSG00000048001.7 | Hes5 | 0.781869 | 1.719356 | 5.81E-05 |
| ENSMUSG00000060376.6 | Bckdha | 0.781826 | 1.719305 | 3.31E-07 |
| ENSMUSG00000029576.11 | Radil | 0.780124 | 1.717278 | 1.78E-07 |
| ENSMUSG00000050428.6 | Fbxo46 | 0.778352 | 1.71517 | 3.15E-06 |
| ENSMUSG00000060969.8 | Irx1 | 0.778313 | 1.715124 | 4.81E-05 |
| ENSMUSG00000059816.5 | Fam159a | 0.778081 | 1.714849 | 0.006461 |
| ENSMUSG00000033938.5 | Ndufb7 | 0.777953 | 1.714697 | 1.17E-07 |
| ENSMUSG00000066975.6 | Cryba4 | 0.777606 | 1.714283 | 0.00466 |
| ENSMUSG00000070902.5 | Zfp352 | 0.777454 | 1.714103 | 1.72E-07 |
| ENSMUSG00000038034.9 | Igsf8 | 0.775009 | 1.7112 | 1.29E-08 |
| ENSMUSG00000029546.11 | Uncx | 0.774425 | 1.710508 | 0.005111 |
| ENSMUSG00000044199.5 | S1pr4 | 0.774112 | 1.710138 | 0.038555 |
| ENSMUSG00000021223.7 | Papln | 0.773339 | 1.709221 | 0.000205 |
| ENSMUSG0000002379.6 | Ndufa11 | 0.7727 | 1.708464 | 2.22E-07 |
| ENSMUSG00000060143.6 | Gm10076 | 0.772485 | 1.70821 | 0.010202 |
| ENSMUSG00000068129.5 | Cst7 | 0.771383 | 1.706905 | 0.011791 |
| ENSMUSG00000057751.8 | Megf6 | 0.771081 | 1.706548 | 9.09E-07 |
| ENSMUSG00000047417.11 | Rexo1 | 0.770376 | 1.705714 | 4.73E-07 |
| ENSMUSG0000004054.8 | Map3k11 | 0.770352 | 1.705686 | 3.84E-08 |
| ENSMUSG00000020773.5 | Trim47 | 0.76916 | 1.704278 | 0.002561 |
| ENSMUSG00000036565.3 | Ttyh3 | 0.768487 | 1.703483 | 3.3E-07 |
| ENSMUSG00000041736.6 | Tspo | 0.767528 | 1.70235 | 0.000229 |
| ENSMUSG00000029551.7 | Psmg3 | 0.766898 | 1.701608 | 1.7E-07 |
| ENSMUSG00000021384.8 | Susd3 | 0.765791 | 1.700302 | 0.001095 |
| ENSMUSG00000035027.11 | Map2k2 | 0.765155 | 1.699552 | 2.27E-09 |
| ENSMUSG00000022565.9 | Plec | 0.763933 | 1.698113 | 1.36E-05 |
| ENSMUSG00000015957.5 | Wnt11 | 0.762591 | 1.696535 | 0.002926 |
| ENSMUSG00000074652.3 | Myh7b | 0.761955 | 1.695787 | 4.26E-07 |
| ENSMUSG00000039154.6 | Shd | 0.761865 | 1.695681 | 3.11E-07 |
| ENSMUSG00000028978.6 | Nos3 | 0.75969 | 1.693127 | 6.86E-05 |
| ENSMUSG00000044328.7 | Trp53i13 | 0.758998 | 1.692315 | 7.78E-06 |
| ENSMUSG00000059534.8 | Uqcr10 | 0.758854 | 1.692146 | 3.6E-08 |
| ENSMUSG00000063696.6 | Gm8730 | 0.758095 | 1.691256 | 0.000148 |
| ENSMUSG00000031897.8 | Psmb10 | 0.75767 | 1.690758 | 1.83E-07 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000025226.5 | Fbxl15 | 0.756767 | 1.6897 | 0.012017 |
| ENSMUSG00000039477.10 | Tnrc18 | 0.756635 | 1.689545 | 6.85E-05 |
| ENSMUSG00000055148.7 | Klf2 | 0.756331 | 1.68919 | 0.000776 |
| ENSMUSG00000031788.7 | Kifc3 | 0.755734 | 1.68849 | 3.51E-07 |
| ENSMUSG00000037679.8 | Inf2 | 0.75555 | 1.688275 | 3.65E-07 |
| ENSMUSG00000020867.7 | Spata20 | 0.75394 | 1.686392 | 0.029756 |
| ENSMUSG00000057729.6 | Prtn3 | 0.753708 | 1.686121 | 0.011805 |
| ENSMUSG00000024206.8 | Rfx2 | 0.753558 | 1.685945 | 0.000602 |
| ENSMUSG00000019428.10 | Fkbp8 | 0.753262 | 1.6856 | 1.15E-08 |
| ENSMUSG00000020235.10 | Fzr1 | 0.753034 | 1.685333 | 1.83E-08 |
| ENSMUSG00000029596.7 | Sdsl | 0.75254 | 1.684756 | 9.47E-06 |
| ENSMUSG00000023495.6 | Pcbp4 | 0.75144 | 1.683472 | 3.17E-08 |
| ENSMUSG00000020747.11 | 2310067B10Rik | 0.750671 | 1.682575 | 4.56E-07 |
| ENSMUSG00000090247.1 | Bloc1s1 | 0.749631 | 1.681363 | 0.001271 |
| ENSMUSG00000026805.8 | Barhl1 | 0.748636 | 1.680204 | 4.23E-06 |
| ENSMUSG00000002763.10 | Pex6 | 0.748422 | 1.679954 | 3.86E-06 |
| ENSMUSG00000026117.8 | Zap70 | 0.748394 | 1.679921 | 3.39E-06 |
| ENSMUSG00000040940.12 | Arhgef1 | 0.748278 | 1.679787 | 2.1E-08 |
| ENSMUSG00000007805.3 | Twist2 | 0.747343 | 1.678698 | 0.00702 |
| ENSMUSG00000037904.8 | Ankrd9 | 0.747005 | 1.678305 | 3.49E-06 |
| ENSMUSG00000044854.5 | 1700056E22Rik | 0.746851 | 1.678126 | 0.024375 |
| ENSMUSG00000034161.7 | Scx | 0.746717 | 1.677971 | 0.00054 |
| ENSMUSG00000038644.8 | Pold1 | 0.746663 | 1.677907 | 6.71E-06 |
| ENSMUSG00000022211.8 | Lrrc16b | 0.746433 | 1.67764 | 3.15E-07 |
| ENSMUSG00000003546.9 | Klc4 | 0.746301 | 1.677487 | 4.32E-08 |
| ENSMUSG00000001435.8 | Col18a1 | 0.741556 | 1.671979 | 1.21E-05 |
| ENSMUSG00000034889.7 | Cactin | 0.740953 | 1.671279 | 6.06E-07 |
| ENSMUSG00000028862.6 | Map3k6 | 0.740067 | 1.670254 | 0.01213 |
| ENSMUSG00000026837.9 | Col5a1 | 0.739994 | 1.670169 | 0.000129 |
| ENSMUSG00000061286.6 | Exosc5 | 0.739756 | 1.669893 | 5.55E-06 |
| ENSMUSG00000045252.10 | Zfp574 | 0.739698 | 1.669827 | 8.42E-07 |
| ENSMUSG00000059278.3 | Lsmd1 | 0.739135 | 1.669175 | 1.07E-05 |
| ENSMUSG00000041930.7 | Fam222a | 0.738777 | 1.668761 | 1.48E-06 |
| ENSMUSG00000040734.8 | Ppp1r13l | 0.73838 | 1.668302 | 0.00022 |
| ENSMUSG00000010047.7 | Hyal2 | 0.735983 | 1.665532 | 1.86E-06 |
| ENSMUSG00000074063.3 | Osgin1 | 0.735706 | 1.665212 | 0.018672 |
| ENSMUSG00000001082.6 | Mfsd10 | 0.734691 | 1.664041 | 3.6E-08 |
| ENSMUSG00000019214.7 | Chtf18 | 0.734254 | 1.663537 | 0.000243 |
| ENSMUSG00000025150.4 | Cbr2 | 0.733568 | 1.662747 | 0.036547 |
| ENSMUSG00000005628.6 | Tmod4 | 0.733415 | 1.66257 | 0.030904 |
| ENSMUSG00000051403.8 | Ppp1r37 | 0.73339 | 1.662541 | 1.46E-07 |
| ENSMUSG00000030739.11 | Myh14 | 0.733197 | 1.662319 | 1.52E-06 |
| ENSMUSG00000070699.4 | Sars2 | 0.733025 | 1.66212 | 9.01E-07 |
| ENSMUSG00000039759.4 | Thap3 | 0.732784 | 1.661843 | 8.76E-07 |
| ENSMUSG00000050936.4 | Hist2h2bb | 0.732589 | 1.661618 | 0.036012 |
| ENSMUSG00000034936.2 | Arl4d | 0.732565 | 1.661591 | 0.003719 |
| ENSMUSG00000024013.8 | Fgd2 | 0.73251 | 1.661527 | 2.22E-06 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000030707.9 | Coro1a | 0.732451 | 1.661459 | 1.08E-08 |
| ENSMUSG00000069917.7 | Hba-a2 | 0.732002 | 1.660942 | 0.002797 |
| ENSMUSG00000038894.6 | Irs2 | 0.731775 | 1.660681 | 2.26E-05 |
| ENSMUSG00000078348.3 | Sf3b5 | 0.731489 | 1.660352 | 2.78E-06 |
| ENSMUSG00000022436.9 | Sh3bp1 | 0.730967 | 1.659751 | 1.86E-05 |
| ENSMUSG00000096753.1 | Fam181a | 0.730688 | 1.65943 | 0.00054 |
| ENSMUSG00000006356.6 | Crip2 | 0.729564 | 1.658138 | 1.52E-06 |
| ENSMUSG00000035890.8 | Rnf126 | 0.72875 | 1.657203 | 1.02E-06 |
| ENSMUSG00000051439.6 | Cd14 | 0.728426 | 1.65683 | 0.020578 |
| ENSMUSG00000031503.7 | Col4a2 | 0.727877 | 1.6562 | 4.24E-07 |
| ENSMUSG00000027257.7 | Pacsin3 | 0.725815 | 1.653835 | 5.28E-09 |
| ENSMUSG00000034930.9 | Rtkn | 0.725266 | 1.653206 | 2.22E-05 |
| ENSMUSG00000002781.11 | Tmem143 | 0.725135 | 1.653056 | 8.36E-06 |
| ENSMUSG00000070637.2 | Gm694 | 0.72398 | 1.651732 | 0.021636 |
| ENSMUSG00000045731.5 | Pnoc | 0.723736 | 1.651453 | 1.36E-06 |
| ENSMUSG00000038194.7 | Lhb | 0.723577 | 1.651271 | 0.000931 |
| ENSMUSG00000020926.10 | Adam11 | 0.721989 | 1.649455 | 2.28E-07 |
| ENSMUSG00000030410.10 | Dmwd | 0.721342 | 1.648715 | 4.66E-08 |
| ENSMUSG00000030699.10 | Tbx6 | 0.72133 | 1.648701 | 0.00482 |
| ENSMUSG00000063239.10 | Grm4 | 0.721178 | 1.648527 | 8.44E-07 |
| ENSMUSG00000049721.8 | Gal3st1 | 0.720877 | 1.648184 | 1.18E-06 |
| ENSMUSG00000056313.4 | 1810011O10Rik | 0.719963 | 1.64714 | 0.043101 |
| ENSMUSG00000071073.4 | Lrrc73 | 0.719866 | 1.647029 | 1.34E-06 |
| ENSMUSG00000028681.5 | Ptch2 | 0.719637 | 1.646768 | 7.27E-06 |
| ENSMUSG00000025384.9 | 2310003H01Rik | 0.719311 | 1.646396 | 8.64E-07 |
| ENSMUSG00000037126.9 | Psd | 0.71754 | 1.644376 | 6.32E-08 |
| ENSMUSG00000030087.5 | Klf15 | 0.717246 | 1.64404 | 1.39E-05 |
| ENSMUSG00000049988.3 | Lrrc25 | 0.717159 | 1.643941 | 0.043307 |
| ENSMUSG00000023908.7 | Pkmyt1 | 0.716978 | 1.643735 | 5.76E-06 |
| ENSMUSG00000053158.9 | Fes | 0.716853 | 1.643593 | 3.31E-05 |
| ENSMUSG00000013158.5 | 4933405L10Rik | 0.714451 | 1.640859 | 0.021907 |
| ENSMUSG00000041506.8 | Rrp9 | 0.714292 | 1.640678 | 1.66E-07 |
| ENSMUSG00000038895.9 | Zfp653 | 0.713884 | 1.640214 | 1.66E-07 |
| ENSMUSG00000001227.5 | Sema6b | 0.713573 | 1.63986 | 2.67E-07 |
| ENSMUSG00000055452.5 | Gm7353 | 0.712909 | 1.639106 | 0.010424 |
| ENSMUSG00000034282.3 | Evpl | 0.712584 | 1.638737 | 1.24E-06 |
| ENSMUSG00000075267.3 | Dfnb59 | 0.712394 | 1.638521 | 0.014596 |
| ENSMUSG00000023266.5 | Frs3 | 0.711957 | 1.638024 | 6.04E-07 |
| ENSMUSG00000028975.10 | Pex14 | 0.711712 | 1.637746 | 1.74E-06 |
| ENSMUSG00000059022.8 | Kcp | 0.710153 | 1.635978 | 0.000518 |
| ENSMUSG00000019139.9 | Isyna1 | 0.709413 | 1.635138 | 2.26E-07 |
| ENSMUSG00000014782.9 | Plekhg4 | 0.708866 | 1.634519 | 0.000228 |
| ENSMUSG00000031738.8 | Irx6 | 0.708685 | 1.634314 | 0.000797 |
| ENSMUSG00000037428.8 | Vgf | 0.708414 | 1.634007 | 1.98E-05 |
| ENSMUSG00000062075.7 | Lmn2 | 0.70736 | 1.632814 | 1.53E-07 |
| ENSMUSG00000006218.4 | Fam131c | 0.707233 | 1.632669 | 3.82E-05 |
| ENSMUSG00000029348.7 | Asph2 | 0.706837 | 1.632222 | 2.89E-08 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000039323.12 | Igfbp2 | 0.705494 | 1.630703 | 0.001247 |
| ENSMUSG00000096146.1 | Kcnj11 | 0.704874 | 1.630002 | 3.89E-05 |
| ENSMUSG00000047810.8 | Ccdc88b | 0.703812 | 1.628803 | 1.65E-05 |
| ENSMUSG00000036882.6 | Arhgap33 | 0.703425 | 1.628365 | 1.09E-06 |
| ENSMUSG00000060572.11 | Mfap2 | 0.703039 | 1.62793 | 0.000139 |
| ENSMUSG00000023972.9 | Ptk7 | 0.703031 | 1.627921 | 2.21E-07 |
| ENSMUSG00000020163.6 | Uqcr11 | 0.702388 | 1.627196 | 2.28E-06 |
| ENSMUSG00000027335.9 | Adra1d | 0.701053 | 1.625691 | 0.028577 |
| ENSMUSG00000048489.7 | 8430408G22Rik | 0.700821 | 1.625429 | 0.023286 |
| ENSMUSG00000032911.5 | Cspg4 | 0.699413 | 1.623844 | 6.65E-05 |
| ENSMUSG00000048537.9 | Phldb1 | 0.699103 | 1.623495 | 1.43E-07 |
| ENSMUSG00000057948.6 | Unc13d | 0.698244 | 1.622529 | 0.000146 |
| ENSMUSG00000052087.7 | Rgs14 | 0.695202 | 1.619111 | 0.000305 |
| ENSMUSG00000050821.7 | Fam131a | 0.694999 | 1.618883 | 7.88E-07 |
| ENSMUSG00000039137.12 | Whrn | 0.694474 | 1.618294 | 2.39E-07 |
| ENSMUSG00000024959.7 | Bad | 0.693901 | 1.617652 | 8.87E-08 |
| ENSMUSG00000004667.12 | Polr2e | 0.693888 | 1.617637 | 8.63E-08 |
| ENSMUSG00000035863.7 | Palm | 0.693811 | 1.617551 | 2.95E-06 |
| ENSMUSG00000000730.7 | Dnmt3l | 0.693505 | 1.617207 | 0.049516 |
| ENSMUSG00000025316.10 | Banp | 0.693448 | 1.617143 | 7.96E-06 |
| ENSMUSG00000019433.8 | Gipc1 | 0.692636 | 1.616234 | 1.8E-06 |
| ENSMUSG00000041827.9 | Oasl1 | 0.691951 | 1.615466 | 0.026111 |
| ENSMUSG00000038406.9 | Scaf1 | 0.691735 | 1.615225 | 3.48E-07 |
| ENSMUSG00000037206.8 | Islr | 0.691732 | 1.615221 | 7.72E-05 |
| ENSMUSG00000053560.4 | Ier2 | 0.690877 | 1.614264 | 0.003023 |
| ENSMUSG00000024175.1 | Tekt4 | 0.690752 | 1.614124 | 9.26E-05 |
| ENSMUSG00000014846.6 | Tppp3 | 0.69075 | 1.614122 | 6.37E-06 |
| ENSMUSG00000044824.5 | Olfr545 | 0.690483 | 1.613824 | 0.025802 |
| ENSMUSG00000051627.2 | Hist1h1e | 0.689112 | 1.612291 | 0.002963 |
| ENSMUSG00000008140.11 | Emc10 | 0.688347 | 1.611436 | 1.45E-07 |
| ENSMUSG00000005442.7 | Cic | 0.687971 | 1.611016 | 4.73E-06 |
| ENSMUSG00000009633.2 | G0s2 | 0.687855 | 1.610887 | 6.76E-06 |
| ENSMUSG00000095352.1 | Gm20783 | 0.687469 | 1.610456 | 4.02E-05 |
| ENSMUSG00000027239.8 | Mdk | 0.687002 | 1.609934 | 9.59E-06 |
| ENSMUSG00000029410.8 | Ppef2 | 0.683918 | 1.606496 | 0.00465 |
| ENSMUSG00000041164.9 | Zmiz2 | 0.683735 | 1.606293 | 3.39E-07 |
| ENSMUSG00000037221.7 | Mospd3 | 0.683734 | 1.606292 | 5.68E-07 |
| ENSMUSG00000032515.7 | Csrnp1 | 0.683467 | 1.605995 | 0.000694 |
| ENSMUSG00000030402.4 | Ppm1n | 0.683329 | 1.605841 | 0.048865 |
| ENSMUSG00000039834.11 | Zfp335 | 0.682644 | 1.605079 | 5.1E-06 |
| ENSMUSG00000020439.11 | Smtn | 0.682271 | 1.604664 | 2.04E-06 |
| ENSMUSG00000070436.5 | Serpinh1 | 0.681533 | 1.603843 | 0.000659 |
| ENSMUSG00000003190.5 | Bcl2l12 | 0.680856 | 1.603091 | 0.001487 |
| ENSMUSG00000031760.8 | Mt3 | 0.6804 | 1.602584 | 7.15E-06 |
| ENSMUSG00000025380.2 | Fscn2 | 0.680195 | 1.602356 | 0.029471 |
| ENSMUSG00000022760.9 | Thap7 | 0.679825 | 1.601946 | 1.97E-05 |
| ENSMUSG00000035735.4 | Dagla | 0.679229 | 1.601284 | 1.3E-06 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000024220.7 | Zfp523 | 0.678871 | 1.600887 | 4.93E-08 |
| ENSMUSG00000045348.9 | Nyap1 | 0.67883 | 1.600841 | 8.66E-06 |
| ENSMUSG00000023348.10 | Trip6 | 0.677599 | 1.599475 | 3.19E-06 |
| ENSMUSG00000053166.8 | Cdh22 | 0.676851 | 1.598647 | 3.56E-05 |
| ENSMUSG00000042677.7 | Zc3h12a | 0.6767 | 1.59848 | 0.000704 |
| ENSMUSG00000039623.9 | Ap5z1 | 0.676549 | 1.598312 | 5.01E-07 |
| ENSMUSG00000015092.3 | Edf1 | 0.676395 | 1.598142 | 1.38E-07 |
| ENSMUSG00000015090.7 | Ptgds | 0.675985 | 1.597687 | 3.18E-06 |
| ENSMUSG00000040466.9 | Blvrb | 0.675043 | 1.596644 | 4.89E-05 |
| ENSMUSG00000036114.3 | Rpp25l | 0.675018 | 1.596616 | 2.65E-06 |
| ENSMUSG00000039059.5 | Hrh3 | 0.674893 | 1.596479 | 7.72E-09 |
| ENSMUSG00000020940.7 | 1700023F06Rik | 0.674545 | 1.596093 | 0.000716 |
| ENSMUSG00000035673.9 | Sbno2 | 0.674313 | 1.595837 | 0.000529 |
| ENSMUSG00000025508.7 | Rplp2 | 0.674115 | 1.595618 | 4.36E-06 |
| ENSMUSG00000049295.10 | Zfp219 | 0.67359 | 1.595037 | 4.39E-06 |
| ENSMUSG00000045672.9 | Col27a1 | 0.67336 | 1.594783 | 8.31E-07 |
| ENSMUSG00000024958.6 | Gpr137 | 0.672979 | 1.594362 | 2.74E-07 |
| ENSMUSG00000054675.5 | Tmem119 | 0.672183 | 1.593483 | 1.03E-06 |
| ENSMUSG00000032523.4 | Hhatl | 0.671424 | 1.592644 | 2.34E-05 |
| ENSMUSG00000015850.5 | Adamtsl4 | 0.670635 | 1.591774 | 5.8E-07 |
| ENSMUSG00000025318.7 | Jph3 | 0.670535 | 1.591663 | 1.85E-07 |
| ENSMUSG00000004100.5 | Ppan | 0.670496 | 1.59162 | 1.99E-06 |
| ENSMUSG00000078129.1 | Actl10 | 0.670132 | 1.591219 | 0.003426 |
| ENSMUSG00000032842.7 | Abcc10 | 0.669604 | 1.590636 | 2.54E-06 |
| ENSMUSG00000024393.8 | Prrc2a | 0.669497 | 1.590518 | 1.08E-06 |
| ENSMUSG00000020893.11 | Per1 | 0.669129 | 1.590112 | 8.81E-06 |
| ENSMUSG00000012296.9 | Tjap1 | 0.669037 | 1.590011 | 2.26E-06 |
| ENSMUSG00000044456.10 | Rin3 | 0.668775 | 1.589722 | 0.003191 |
| ENSMUSG00000041062.6 | Mslnl | 0.668413 | 1.589324 | 0.029956 |
| ENSMUSG00000020437.6 | Myo1g | 0.668181 | 1.589068 | 0.026692 |
| ENSMUSG00000039001.6 | Rps21 | 0.6681 | 1.588979 | 5.65E-09 |
| ENSMUSG00000025145.7 | Lrrc45 | 0.667349 | 1.588152 | 2.69E-09 |
| ENSMUSG00000028670.8 | Lypla2 | 0.666714 | 1.587453 | 6.02E-07 |
| ENSMUSG00000092225.1 | Gm2381 | 0.665467 | 1.586082 | 0.041592 |
| ENSMUSG00000028789.10 | Adc | 0.665327 | 1.585927 | 2.56E-07 |
| ENSMUSG00000024160.10 | Spsb3 | 0.665142 | 1.585724 | 0.001572 |
| ENSMUSG00000053395.9 | Cacng8 | 0.665033 | 1.585604 | 2.12E-06 |
| ENSMUSG00000032584.7 | Mst1r | 0.664333 | 1.584835 | 0.001155 |
| ENSMUSG00000046613.12 | Vwa5b2 | 0.664233 | 1.584725 | 9.38E-09 |
| ENSMUSG00000034837.7 | Gnat1 | 0.663939 | 1.584402 | 0.008917 |
| ENSMUSG00000038276.8 | Asic3 | 0.663787 | 1.584236 | 0.001499 |
| ENSMUSG00000036931.8 | Nfkbid | 0.663475 | 1.583893 | 0.001663 |
| ENSMUSG00000059412.6 | Fxyd2 | 0.663084 | 1.583464 | 0.006397 |
| ENSMUSG00000025386.2 | Pde6g | 0.662051 | 1.582331 | 0.021511 |
| ENSMUSG00000029860.10 | Zyx | 0.662046 | 1.582325 | 5.17E-07 |
| ENSMUSG00000038274.5 | Fau | 0.660657 | 1.580803 | 1.45E-08 |
| ENSMUSG00000019659.4 | Ccdc12 | 0.660043 | 1.580129 | 1.72E-07 |

| | | | | |
|-----------------------|----------|----------|----------|----------|
| ENSMUSG00000055809.7 | Dnaaf3 | 0.659965 | 1.580045 | 7.13E-05 |
| ENSMUSG00000027603.9 | Ggt7 | 0.65934 | 1.57936 | 3.98E-09 |
| ENSMUSG00000048997.11 | Atxn7l2 | 0.65931 | 1.579328 | 5.22E-08 |
| ENSMUSG00000043448.7 | Gjc2 | 0.658884 | 1.57886 | 4.36E-06 |
| ENSMUSG00000014470.4 | Rnf166 | 0.658748 | 1.578712 | 4.6E-07 |
| ENSMUSG00000029869.7 | Ephb6 | 0.658165 | 1.578074 | 3.29E-07 |
| ENSMUSG00000037992.10 | Rara | 0.65757 | 1.577424 | 7.43E-06 |
| ENSMUSG00000053113.3 | Socs3 | 0.656469 | 1.57622 | 0.035565 |
| ENSMUSG00000063765.5 | Chadl | 0.656114 | 1.575832 | 3.4E-05 |
| ENSMUSG00000033871.8 | Ppargc1b | 0.656091 | 1.575808 | 0.000105 |
| ENSMUSG00000035314.8 | Gdpd5 | 0.655885 | 1.575582 | 4.18E-07 |
| ENSMUSG00000028042.9 | Zbtb7b | 0.655879 | 1.575576 | 9.13E-07 |
| ENSMUSG00000034730.10 | Bai1 | 0.655658 | 1.575335 | 1.12E-06 |
| ENSMUSG00000003380.10 | Rabac1 | 0.655423 | 1.575077 | 2.6E-08 |
| ENSMUSG00000006019.9 | Dhx34 | 0.655256 | 1.574895 | 2.01E-05 |
| ENSMUSG00000033006.9 | Sox10 | 0.654953 | 1.574565 | 5.59E-09 |
| ENSMUSG00000045052.2 | Prhr | 0.654605 | 1.574185 | 0.008824 |
| ENSMUSG00000064264.8 | Zfp428 | 0.654038 | 1.573566 | 7.44E-06 |
| ENSMUSG00000006313.4 | Upk1a | 0.653451 | 1.572927 | 0.000693 |
| ENSMUSG00000033434.9 | Gtpbp6 | 0.653062 | 1.572503 | 4.11E-05 |
| ENSMUSG00000020806.9 | Rhbdf2 | 0.652551 | 1.571945 | 0.005798 |
| ENSMUSG00000029622.10 | Arpc1b | 0.652405 | 1.571787 | 1.19E-05 |
| ENSMUSG00000036686.10 | Cc2d1a | 0.652246 | 1.571613 | 1.14E-06 |
| ENSMUSG00000027510.11 | Rbm38 | 0.652221 | 1.571586 | 0.000206 |
| ENSMUSG00000022559.7 | Fbxl6 | 0.652165 | 1.571525 | 7.72E-07 |
| ENSMUSG00000020770.7 | Unk | 0.652005 | 1.57135 | 2.03E-07 |
| ENSMUSG00000027579.6 | Srms | 0.651768 | 1.571092 | 0.007858 |
| ENSMUSG00000063146.5 | Clip2 | 0.651539 | 1.570843 | 1.02E-06 |
| ENSMUSG00000036820.5 | Amdhd2 | 0.651286 | 1.570568 | 1.09E-06 |
| ENSMUSG00000055692.12 | Tmem191c | 0.651143 | 1.570412 | 7.93E-07 |
| ENSMUSG00000027296.7 | Itpka | 0.651006 | 1.570262 | 1.17E-05 |
| ENSMUSG00000003872.7 | Lin7b | 0.650881 | 1.570127 | 7.38E-06 |
| ENSMUSG00000018169.6 | Mfng | 0.6506 | 1.569821 | 0.000197 |
| ENSMUSG00000002504.8 | Slc9a3r2 | 0.650441 | 1.569648 | 1.38E-06 |
| ENSMUSG00000040428.11 | Plekha4 | 0.649423 | 1.56854 | 0.001924 |
| ENSMUSG00000050234.7 | Gja4 | 0.649328 | 1.568438 | 9.59E-05 |
| ENSMUSG00000036553.10 | Sh3tc1 | 0.648731 | 1.567788 | 0.006028 |
| ENSMUSG00000026860.10 | Sh3glb2 | 0.648679 | 1.567732 | 4.79E-09 |
| ENSMUSG00000003534.11 | Ddr1 | 0.64859 | 1.567635 | 4.33E-08 |
| ENSMUSG00000061878.9 | Sphk1 | 0.648417 | 1.567447 | 0.002425 |
| ENSMUSG00000022550.11 | Adck5 | 0.648229 | 1.567243 | 5.75E-08 |
| ENSMUSG00000045009.7 | Prvt3 | 0.648202 | 1.567213 | 3.56E-06 |
| ENSMUSG00000029408.7 | Abcb9 | 0.647973 | 1.566965 | 4.06E-06 |
| ENSMUSG00000002984.10 | Tomm40 | 0.647848 | 1.566829 | 5.08E-07 |
| ENSMUSG00000020211.9 | Sf3a2 | 0.647396 | 1.566339 | 3.66E-06 |
| ENSMUSG00000074170.4 | Plekhf1 | 0.647108 | 1.566026 | 0.00583 |
| ENSMUSG00000015093.9 | Clic3 | 0.646421 | 1.56528 | 0.001024 |

| | | | | |
|-----------------------|----------|----------|----------|----------|
| ENSMUSG00000026941.10 | Mamdc4 | 0.646373 | 1.565228 | 9.2E-05 |
| ENSMUSG00000015943.5 | Bola1 | 0.645947 | 1.564766 | 0.00168 |
| ENSMUSG00000032491.10 | Nradd | 0.645932 | 1.56475 | 0.002786 |
| ENSMUSG00000002985.9 | Apoe | 0.645194 | 1.563949 | 1.09E-07 |
| ENSMUSG00000044716.6 | Dok7 | 0.644367 | 1.563053 | 5.57E-06 |
| ENSMUSG00000028626.5 | Col9a2 | 0.642987 | 1.561559 | 4.3E-06 |
| ENSMUSG00000022791.10 | Tnk2 | 0.642874 | 1.561436 | 8.72E-07 |
| ENSMUSG00000029714.7 | Gigyf1 | 0.64284 | 1.5614 | 1.96E-07 |
| ENSMUSG00000019970.9 | Sgk1 | 0.6426 | 1.56114 | 0.015236 |
| ENSMUSG00000064326.6 | Siva1 | 0.642588 | 1.561128 | 4.51E-06 |
| ENSMUSG00000053593.4 | Fate1 | 0.642511 | 1.561043 | 0.042137 |
| ENSMUSG00000042286.7 | Stab1 | 0.641941 | 1.560427 | 0.000141 |
| ENSMUSG00000045039.9 | Megf8 | 0.640829 | 1.559225 | 1.08E-06 |
| ENSMUSG00000040327.10 | Cul9 | 0.639826 | 1.558141 | 2.28E-06 |
| ENSMUSG00000036896.5 | C1qc | 0.639752 | 1.558061 | 6.85E-06 |
| ENSMUSG00000048217.5 | Nags | 0.639305 | 1.557579 | 0.047295 |
| ENSMUSG00000020538.9 | Srebf1 | 0.638857 | 1.557095 | 6.39E-08 |
| ENSMUSG00000021294.7 | Kif26a | 0.638196 | 1.556382 | 3.88E-05 |
| ENSMUSG00000068601.2 | Gm10244 | 0.637969 | 1.556137 | 0.005638 |
| ENSMUSG00000031865.9 | Dctn1 | 0.637432 | 1.555558 | 2.94E-07 |
| ENSMUSG00000024485.9 | Slc4a9 | 0.636522 | 1.554577 | 0.001051 |
| ENSMUSG00000023991.10 | Foxp4 | 0.636498 | 1.554551 | 9.9E-07 |
| ENSMUSG00000025362.5 | Rps26 | 0.634979 | 1.552915 | 1.17E-07 |
| ENSMUSG00000042292.10 | Mkl1 | 0.634723 | 1.55264 | 3E-05 |
| ENSMUSG00000025372.10 | Baiap2 | 0.634548 | 1.552451 | 5.52E-06 |
| ENSMUSG00000044857.7 | Lemd2 | 0.634069 | 1.551936 | 8.51E-07 |
| ENSMUSG00000034881.7 | Tbxa2r | 0.633725 | 1.551566 | 0.028965 |
| ENSMUSG00000049130.5 | C5ar1 | 0.633527 | 1.551353 | 0.016215 |
| ENSMUSG00000072825.4 | Cep170b | 0.633478 | 1.551301 | 2.39E-06 |
| ENSMUSG00000047507.6 | Baiap3 | 0.633467 | 1.551289 | 2.36E-06 |
| ENSMUSG00000024851.7 | Pitpnm1 | 0.632934 | 1.550716 | 1.04E-07 |
| ENSMUSG00000022614.7 | Lmf2 | 0.632454 | 1.550199 | 3.01E-07 |
| ENSMUSG00000042632.10 | Pla2g6 | 0.632415 | 1.550158 | 7.56E-07 |
| ENSMUSG00000033007.9 | Asic4 | 0.632056 | 1.549772 | 1.52E-06 |
| ENSMUSG00000015478.7 | Rnf5 | 0.631677 | 1.549365 | 5.96E-06 |
| ENSMUSG00000028444.11 | Cntfr | 0.631556 | 1.549235 | 8.1E-06 |
| ENSMUSG00000022546.4 | Gpt | 0.63103 | 1.548671 | 1.16E-07 |
| ENSMUSG00000005640.5 | Insrr | 0.630647 | 1.548259 | 0.049669 |
| ENSMUSG00000071649.5 | B3gat3 | 0.628519 | 1.545977 | 8.98E-08 |
| ENSMUSG00000032715.9 | Trib3 | 0.628515 | 1.545973 | 0.003675 |
| ENSMUSG00000024773.8 | Atg2a | 0.628154 | 1.545586 | 8.01E-07 |
| ENSMUSG00000022483.10 | Col2a1 | 0.627299 | 1.544671 | 0.000254 |
| ENSMUSG00000004933.11 | Matk | 0.626367 | 1.543673 | 1.25E-09 |
| ENSMUSG00000055632.11 | Hmcn2 | 0.625927 | 1.543203 | 0.001206 |
| ENSMUSG00000035370.7 | Adat3 | 0.62524 | 1.542467 | 0.000291 |
| ENSMUSG00000037907.10 | Ankrd13b | 0.625003 | 1.542214 | 8.05E-08 |
| ENSMUSG00000035637.8 | Grhpr | 0.623828 | 1.540958 | 5.97E-07 |

| | | | | |
|-----------------------|-----------|----------|----------|----------|
| ENSMUSG00000029381.9 | Shroom3 | 0.623116 | 1.540198 | 1.32E-06 |
| ENSMUSG00000015745.3 | Plekho1 | 0.62281 | 1.539871 | 1.1E-07 |
| ENSMUSG00000015094.10 | Npdc1 | 0.622469 | 1.539507 | 6.56E-09 |
| ENSMUSG00000028958.8 | Tmub1 | 0.622156 | 1.539173 | 9.68E-06 |
| ENSMUSG00000028782.8 | Bai2 | 0.622051 | 1.539061 | 3.29E-07 |
| ENSMUSG00000026241.4 | Nppc | 0.621871 | 1.53887 | 0.002097 |
| ENSMUSG00000037003.9 | Tenc1 | 0.6213 | 1.53826 | 4.6E-05 |
| ENSMUSG00000015461.9 | Atf6b | 0.620216 | 1.537106 | 1.15E-06 |
| ENSMUSG00000031980.9 | Agt | 0.620072 | 1.536952 | 1.41E-08 |
| ENSMUSG00000056724.8 | Nbeal2 | 0.619946 | 1.536817 | 1.29E-05 |
| ENSMUSG00000022469.10 | Rapgef3 | 0.619343 | 1.536176 | 1.44E-07 |
| ENSMUSG00000024197.9 | Plin3 | 0.619257 | 1.536084 | 3.3E-05 |
| ENSMUSG00000034949.12 | Zfr2 | 0.618583 | 1.535366 | 1.63E-06 |
| ENSMUSG00000048807.2 | Slc35e4 | 0.618339 | 1.535107 | 4.82E-06 |
| ENSMUSG00000020868.9 | Xylt2 | 0.618285 | 1.535049 | 3.47E-07 |
| ENSMUSG00000018861.2 | Fdxr | 0.618194 | 1.534953 | 5.96E-07 |
| ENSMUSG00000037349.3 | Nudt22 | 0.617893 | 1.534632 | 6.99E-06 |
| ENSMUSG00000028023.10 | Pitx2 | 0.617736 | 1.534466 | 0.00784 |
| ENSMUSG00000022623.9 | Shank3 | 0.617733 | 1.534462 | 1.79E-05 |
| ENSMUSG00000049521.1 | Cdc42ep1 | 0.617302 | 1.534004 | 1.79E-06 |
| ENSMUSG00000032968.4 | Inha | 0.616858 | 1.533532 | 1.85E-06 |
| ENSMUSG00000062382.7 | Gm10116 | 0.616383 | 1.533027 | 0.010471 |
| ENSMUSG00000004263.9 | Atn1 | 0.615998 | 1.532618 | 1.81E-06 |
| ENSMUSG00000018822.7 | Sfrp5 | 0.615872 | 1.532484 | 3.41E-06 |
| ENSMUSG00000030741.9 | Spns1 | 0.615286 | 1.531862 | 1.23E-07 |
| ENSMUSG00000066510.4 | Ankdd1a | 0.615245 | 1.531818 | 0.002659 |
| ENSMUSG00000050357.8 | Rltpr | 0.615237 | 1.53181 | 2.07E-07 |
| ENSMUSG00000070000.7 | Fcho1 | 0.614811 | 1.531357 | 4.57E-07 |
| ENSMUSG00000029713.9 | Gnb2 | 0.61408 | 1.530581 | 6.25E-07 |
| ENSMUSG00000032394.5 | Igdcc3 | 0.613488 | 1.529954 | 0.0001 |
| ENSMUSG00000096403.1 | Gm9825 | 0.613479 | 1.529944 | 0.003736 |
| ENSMUSG00000038390.9 | Gpr162 | 0.611677 | 1.528034 | 1.23E-07 |
| ENSMUSG00000033170.8 | Card10 | 0.611527 | 1.527876 | 9.27E-05 |
| ENSMUSG00000024137.8 | E4f1 | 0.611453 | 1.527797 | 1.07E-06 |
| ENSMUSG00000040964.10 | Arhgef10l | 0.611358 | 1.527696 | 2.33E-06 |
| ENSMUSG00000061393.7 | Acvr2b | 0.611317 | 1.527653 | 0.003088 |
| ENSMUSG00000025422.8 | Agap2 | 0.61123 | 1.527561 | 2.89E-07 |
| ENSMUSG00000030083.9 | Abtb1 | 0.611177 | 1.527504 | 2.94E-07 |
| ENSMUSG00000078552.4 | Dcdc2b | 0.611091 | 1.527413 | 5.78E-05 |
| ENSMUSG00000024940.10 | Ltbp3 | 0.610979 | 1.527295 | 2.22E-06 |
| ENSMUSG00000051243.7 | Islr2 | 0.610426 | 1.52671 | 1.52E-06 |
| ENSMUSG00000035268.8 | Pkig | 0.610189 | 1.526459 | 7.92E-06 |
| ENSMUSG00000061589.8 | Dot1l | 0.61015 | 1.526418 | 7.38E-07 |
| ENSMUSG00000044172.6 | Ptx4 | 0.608796 | 1.524986 | 0.049019 |
| ENSMUSG00000029602.5 | Rasal1 | 0.608735 | 1.524922 | 5.51E-06 |
| ENSMUSG00000063704.6 | Mapk15 | 0.608724 | 1.52491 | 0.000375 |
| ENSMUSG00000033597.8 | Caskin1 | 0.608691 | 1.524875 | 6.78E-06 |

| | | | | |
|------------------------|----------|----------|----------|----------|
| ENSMUSG00000001751.9 | Naglu | 0.608576 | 1.524753 | 4.05E-05 |
| ENSMUSG000000067653.6 | Ankrd23 | 0.608225 | 1.524382 | 9.98E-05 |
| ENSMUSG000000011877.7 | Git1 | 0.607931 | 1.524072 | 2.77E-06 |
| ENSMUSG000000030588.5 | Yif1b | 0.607829 | 1.523964 | 1.64E-07 |
| ENSMUSG000000041607.10 | Mbp | 0.606137 | 1.522178 | 1.04E-07 |
| ENSMUSG000000028600.9 | Podn | 0.605913 | 1.521941 | 0.008896 |
| ENSMUSG000000050552.7 | Lamtor4 | 0.605705 | 1.521722 | 1.49E-06 |
| ENSMUSG000000054874.6 | Pcnxl3 | 0.605678 | 1.521693 | 2.72E-06 |
| ENSMUSG000000039741.9 | Bahcc1 | 0.605491 | 1.521497 | 3.54E-05 |
| ENSMUSG000000048897.9 | Zfp710 | 0.605478 | 1.521483 | 4.57E-07 |
| ENSMUSG000000006215.6 | Zbtb17 | 0.604386 | 1.520331 | 2.24E-07 |
| ENSMUSG000000024769.7 | Cdc42bpg | 0.604047 | 1.519974 | 4.6E-05 |
| ENSMUSG000000030530.9 | Furin | 0.603567 | 1.519469 | 6.41E-07 |
| ENSMUSG000000023904.4 | Hcfc1r1 | 0.603498 | 1.519396 | 1.56E-08 |
| ENSMUSG000000029570.1 | Lfng | 0.603482 | 1.51938 | 1.88E-05 |
| ENSMUSG000000032120.10 | C2cd2l | 0.603361 | 1.519252 | 3.62E-07 |
| ENSMUSG000000029545.7 | Acads | 0.603165 | 1.519045 | 3.81E-06 |
| ENSMUSG000000017713.9 | Tha1 | 0.602771 | 1.518631 | 3.73E-05 |
| ENSMUSG000000012017.3 | Scarf2 | 0.602652 | 1.518506 | 1.52E-05 |
| ENSMUSG000000027134.4 | Lpcat4 | 0.602581 | 1.51843 | 4.78E-07 |
| ENSMUSG000000007570.9 | Fance | 0.602446 | 1.518289 | 2.94E-07 |
| ENSMUSG000000024793.8 | Tnfrsf25 | 0.602308 | 1.518143 | 0.04214 |
| ENSMUSG000000045259.4 | Klhdc9 | 0.601306 | 1.51709 | 0.000443 |
| ENSMUSG000000028137.5 | Celf3 | 0.601204 | 1.516983 | 2.03E-06 |
| ENSMUSG000000057777.3 | Mab21l2 | 0.600083 | 1.515803 | 1.89E-06 |
| ENSMUSG000000025572.11 | Tmc6 | 0.599946 | 1.515659 | 1.46E-05 |
| ENSMUSG000000007036.9 | Abhd16a | 0.599732 | 1.515435 | 1.33E-07 |
| ENSMUSG000000074358.3 | Ccdc61 | 0.599349 | 1.515033 | 0.000141 |
| ENSMUSG000000015468.8 | Notch4 | 0.599292 | 1.514973 | 0.000836 |
| ENSMUSG000000049482.9 | Ctu2 | 0.599137 | 1.51481 | 2.89E-06 |
| ENSMUSG000000041354.9 | Rgl2 | 0.599072 | 1.514742 | 4.52E-08 |
| ENSMUSG000000026923.9 | Notch1 | 0.598983 | 1.514649 | 0.000574 |
| ENSMUSG000000044595.10 | Dnd1 | 0.598772 | 1.514427 | 0.008723 |
| ENSMUSG000000079547.2 | H2-DMb1 | 0.598616 | 1.514264 | 0.006402 |
| ENSMUSG000000006576.10 | Slc4a3 | 0.598112 | 1.513735 | 1.01E-06 |
| ENSMUSG000000046727.6 | Cystm1 | 0.597479 | 1.51307 | 3.99E-07 |
| ENSMUSG000000020692.8 | Nle1 | 0.597049 | 1.512619 | 2.3E-05 |
| ENSMUSG000000033055.4 | Ankrd54 | 0.597029 | 1.512598 | 2.87E-07 |
| ENSMUSG000000045319.7 | Proser2 | 0.596166 | 1.511693 | 0.000241 |
| ENSMUSG000000089832.2 | Shkbp1 | 0.595809 | 1.51132 | 1.14E-06 |
| ENSMUSG000000049556.4 | Lingo1 | 0.595317 | 1.510805 | 8.49E-07 |
| ENSMUSG000000079235.4 | Ccdc13 | 0.595263 | 1.510748 | 1.67E-06 |
| ENSMUSG000000047658.6 | Gal3st3 | 0.595236 | 1.51072 | 1.56E-07 |
| ENSMUSG000000003970.8 | Rpl8 | 0.594793 | 1.510256 | 1.81E-07 |
| ENSMUSG000000074899.4 | Sptbn5 | 0.594602 | 1.510056 | 0.00023 |
| ENSMUSG000000034684.7 | Sema3f | 0.594535 | 1.509986 | 6.57E-07 |
| ENSMUSG000000048385.8 | Scrt1 | 0.59453 | 1.50998 | 0.000224 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000024201.6 | Kdm4b | 0.594334 | 1.509775 | 9.16E-07 |
| ENSMUSG00000070823.3 | Gm1043 | 0.593604 | 1.509012 | 0.003762 |
| ENSMUSG00000023192.7 | Grm2 | 0.593002 | 1.508382 | 1.97E-05 |
| ENSMUSG00000030606.7 | Hapl3 | 0.592771 | 1.508141 | 0.016549 |
| ENSMUSG00000041130.9 | Zfp598 | 0.592377 | 1.507729 | 8.12E-10 |
| ENSMUSG00000041429.2 | Nthl1 | 0.592283 | 1.507631 | 7.35E-05 |
| ENSMUSG00000031972.4 | Acta1 | 0.592207 | 1.507551 | 0.000302 |
| ENSMUSG00000024613.10 | Tcof1 | 0.590993 | 1.506283 | 7.02E-06 |
| ENSMUSG00000022562.7 | Oplah | 0.590487 | 1.505755 | 1.52E-06 |
| ENSMUSG00000052488.6 | Cherp | 0.590182 | 1.505437 | 1.87E-06 |
| ENSMUSG00000033020.6 | Polr2f | 0.589106 | 1.504315 | 2.38E-06 |
| ENSMUSG00000024212.8 | Mllt1 | 0.588564 | 1.50375 | 8.78E-07 |
| ENSMUSG00000000149.6 | Gna12 | 0.588561 | 1.503746 | 6.9E-09 |
| ENSMUSG00000066191.5 | Anks6 | 0.588114 | 1.50328 | 1.99E-06 |
| ENSMUSG00000046822.6 | Slc39a3 | 0.587979 | 1.503139 | 7.23E-07 |
| ENSMUSG00000006445.3 | Epha2 | 0.587942 | 1.503101 | 0.003049 |
| ENSMUSG00000032198.8 | Dock6 | 0.587562 | 1.502705 | 5.21E-06 |
| ENSMUSG00000001552.8 | Jup | 0.58748 | 1.50262 | 1.84E-06 |
| ENSMUSG00000063838.6 | Cdc42ep5 | 0.586384 | 1.501479 | 0.026292 |
| ENSMUSG00000050288.5 | Fzd2 | 0.585639 | 1.500703 | 0.000107 |
| ENSMUSG00000027602.3 | Map1lc3a | 0.585364 | 1.500417 | 5.39E-07 |
| ENSMUSG00000036067.6 | Slc2a6 | 0.585329 | 1.500381 | 3.02E-06 |
| ENSMUSG00000067847.7 | Romo1 | 0.585039 | 1.500079 | 4.15E-06 |
| ENSMUSG00000058046.1 | 4933430I17Rik | -0.58626 | 0.666066 | 0.003661 |
| ENSMUSG00000042385.8 | Gzmk | -0.59041 | 0.664156 | 0.015645 |
| ENSMUSG00000006056.7 | Calcoco2 | -0.59195 | 0.663446 | 0.033347 |
| ENSMUSG00000050074.6 | Spink8 | -0.59829 | 0.660537 | 0.013346 |
| ENSMUSG00000029304.8 | Spp1 | -0.60259 | 0.658572 | 0.005668 |
| ENSMUSG00000063623.2 | C230062I16Rik | -0.6122 | 0.654197 | 0.019829 |
| ENSMUSG00000013611.8 | Snx31 | -0.61567 | 0.652627 | 0.014658 |
| ENSMUSG00000035364.1 | 4930524J08Rik | -0.61632 | 0.652332 | 0.039909 |
| ENSMUSG00000044645.7 | Gm7334 | -0.61661 | 0.6522 | 0.04652 |
| ENSMUSG00000035296.7 | Sgcg | -0.62024 | 0.650562 | 0.049265 |
| ENSMUSG00000039748.6 | Exo1 | -0.62498 | 0.648429 | 0.012319 |
| ENSMUSG00000048498.7 | Cd300e | -0.63953 | 0.641921 | 0.045469 |
| ENSMUSG00000069441.3 | Dsg1a | -0.64217 | 0.640746 | 0.014304 |
| ENSMUSG00000024131.7 | Slc3a1 | -0.64299 | 0.640382 | 0.032088 |
| ENSMUSG00000062713.7 | Sim2 | -0.65036 | 0.637119 | 0.020905 |
| ENSMUSG00000057228.5 | Aadat | -0.65474 | 0.63519 | 0.005717 |
| ENSMUSG00000094845.1 | Tmem95 | -0.65502 | 0.635068 | 0.016159 |
| ENSMUSG00000078932.2 | CN725425 | -0.65606 | 0.634608 | 0.043004 |
| ENSMUSG00000082932.3 | Cyp2j8 | -0.65945 | 0.633119 | 0.02678 |
| ENSMUSG00000034683.6 | Ppp1r1c | -0.67576 | 0.626004 | 0.027428 |
| ENSMUSG00000094140.1 | Olf15l2 | -0.68004 | 0.624148 | 0.042044 |
| ENSMUSG00000050957.4 | Insl6 | -0.68273 | 0.622985 | 0.010675 |
| ENSMUSG00000030244.7 | Gys2 | -0.70302 | 0.614286 | 0.036265 |
| ENSMUSG00000048337.3 | Npy4r | -0.70434 | 0.613724 | 0.010082 |

| | | | | |
|-----------------------|---------------|----------|----------|----------|
| ENSMUSG00000011171.5 | Vipr2 | -0.71343 | 0.609869 | 0.005191 |
| ENSMUSG00000053830.3 | Gm9923 | -0.71601 | 0.608778 | 0.008662 |
| ENSMUSG00000017688.8 | Hnf4g | -0.71737 | 0.608204 | 0.039892 |
| ENSMUSG00000072955.7 | Tmsb15l | -0.72426 | 0.605309 | 0.015094 |
| ENSMUSG00000052180.8 | Serpib6c | -0.74895 | 0.595034 | 0.024012 |
| ENSMUSG00000035202.7 | Lars2 | -0.74967 | 0.594741 | 0.02531 |
| ENSMUSG00000035365.9 | Parpbp | -0.76419 | 0.588785 | 0.00972 |
| ENSMUSG00000027326.7 | Casc5 | -0.77629 | 0.583866 | 0.00951 |
| ENSMUSG00000029134.8 | Plb1 | -0.78754 | 0.579331 | 0.025941 |
| ENSMUSG00000021041.7 | 2700073G19Rik | -0.79187 | 0.577595 | 0.026906 |
| ENSMUSG00000073598.3 | 1700066B19Rik | -0.80069 | 0.574073 | 0.04737 |
| ENSMUSG00000041886.6 | Macc1 | -0.80916 | 0.570715 | 0.01617 |
| ENSMUSG00000021647.6 | Cartpt | -0.82651 | 0.563892 | 0.045857 |
| ENSMUSG00000026602.4 | Nphs2 | -0.83155 | 0.561926 | 0.024347 |
| ENSMUSG00000051648.7 | Kctd19 | -0.83867 | 0.559159 | 0.006953 |
| ENSMUSG00000022860.8 | Chodl | -0.85459 | 0.553022 | 0.004486 |
| ENSMUSG00000087408.3 | Cers1 | -0.86917 | 0.54746 | 0.000251 |
| ENSMUSG00000019935.10 | Slc17a8 | -0.8847 | 0.541599 | 0.007438 |
| ENSMUSG00000026468.8 | Lhx4 | -0.89188 | 0.538913 | 0.017282 |
| ENSMUSG00000073907.2 | Olf689 | -0.91594 | 0.529997 | 0.017322 |
| ENSMUSG00000022667.11 | Cd200r1 | -0.9162 | 0.529904 | 0.047557 |
| ENSMUSG00000066867.5 | Oas1e | -0.92538 | 0.526541 | 0.005647 |
| ENSMUSG00000042258.7 | Isl1 | -0.94438 | 0.519652 | 0.01138 |
| ENSMUSG00000044556.3 | Tex38 | -0.95723 | 0.515046 | 0.003216 |
| ENSMUSG00000073594.2 | Gm10545 | -0.96182 | 0.513408 | 0.001187 |
| ENSMUSG00000074603.2 | Gm10729 | -0.96671 | 0.51167 | 0.015437 |
| ENSMUSG00000027750.10 | Postn | -0.9882 | 0.504106 | 0.012035 |
| ENSMUSG00000030666.5 | Calcb | -1.02459 | 0.49155 | 0.015474 |
| ENSMUSG00000062939.5 | Stat4 | -1.04901 | 0.483299 | 0.009364 |
| ENSMUSG00000031891.5 | Hsd11b2 | -1.0534 | 0.48183 | 0.03743 |
| ENSMUSG00000031965.8 | Tbx20 | -1.05743 | 0.480487 | 0.024513 |
| ENSMUSG00000079711.3 | Smok4a | -1.07093 | 0.476013 | 0.023002 |
| ENSMUSG00000035277.9 | Arx | -1.08419 | 0.471658 | 0.031188 |
| ENSMUSG00000055976.5 | Cldn23 | -1.10907 | 0.463592 | 0.00092 |
| ENSMUSG00000025479.8 | Cyp2e1 | -1.14565 | 0.451985 | 0.022333 |
| ENSMUSG00000075307.3 | Klhl41 | -1.16044 | 0.447377 | 0.000218 |
| ENSMUSG00000012520.8 | Phox2b | -1.23378 | 0.425201 | 0.011201 |
| ENSMUSG00000021919.7 | Chat | -1.26664 | 0.415625 | 0.005995 |
| ENSMUSG00000079666.2 | 1700015F17Rik | -1.29237 | 0.408281 | 0.017433 |
| ENSMUSG00000022479.9 | Vdr | -1.32233 | 0.399887 | 0.001526 |
| ENSMUSG00000040283.8 | Btnl9 | -1.33761 | 0.395674 | 0.010701 |
| ENSMUSG00000078887.4 | Gm6710 | -1.33905 | 0.395282 | 0.016422 |
| ENSMUSG00000037334.2 | H2-M1 | -1.40436 | 0.377787 | 0.013625 |
| ENSMUSG00000079685.3 | Ubp1 | -1.48008 | 0.358468 | 0.00592 |

| | | | | |
|----------------------|--------|----------|----------|----------|
| ENSMUSG00000024391.7 | Apom | -1.48052 | 0.35836 | 0.020236 |
| ENSMUSG00000023945.6 | Slc5a7 | -1.58653 | 0.332972 | 0.00151 |
| ENSMUSG00000040485.4 | Lrrc52 | -1.6104 | 0.327507 | 0.032648 |

Table S2. Primers used for qPCR experiments. Primer sequences; primers were designed to amplify regions of 50 – 250 bp (S5) located in the genes of interest selected from IPA analysis.

| Name | Forward | Reverse | Product length |
|----------------|-------------------------|------------------------|----------------|
| <i>Capn11</i> | ACTACTCAGACATCTCTTGGGC | CAGCAGGGAAAAAGGGTCT | 183 |
| <i>Capn2</i> | GAGCCGAGGAGGTTGAAAGT | GCCGTTTCGGTTAGATTTGCC | 153 |
| <i>Capn1</i> | AGTGGAAACAAAGTGGACCCC | TCGGAACGACATCCAGAACTC | 80 |
| <i>Slc17a8</i> | GCAATGACTAAGCACAAAGACCC | GGGTGGTGGCTCCATAAGAC | 250 |
| <i>CCL3</i> | CCCAGCCAGGTGTCATTTTC | GTGGCTACTTGGCAGCAAAC | 238 |
| <i>Cyr61</i> | AGAGGCTTCCTGTCTTTGGC | CCAAGACGTGGTCTGAACGA | 92 |
| <i>Oacyl</i> | AAGGCTATGGAGGTCCCGT | AGCATGTTGGTGTCCGTGTA | 157 |
| <i>Btg2</i> | ACGCACTGACCGATCATTACAA | CCCGATGCGGTAAGACACTT | 212 |
| <i>Tph2</i> | CTGAATCCGCCTGAGAGCAT | TAAATCCTGGATGGTTCGGCA | 145 |
| <i>Dusp1</i> | TATCGTGCCCAACGCTGAA | ACGCTTCATATCCTCCTTGG | 191 |
| <i>Cyp2e1</i> | ACCTGGAAGCCACAGAAAAGTC | TTCTTGGCTGTGTTTTTCTTCT | 160 |
| <i>Mt1</i> | CTCGGAATGGACCCCAACTG | AGGAGCAGCAGCTCTTCTTG | 112 |
| <i>Sgk1</i> | GCTAGGCACAAGGCAGAAGA | GGTAGAACAGCTCTCCACCA | 217 |
| <i>Vgf</i> | AAAGGATGACGGCGTACCAG | GAGGCTATGGGTCTGACTGC | 229 |
| <i>Fos</i> | CAGAGCGGGAATGGTGAAGA | CTGTCTCCGCTTGGAGTGTA | 188 |
| <i>F2r11</i> | AGAACCTTGACCCGGGACG | CAGAGGGCCATGCCATTA | 223 |
| <i>Pde6g</i> | TGCAAGGGTTTGGGGATGA | GGAATCAGGCTCAGGTTTGG | 223 |