

Table S2 Differentially expressed mRNAs

| mRNA | logFC | logCPM | P value | FDR |
|---------|--------------|-------------|-----------|-----------|
| RTKN2 | -4.039559435 | 5.535879335 | 5.33E-216 | 9.67E-212 |
| FAM107A | -4.513599474 | 5.24374202 | 3.75E-213 | 3.40E-209 |
| EPAS1 | -2.686342646 | 9.244169656 | 7.05E-210 | 4.26E-206 |
| OTUD1 | -2.09143949 | 4.624686272 | 1.69E-209 | 7.64E-206 |
| S1PR1 | -2.822371755 | 5.268256279 | 1.82E-200 | 6.61E-197 |
| SEMA3G | -3.194860709 | 3.990875885 | 1.94E-199 | 5.87E-196 |
| STX11 | -2.978239639 | 3.593995142 | 1.68E-198 | 4.36E-195 |
| RGCC | -2.845482468 | 6.222611167 | 8.67E-198 | 1.96E-194 |
| TEK | -3.224404031 | 4.397191146 | 1.11E-197 | 2.24E-194 |
| RAMP3 | -3.193661973 | 4.616480766 | 1.15E-195 | 2.09E-192 |
| PECAM1 | -2.291303929 | 8.044649284 | 2.11E-195 | 3.48E-192 |
| ACVRL1 | -2.543612672 | 5.624476194 | 4.14E-193 | 6.25E-190 |
| SPAAR | -2.682656676 | 0.47245075 | 5.42E-191 | 7.55E-188 |
| EMP2 | -2.71673525 | 8.629587888 | 4.43E-186 | 5.73E-183 |
| EDNRB | -3.466152682 | 5.08041568 | 6.90E-181 | 8.34E-178 |
| FCN3 | -4.486479828 | 5.04373899 | 3.70E-178 | 4.19E-175 |
| SLC6A4 | -6.126900568 | 4.60162205 | 3.06E-176 | 3.26E-173 |
| RAMP2 | -2.854694399 | 4.449347044 | 5.98E-176 | 6.02E-173 |
| PRX | -3.347871425 | 4.627081611 | 3.41E-175 | 3.25E-172 |
| HSPA12B | -2.765739953 | 3.258689462 | 1.04E-174 | 9.47E-172 |
| PTPN21 | -2.424635132 | 4.810647671 | 1.07E-171 | 9.26E-169 |
| LDB2 | -2.574710961 | 4.645190667 | 6.17E-170 | 5.08E-167 |
| ROBO4 | -2.814520926 | 5.110931715 | 1.56E-165 | 1.23E-162 |
| LIMS2 | -2.784118632 | 4.749477914 | 6.82E-165 | 5.15E-162 |
| WWC2 | -2.321603537 | 5.569396622 | 1.17E-161 | 8.45E-159 |
| ANGPT4 | -4.196909458 | 0.300198234 | 2.55E-160 | 1.78E-157 |
| CDH5 | -2.526008369 | 6.1184064 | 1.30E-157 | 8.69E-155 |
| AGER | -5.003396855 | 8.287595753 | 1.35E-157 | 8.76E-155 |
| SPOCK2 | -3.174306189 | 7.134242666 | 9.64E-157 | 6.03E-154 |
| FABP4 | -4.862193442 | 4.388806889 | 1.04E-156 | 6.29E-154 |
| MYZAP | -3.300764888 | 2.02094212 | 1.06E-155 | 6.22E-153 |
| JAM2 | -2.487668609 | 4.066669853 | 3.15E-154 | 1.79E-151 |
| CALCRL | -2.733100631 | 5.703635832 | 1.27E-151 | 6.95E-149 |
| CD101 | -2.764497369 | 2.701830866 | 3.66E-151 | 1.95E-148 |
| KANK3 | -2.813668979 | 2.9237841 | 1.79E-150 | 9.27E-148 |
| CAVIN2 | -3.277029997 | 6.310716159 | 6.38E-150 | 3.21E-147 |
| FHL1 | -3.386113941 | 6.097163773 | 5.58E-149 | 2.73E-146 |
| FOXF1 | -2.719585183 | 3.728694128 | 4.19E-146 | 2.00E-143 |

| | | | | |
|-----------|--------------|--------------|-----------|-----------|
| FMO2 | -3.248585392 | 5.928429945 | 2.13E-145 | 9.90E-143 |
| SH2D3C | -2.271491513 | 4.640169258 | 2.95E-145 | 1.34E-142 |
| TMEM100 | -4.315116104 | 4.643946436 | 7.43E-144 | 3.28E-141 |
| ECSCR | -2.352815289 | 2.04812997 | 1.82E-143 | 7.87E-141 |
| TAL1 | -2.762967145 | 2.098682578 | 5.72E-143 | 2.41E-140 |
| CYYR1 | -2.24679846 | 4.112304285 | 1.75E-141 | 7.21E-139 |
| PLAC9 | -2.683859753 | 2.665344279 | 6.45E-140 | 2.60E-137 |
| FGD5 | -2.23482708 | 4.882518907 | 1.35E-138 | 5.31E-136 |
| CLEC3B | -3.663439875 | 4.369381696 | 2.84E-138 | 1.09E-135 |
| SGCG | -3.801988837 | -0.02823605 | 2.49E-137 | 9.40E-135 |
| GIMAP8 | -2.433914149 | 4.606362273 | 4.07E-137 | 1.50E-134 |
| CAV1 | -3.402442752 | 8.125550202 | 6.44E-137 | 2.33E-134 |
| SMAD6 | -2.527681245 | 4.274219454 | 5.13E-134 | 1.82E-131 |
| GRK5 | -2.466877544 | 5.018058456 | 6.24E-134 | 2.17E-131 |
| LRRC32 | -2.351735392 | 5.58862717 | 5.89E-132 | 2.01E-129 |
| ADRB2 | -3.050737876 | 3.306935537 | 1.73E-131 | 5.81E-129 |
| LYVE1 | -3.167723449 | 3.809493609 | 4.93E-129 | 1.62E-126 |
| CLEC1A | -2.283393528 | 2.047847468 | 1.26E-128 | 4.08E-126 |
| GPD1 | -3.909904309 | 3.634396516 | 1.57E-128 | 5.00E-126 |
| VIPR1 | -3.196507993 | 4.931187045 | 1.85E-127 | 5.78E-125 |
| STARD8 | -2.184691779 | 3.959912213 | 2.58E-127 | 7.93E-125 |
| ARHGEF15 | -2.43186785 | 3.911217884 | 3.29E-127 | 9.93E-125 |
| GYPE | -3.248015068 | -0.197287313 | 3.64E-126 | 1.08E-123 |
| CLEC14A | -2.272597485 | 5.079322079 | 5.75E-126 | 1.68E-123 |
| ARHGEF26 | -2.636625493 | 4.669653779 | 1.18E-125 | 3.39E-123 |
| MYCT1 | -2.227327251 | 3.499083928 | 3.73E-124 | 1.06E-121 |
| SOX7 | -2.909979744 | 2.969135381 | 2.64E-123 | 7.35E-121 |
| HBB | -4.224912388 | 6.898757262 | 5.59E-123 | 1.53E-120 |
| HBA2 | -4.122987561 | 4.384042712 | 7.72E-122 | 2.09E-119 |
| CCM2L | -2.487299945 | 2.088901747 | 1.50E-121 | 3.99E-119 |
| GPM6A | -4.405949249 | 3.209893388 | 2.52E-121 | 6.61E-119 |
| CSRNP1 | -2.356460723 | 6.193078716 | 6.26E-121 | 1.62E-118 |
| ERG | -2.119440921 | 4.47507379 | 1.40E-120 | 3.57E-118 |
| C20orf202 | -2.584884567 | -0.886096242 | 7.46E-120 | 1.88E-117 |
| TNNC1 | -3.536705198 | 3.838087062 | 3.96E-119 | 9.83E-117 |
| NOVA2 | -2.398311508 | 2.550904617 | 7.11E-119 | 1.74E-116 |
| CLIC5 | -3.605080302 | 6.258455773 | 1.00E-118 | 2.42E-116 |
| MMRN2 | -2.10851034 | 4.955150391 | 1.23E-118 | 2.93E-116 |
| INMT | -3.47270053 | 5.80246615 | 7.55E-118 | 1.75E-115 |
| EMCN | -2.709705308 | 4.363835147 | 1.53E-117 | 3.46E-115 |

| | | | | |
|-----------|--------------|--------------|-----------|-----------|
| HBA1 | -4.349012664 | -0.947902641 | 2.49E-117 | 5.56E-115 |
| CD300LG | -4.927879898 | 1.456729037 | 3.61E-116 | 7.98E-114 |
| PTPRB | -2.562865937 | 5.985634927 | 3.87E-116 | 8.46E-114 |
| USHBP1 | -2.293316503 | 1.916956681 | 2.30E-115 | 4.97E-113 |
| AOC3 | -2.629158388 | 6.332382695 | 2.69E-115 | 5.73E-113 |
| SCUBE1 | -3.537604108 | 3.068113584 | 3.96E-115 | 8.35E-113 |
| RXFP1 | -3.065591857 | 1.186093976 | 8.54E-115 | 1.78E-112 |
| GRASP | -2.319149957 | 3.667096606 | 1.56E-114 | 3.20E-112 |
| THSD1 | -2.214098996 | 2.602679722 | 1.88E-114 | 3.83E-112 |
| MCEMP1 | -4.004608405 | 4.68193461 | 2.18E-114 | 4.38E-112 |
| GPIHBP1 | -3.683883264 | 3.193102901 | 1.36E-113 | 2.70E-111 |
| SLC39A8 | -2.464666565 | 7.51387305 | 1.68E-112 | 3.32E-110 |
| FXYD1 | -2.918083932 | 0.21141545 | 7.81E-111 | 1.52E-108 |
| NECAB1 | -3.154971995 | 2.452758869 | 1.22E-109 | 2.34E-107 |
| C14orf132 | -2.613430314 | 4.614126865 | 9.26E-109 | 1.73E-106 |
| SOX17 | -2.680629003 | 1.916799228 | 1.12E-108 | 2.07E-106 |
| GPR146 | -2.255384112 | 1.014337549 | 1.85E-108 | 3.39E-106 |
| CD93 | -2.182914965 | 6.969644693 | 3.34E-108 | 6.00E-106 |
| ALAS2 | -4.042370502 | -0.892560335 | 7.90E-108 | 1.40E-105 |
| HIGD1B | -2.757891302 | 2.135621796 | 1.10E-107 | 1.93E-105 |
| RGS9 | -2.454278843 | 1.12402781 | 3.25E-107 | 5.62E-105 |
| ARHGAP6 | -2.335634124 | 2.655842308 | 5.98E-107 | 1.02E-104 |
| RASIP1 | -2.280115733 | 3.921870894 | 8.39E-107 | 1.42E-104 |
| STXBP6 | -3.359801547 | 3.372077506 | 2.35E-106 | 3.95E-104 |
| WNT3A | -4.078449296 | 1.317547775 | 2.55E-106 | 4.24E-104 |
| CA4 | -4.315210955 | 2.81509305 | 1.60E-105 | 2.64E-103 |
| SLIT2 | -2.462914975 | 5.153219908 | 5.49E-104 | 8.97E-102 |
| FEZ1 | -2.133947117 | 3.274960879 | 6.72E-104 | 1.09E-101 |
| CLEC4M | -4.434068236 | -1.363544273 | 1.23E-103 | 1.97E-101 |
| ANOS1 | -2.777218727 | 5.780962516 | 1.30E-103 | 2.07E-101 |
| BTNL9 | -3.39009402 | 3.687217761 | 1.44E-103 | 2.27E-101 |
| TNS1 | -2.144736429 | 8.424170537 | 1.57E-103 | 2.46E-101 |
| CD5L | -4.019287773 | -0.940705608 | 4.96E-103 | 7.68E-101 |
| EFCC1 | -2.555981137 | 2.715976002 | 3.79E-102 | 5.77E-100 |
| JPH4 | -2.568727026 | 0.813179422 | 4.98E-101 | 7.52E-99 |
| FAM46B | -2.781867404 | 3.269966333 | 1.72E-100 | 2.57E-98 |
| NCKAP5 | -3.491093582 | 3.601548553 | 2.50E-100 | 3.71E-98 |
| GLIPR2 | -2.187263481 | 5.615714335 | 3.92E-100 | 5.77E-98 |
| C10orf67 | -3.939629726 | -0.075719088 | 6.43E-100 | 9.40E-98 |
| HBEGF | -2.555338694 | 5.337523157 | 9.49E-100 | 1.38E-97 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| CAVIN1 | -2.055978988 | 8.001875925 | 1.04E-99 | 1.49E-97 |
| NMUR1 | -2.647369716 | 0.820654309 | 1.34E-99 | 1.91E-97 |
| FREM3 | -4.235237833 | -0.829187194 | 6.85E-99 | 9.55E-97 |
| GIMAP6 | -2.069467713 | 4.947153702 | 1.79E-98 | 2.47E-96 |
| PYCR1 | 3.74679271 | 6.864921306 | 3.35E-98 | 4.59E-96 |
| HEG1 | -2.105879521 | 6.726716222 | 1.72E-97 | 2.34E-95 |
| OVCH1 | -3.89205837 | -0.31510284 | 2.16E-97 | 2.89E-95 |
| ADAMTS8 | -3.489859137 | 3.381313572 | 1.35E-96 | 1.80E-94 |
| ST8SIA6 | -3.294844352 | 0.969371521 | 2.97E-96 | 3.93E-94 |
| SCN4B | -2.783272498 | 3.319275128 | 3.00E-96 | 3.94E-94 |
| ANKRD1 | -4.384709958 | 3.661758439 | 3.99E-96 | 5.20E-94 |
| MYOC | -4.479559125 | -0.186999803 | 6.56E-96 | 8.50E-94 |
| TCF21 | -3.080374154 | 3.53365565 | 8.74E-96 | 1.12E-93 |
| THBD | -2.410396996 | 5.984299812 | 2.01E-95 | 2.52E-93 |
| ARHGAP31 | -2.106920184 | 5.750681736 | 3.01E-95 | 3.74E-93 |
| RS1 | -3.705828725 | -0.078268199 | 3.10E-95 | 3.82E-93 |
| SIRPB1 | -2.829686576 | 3.090523813 | 4.94E-95 | 6.05E-93 |
| FAM189A2 | -2.89694567 | 4.341511272 | 5.01E-95 | 6.09E-93 |
| CSF3 | -4.621626353 | 3.293079059 | 4.42E-94 | 5.31E-92 |
| ARC | -3.418597871 | 1.373059798 | 8.81E-94 | 1.05E-91 |
| FAM110D | -2.299648465 | 0.924019119 | 2.26E-93 | 2.68E-91 |
| SEMA6A | -2.520573604 | 3.777484315 | 8.40E-93 | 9.88E-91 |
| TNR | -3.815674612 | 0.628656719 | 1.03E-92 | 1.20E-90 |
| DNASE1L3 | -3.456923461 | 2.375566073 | 1.91E-92 | 2.22E-90 |
| UPK3B | -4.116733028 | 4.809823133 | 3.79E-92 | 4.37E-90 |
| CHRM1 | -4.395483533 | -0.261145462 | 9.34E-92 | 1.07E-89 |
| SLC4A1 | -3.377027027 | -2.035996115 | 3.52E-91 | 3.99E-89 |
| FHL5 | -2.727578718 | 1.912377233 | 8.57E-91 | 9.65E-89 |
| GSTM5 | -2.430556693 | 2.165559953 | 8.70E-91 | 9.73E-89 |
| LTBP4 | -2.195659093 | 7.108298977 | 2.84E-90 | 3.16E-88 |
| NLRC4 | -2.048331887 | 2.590799954 | 8.72E-89 | 9.52E-87 |
| DPP6 | -3.227334179 | 0.01773319 | 1.02E-88 | 1.11E-86 |
| JCAD | -2.076536143 | 5.985326172 | 6.60E-88 | 7.08E-86 |
| NXPH3 | -2.396266621 | 1.932383185 | 1.18E-87 | 1.25E-85 |
| CGNL1 | -2.194646752 | 5.738928278 | 1.22E-87 | 1.29E-85 |
| FRMD3 | -2.401784087 | 2.487469253 | 1.29E-87 | 1.35E-85 |
| TGFBR3 | -2.529157615 | 4.667463384 | 2.39E-87 | 2.49E-85 |
| SPN | -2.268516773 | 5.101921728 | 2.83E-87 | 2.94E-85 |
| NPR1 | -2.590094118 | 4.401541127 | 3.03E-87 | 3.12E-85 |
| CCDC85A | -2.78577945 | 1.012413835 | 7.83E-86 | 7.88E-84 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| RAI2 | -2.109595275 | 3.75174624 | 2.82E-85 | 2.79E-83 |
| CMTM2 | -2.263796542 | -0.821916537 | 5.81E-85 | 5.72E-83 |
| LDLR | -2.086188772 | 7.129007292 | 7.70E-85 | 7.54E-83 |
| VWF | -2.297833396 | 8.194578582 | 1.48E-84 | 1.44E-82 |
| CLDN5 | -2.675973674 | 5.339744188 | 3.93E-84 | 3.79E-82 |
| SH3GL3 | -4.196711034 | -0.066980682 | 2.09E-83 | 1.97E-81 |
| AKAP2 | -2.496276412 | 0.401124788 | 2.22E-83 | 2.09E-81 |
| AC008763.3 | -3.951598339 | -3.337830977 | 7.68E-82 | 7.06E-80 |
| PHACTR1 | -2.25836199 | 4.447128365 | 4.00E-81 | 3.66E-79 |
| SSTR4 | -3.786195748 | -3.904073963 | 1.44E-80 | 1.31E-78 |
| LAMP3 | -2.750650664 | 7.431505441 | 2.23E-80 | 2.01E-78 |
| CDO1 | -2.662150209 | 1.575465581 | 2.33E-80 | 2.09E-78 |
| ADAMTS1 | -2.313121227 | 5.867271611 | 8.72E-80 | 7.78E-78 |
| MGAT3 | -3.001651741 | 3.974766419 | 1.98E-79 | 1.73E-77 |
| DPEP2 | -2.169695988 | 2.916211316 | 2.80E-79 | 2.43E-77 |
| ADGRE3 | -2.829046464 | 0.604688858 | 1.02E-78 | 8.82E-77 |
| PTPN5 | -3.380662443 | -0.871758618 | 1.37E-78 | 1.17E-76 |
| OR6K3 | -4.150524172 | -3.646445472 | 1.58E-78 | 1.35E-76 |
| FGR | -2.086414647 | 4.904153381 | 4.22E-78 | 3.57E-76 |
| SEMA5A | -2.508486916 | 5.171093372 | 4.44E-78 | 3.74E-76 |
| MFAP4 | -2.627974716 | 7.10352358 | 5.13E-78 | 4.30E-76 |
| VEGFD | -3.547704212 | 3.372344197 | 8.07E-78 | 6.74E-76 |
| TEDC2 | 3.544361286 | 2.617541784 | 4.27E-77 | 3.53E-75 |
| SELP | -2.294761422 | 3.450806783 | 5.44E-77 | 4.48E-75 |
| COX4I2 | -2.251083428 | 2.499871727 | 6.86E-77 | 5.62E-75 |
| CAV2 | -2.324109894 | 6.990902329 | 1.24E-75 | 9.95E-74 |
| CD36 | -2.870398806 | 5.593847364 | 1.84E-75 | 1.47E-73 |
| ASPA | -2.586241081 | 0.904602975 | 2.38E-75 | 1.89E-73 |
| CMTM5 | -2.872264401 | -2.615687128 | 2.39E-75 | 1.89E-73 |
| CD52 | -2.332978348 | 5.887049167 | 1.38E-74 | 1.08E-72 |
| ABI3BP | -2.464508825 | 5.417297146 | 2.30E-74 | 1.78E-72 |
| SLC19A3 | -2.869917778 | 2.712895075 | 3.05E-74 | 2.35E-72 |
| AGRP | -2.935961041 | -0.168615245 | 4.45E-74 | 3.42E-72 |
| FAM162B | -2.260419233 | 1.696162306 | 4.82E-74 | 3.68E-72 |
| MS4A7 | -2.107778006 | 5.568041431 | 1.09E-73 | 8.27E-72 |
| GRIA1 | -3.680412596 | 2.013979189 | 1.46E-73 | 1.10E-71 |
| PRKG2 | -2.608583915 | 1.828720697 | 1.47E-73 | 1.11E-71 |
| TUBB1 | -2.599205503 | -0.157493006 | 1.75E-73 | 1.31E-71 |
| IQSEC3 | -2.577885441 | 1.60031149 | 1.79E-73 | 1.34E-71 |
| PI16 | -3.553098643 | 1.27812595 | 3.97E-73 | 2.93E-71 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| TMEM88 | -2.107791285 | 1.52556866 | 7.20E-73 | 5.28E-71 |
| HTR3C | -4.51070999 | -1.120067814 | 7.94E-73 | 5.80E-71 |
| ITLN2 | -4.606449728 | 2.413893365 | 1.03E-72 | 7.49E-71 |
| DKK2 | -2.276704213 | 2.530909971 | 1.62E-72 | 1.17E-70 |
| TBX3 | -2.098727002 | 3.934381834 | 1.75E-72 | 1.26E-70 |
| OLR1 | -2.520007762 | 5.729035261 | 2.06E-72 | 1.48E-70 |
| LGI3 | -4.232851875 | 3.832486437 | 5.70E-72 | 4.05E-70 |
| UNC45B | -2.51020713 | -1.043161094 | 1.18E-71 | 8.26E-70 |
| ITM2A | -2.005638476 | 4.620756662 | 1.71E-71 | 1.20E-69 |
| MASP1 | -2.67645594 | 2.096503789 | 3.32E-71 | 2.30E-69 |
| IQGAP3 | 3.651927885 | 4.933028828 | 3.83E-71 | 2.64E-69 |
| SFTPC | -4.701210092 | 11.84794186 | 6.61E-71 | 4.54E-69 |
| ETV4 | 3.875510619 | 5.57645522 | 1.12E-70 | 7.60E-69 |
| FPR2 | -2.932509866 | 2.486734419 | 1.62E-70 | 1.10E-68 |
| ABCA8 | -2.803712315 | 3.936088784 | 2.22E-70 | 1.50E-68 |
| SERTM1 | -4.74437604 | 1.379795781 | 2.27E-70 | 1.53E-68 |
| PALMD | -2.013370684 | 4.038341108 | 3.31E-70 | 2.20E-68 |
| GDF10 | -3.153555578 | 2.620945521 | 3.50E-70 | 2.32E-68 |
| FAM83A | 6.81884006 | 7.193735284 | 5.43E-70 | 3.59E-68 |
| PKNOX2 | -2.40865215 | 2.390130383 | 7.81E-70 | 5.13E-68 |
| SLC14A1 | -2.824329401 | 1.801786543 | 8.36E-70 | 5.47E-68 |
| GRIK4 | -2.470813975 | 0.156332649 | 1.38E-69 | 9.00E-68 |
| ADRB1 | -3.103333899 | 2.803518403 | 5.98E-69 | 3.89E-67 |
| ALKAL2 | -2.964308029 | 0.671937697 | 1.02E-68 | 6.63E-67 |
| DES | -3.018935621 | 4.342012519 | 1.49E-68 | 9.58E-67 |
| KIAA1324L | -2.062897625 | 4.699480603 | 2.54E-68 | 1.63E-66 |
| SAPCD2 | 3.804868298 | 4.027928527 | 3.22E-68 | 2.05E-66 |
| MARCO | -3.007431986 | 6.693734454 | 6.38E-68 | 4.05E-66 |
| CXCR2 | -2.567932163 | 1.451819764 | 6.98E-68 | 4.41E-66 |
| TOP2A | 3.903307528 | 6.904441331 | 7.11E-68 | 4.48E-66 |
| MSR1 | -2.281694636 | 6.495539779 | 1.32E-67 | 8.26E-66 |
| GLDN | -2.497449507 | 3.22649701 | 1.63E-67 | 1.01E-65 |
| GOLM1 | 2.669744585 | 8.210181394 | 1.68E-67 | 1.04E-65 |
| OSCAR | -2.200662297 | 4.044195036 | 2.40E-67 | 1.48E-65 |
| ACADL | -3.112393392 | 2.675022988 | 4.77E-67 | 2.91E-65 |
| ABCG2 | -2.014551101 | 2.712094457 | 2.52E-66 | 1.53E-64 |
| UBE2T | 3.338646481 | 4.214061201 | 3.49E-66 | 2.10E-64 |
| TGM1 | -2.392612469 | 1.769300847 | 3.49E-66 | 2.10E-64 |
| GCOM1 | -2.635950434 | -0.565659543 | 4.40E-66 | 2.63E-64 |
| ACTN2 | -2.761965507 | 0.315878789 | 4.90E-66 | 2.91E-64 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| ADGRE1 | -2.686779516 | 1.919046439 | 2.03E-65 | 1.19E-63 |
| ADM2 | 3.499584848 | 4.084602787 | 3.09E-65 | 1.81E-63 |
| PRAM1 | -2.127325656 | 2.952442886 | 5.06E-65 | 2.92E-63 |
| SLIT3 | -2.403035132 | 5.534343439 | 5.78E-65 | 3.30E-63 |
| B3GNT3 | 4.404714906 | 5.508309152 | 8.29E-65 | 4.71E-63 |
| TMEM184A | 3.157859664 | 5.475786339 | 9.84E-65 | 5.57E-63 |
| SYNPO2L | -2.627874515 | -0.561991425 | 1.23E-64 | 6.92E-63 |
| LRRC2 | -2.417560182 | 0.627078054 | 2.08E-64 | 1.16E-62 |
| SIGLEC11 | -2.407092623 | 0.602097726 | 2.57E-64 | 1.43E-62 |
| TUBB3 | 4.760611662 | 3.025182262 | 2.90E-64 | 1.61E-62 |
| FO681492.1 | -2.84180081 | 0.488164123 | 4.95E-64 | 2.72E-62 |
| CDC25C | 3.695262661 | 2.155460916 | 8.67E-64 | 4.73E-62 |
| SELE | -2.909462573 | 2.342913367 | 9.52E-64 | 5.18E-62 |
| MPIG6B | -2.160574095 | -0.726265862 | 1.06E-63 | 5.78E-62 |
| KIF4A | 3.871648489 | 4.282796558 | 1.13E-63 | 6.10E-62 |
| SULT1C4 | -2.265101595 | 1.671795065 | 1.34E-63 | 7.18E-62 |
| VSIG4 | -2.364182619 | 6.221610002 | 1.34E-63 | 7.19E-62 |
| CORO2B | -2.16567198 | 2.13527342 | 1.80E-63 | 9.58E-62 |
| CNTN6 | -3.406654038 | 1.785595213 | 2.05E-63 | 1.09E-61 |
| CFP | -2.05662042 | 2.301506385 | 2.28E-63 | 1.20E-61 |
| OTC | -3.595435034 | -2.187111699 | 2.33E-63 | 1.22E-61 |
| UHRF1 | 3.384490714 | 3.94677616 | 2.48E-63 | 1.30E-61 |
| CD300C | -2.070612305 | 2.241293089 | 2.60E-63 | 1.35E-61 |
| IGSF10 | -2.792696676 | 3.553689382 | 3.72E-63 | 1.92E-61 |
| DLC1 | -2.218474362 | 6.830281249 | 4.29E-63 | 2.21E-61 |
| ERCC6L | 3.327182836 | 2.232492192 | 5.64E-63 | 2.90E-61 |
| CCDC141 | -2.974980679 | 1.592338708 | 5.82E-63 | 2.98E-61 |
| MAMDC2 | -2.659458302 | 4.043990712 | 1.10E-62 | 5.62E-61 |
| KCNA4 | -3.863629197 | -0.514797257 | 1.30E-62 | 6.64E-61 |
| ODF3L1 | -2.325324954 | -0.283345514 | 1.49E-62 | 7.55E-61 |
| KLF4 | -2.25312747 | 5.623205897 | 4.90E-62 | 2.47E-60 |
| S100A3 | -2.348999876 | 1.369509938 | 7.56E-62 | 3.79E-60 |
| LIN7A | -2.47471556 | 2.771285216 | 1.15E-61 | 5.76E-60 |
| DACH1 | -2.442137687 | 2.567743041 | 1.27E-61 | 6.31E-60 |
| TNXB | -2.674140331 | 5.323211105 | 2.50E-61 | 1.23E-59 |
| E2F8 | 3.207353988 | 2.965805781 | 2.99E-61 | 1.47E-59 |
| COL6A6 | -2.78889786 | 3.733169682 | 3.01E-61 | 1.47E-59 |
| NEK2 | 3.774386809 | 3.941023255 | 5.49E-61 | 2.68E-59 |
| LRRN3 | -2.713070555 | 1.939612476 | 5.54E-61 | 2.70E-59 |
| KIF14 | 3.79452422 | 3.319778439 | 6.52E-61 | 3.16E-59 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| ADAMTSL3 | -2.27615031 | 3.286935176 | 7.46E-61 | 3.60E-59 |
| PTCRA | -2.405357333 | -0.440160693 | 8.08E-61 | 3.89E-59 |
| KIF20A | 3.187304966 | 4.270071138 | 9.42E-61 | 4.53E-59 |
| GPX3 | -2.230673665 | 8.226850962 | 1.03E-60 | 4.95E-59 |
| BUB1B | 3.435760587 | 3.909714248 | 1.54E-60 | 7.33E-59 |
| ORC6 | 3.079139023 | 2.938851946 | 1.59E-60 | 7.53E-59 |
| XRCC2 | 3.263485992 | 2.765404248 | 1.66E-60 | 7.82E-59 |
| HJURP | 3.89788109 | 3.961695756 | 1.92E-60 | 9.02E-59 |
| SPAG5 | 3.127224072 | 4.947003079 | 2.10E-60 | 9.88E-59 |
| PLEKHN1 | 3.159060114 | 2.899227573 | 2.77E-60 | 1.30E-58 |
| EFNA4 | 2.211875353 | 4.306447022 | 2.80E-60 | 1.31E-58 |
| STIL | 2.595913094 | 3.709093492 | 7.92E-60 | 3.68E-58 |
| EZH2 | 2.584322941 | 4.373852205 | 8.08E-60 | 3.74E-58 |
| KIF26B | 3.163348389 | 5.542103185 | 9.60E-60 | 4.44E-58 |
| PLA2G4F | -2.683505042 | 4.562167929 | 1.03E-59 | 4.76E-58 |
| ADH1B | -3.239448159 | 6.472518279 | 1.23E-59 | 5.68E-58 |
| CXCR1 | -2.842162279 | 0.685331133 | 1.46E-59 | 6.71E-58 |
| PLK1 | 3.249297059 | 4.676477446 | 1.90E-59 | 8.65E-58 |
| HAS1 | -3.3403665 | 0.782225727 | 2.55E-59 | 1.16E-57 |
| ST6GALNAC5 | -2.195372544 | 3.397970924 | 2.91E-59 | 1.32E-57 |
| MYH2 | -3.112267249 | -1.53321943 | 3.71E-59 | 1.68E-57 |
| CDC6 | 3.453386055 | 4.422111071 | 4.15E-59 | 1.87E-57 |
| DLGAP5 | 3.722025261 | 4.042795784 | 4.63E-59 | 2.08E-57 |
| LGR4 | 2.751540824 | 6.158661663 | 8.51E-59 | 3.79E-57 |
| CENPF | 3.53044113 | 5.730338792 | 8.91E-59 | 3.96E-57 |
| ANGPT1 | -2.240522998 | 4.067247273 | 1.03E-58 | 4.58E-57 |
| DCC | -2.590749687 | 1.240072326 | 1.32E-58 | 5.85E-57 |
| ARHGEF39 | 2.480229063 | 2.83296955 | 1.56E-58 | 6.90E-57 |
| ASPM | 3.781966432 | 4.484458426 | 1.67E-58 | 7.36E-57 |
| SPAG4 | 2.932785734 | 3.962266026 | 2.05E-58 | 8.97E-57 |
| KIF2C | 3.611879936 | 4.530064993 | 2.50E-58 | 1.09E-56 |
| CDC20 | 3.812386584 | 5.10326881 | 4.28E-58 | 1.83E-56 |
| MEX3A | 4.22027003 | 4.887222436 | 6.07E-58 | 2.59E-56 |
| IL6 | -2.819893923 | 3.804543492 | 6.78E-58 | 2.89E-56 |
| ITGA8 | -2.07269722 | 4.552050805 | 7.16E-58 | 3.03E-56 |
| SYT15 | -2.488394774 | 0.054255773 | 8.40E-58 | 3.54E-56 |
| NUF2 | 3.749496335 | 3.665606818 | 9.84E-58 | 4.13E-56 |
| SOSTDC1 | -3.682283805 | 2.674987538 | 1.02E-57 | 4.26E-56 |
| CFD | -2.319018208 | 5.127669425 | 1.04E-57 | 4.34E-56 |
| IQCN | -2.409733708 | 3.279994923 | 1.20E-57 | 4.99E-56 |

| | | | | |
|-------------|--------------|--------------|----------|----------|
| CCL23 | -2.494032079 | 0.794530498 | 1.49E-57 | 6.17E-56 |
| CTHRC1 | 3.813154581 | 6.121660806 | 1.69E-57 | 6.97E-56 |
| MMRN1 | -2.325029039 | 3.730036878 | 1.89E-57 | 7.80E-56 |
| EXO1 | 3.632955195 | 3.25021806 | 2.04E-57 | 8.36E-56 |
| TBX4 | -2.161695549 | 3.766490023 | 2.30E-57 | 9.42E-56 |
| CDCA8 | 3.080762259 | 4.265461818 | 2.49E-57 | 1.02E-55 |
| PTPRQ | -3.551959723 | 0.612677987 | 3.11E-57 | 1.26E-55 |
| GIN51 | 3.078763646 | 3.94445483 | 3.62E-57 | 1.46E-55 |
| MELK | 3.652395898 | 3.95193564 | 4.00E-57 | 1.62E-55 |
| ANLN | 3.823970273 | 5.555833335 | 4.60E-57 | 1.85E-55 |
| RSPO1 | -3.04388156 | 0.699587477 | 7.11E-57 | 2.85E-55 |
| PPP1R14B | 2.115279013 | 6.544822235 | 8.99E-57 | 3.60E-55 |
| CASQ2 | -2.715366223 | 0.67083483 | 1.03E-56 | 4.12E-55 |
| DEPDC1B | 3.635318774 | 2.947399363 | 1.12E-56 | 4.45E-55 |
| WISP2 | -2.156039619 | 3.890715984 | 1.19E-56 | 4.71E-55 |
| RECQL4 | 3.059097592 | 4.585044051 | 2.89E-56 | 1.14E-54 |
| RAD54L | 3.312753701 | 2.634942545 | 3.36E-56 | 1.32E-54 |
| KIF18B | 3.804742574 | 3.675895785 | 3.86E-56 | 1.51E-54 |
| VEPH1 | -2.612035074 | 4.568194822 | 8.25E-56 | 3.21E-54 |
| LRRC36 | -2.893968265 | 2.707538149 | 8.68E-56 | 3.37E-54 |
| SPTBN2 | 2.536265527 | 5.770205324 | 9.81E-56 | 3.78E-54 |
| CEP55 | 3.288449477 | 4.517462963 | 1.57E-55 | 6.00E-54 |
| CHRNA2 | -3.546595958 | -2.18227859 | 2.00E-55 | 7.64E-54 |
| EFNA3 | 3.087555365 | 2.554571213 | 2.45E-55 | 9.29E-54 |
| RMI2 | 2.319506041 | 3.918222669 | 3.23E-55 | 1.22E-53 |
| MND1 | 2.932307184 | 1.73114217 | 3.26E-55 | 1.23E-53 |
| HSPB6 | -2.44661685 | 3.480379199 | 3.56E-55 | 1.34E-53 |
| DNASE2B | -2.880232718 | 0.126004866 | 4.78E-55 | 1.79E-53 |
| SGO1 | 3.252335242 | 2.199662348 | 4.80E-55 | 1.80E-53 |
| FGFBP2 | -3.050167936 | 0.556398386 | 4.91E-55 | 1.83E-53 |
| TROAP | 3.866357758 | 3.788851622 | 5.24E-55 | 1.96E-53 |
| SH2D4B | -2.197104037 | -1.317249587 | 5.62E-55 | 2.09E-53 |
| TPX2 | 3.678643173 | 5.803885943 | 6.19E-55 | 2.30E-53 |
| DEPDC1 | 3.875064177 | 3.465535773 | 7.07E-55 | 2.62E-53 |
| SKA3 | 3.233942826 | 2.815877427 | 9.08E-55 | 3.36E-53 |
| CCNB1 | 3.009646799 | 5.345825591 | 9.48E-55 | 3.49E-53 |
| AL096711.2 | -2.482493928 | -0.529196332 | 1.26E-54 | 4.63E-53 |
| INMT-MINDY4 | -3.069810203 | -2.650504964 | 1.49E-54 | 5.46E-53 |
| BIRC5 | 3.717378201 | 5.32640329 | 2.22E-54 | 8.08E-53 |
| CTXND1 | -3.092338906 | 1.399230845 | 2.55E-54 | 9.24E-53 |

| | | | | |
|---------|--------------|--------------|----------|----------|
| PDZD2 | -2.198965084 | 5.199240286 | 2.82E-54 | 1.02E-52 |
| GTSE1 | 3.136124376 | 3.424062586 | 4.01E-54 | 1.44E-52 |
| OCIAD2 | 2.214029582 | 6.799733293 | 6.96E-54 | 2.48E-52 |
| FOSB | -3.27291549 | 7.577234123 | 8.79E-54 | 3.11E-52 |
| ANGPTL7 | -3.466587054 | -0.597282604 | 8.91E-54 | 3.14E-52 |
| GP9 | -3.052823064 | -2.740799298 | 1.05E-53 | 3.69E-52 |
| UBE2C | 4.223863177 | 5.248407907 | 1.06E-53 | 3.71E-52 |
| KIF11 | 2.72596055 | 4.707597854 | 1.06E-53 | 3.72E-52 |
| ZBED2 | -2.337233381 | 2.748146171 | 1.19E-53 | 4.14E-52 |
| FUT2 | 3.206745951 | 4.529928048 | 1.21E-53 | 4.23E-52 |
| IL7R | -2.017292859 | 6.278254273 | 1.42E-53 | 4.92E-52 |
| ADRA1A | -3.413028805 | -0.582206514 | 1.58E-53 | 5.48E-52 |
| CBLC | 3.231176878 | 4.293862764 | 2.30E-53 | 7.96E-52 |
| CDCA3 | 3.193969082 | 3.493243863 | 2.47E-53 | 8.50E-52 |
| CCNB2 | 3.082562947 | 4.319179962 | 2.99E-53 | 1.02E-51 |
| ZWINT | 2.639364359 | 4.948776456 | 3.53E-53 | 1.20E-51 |
| TMPRSS4 | 4.853468408 | 6.925325084 | 6.18E-53 | 2.09E-51 |
| DUOX1 | -2.536644385 | 6.05427718 | 7.94E-53 | 2.68E-51 |
| PDK4 | -2.355839403 | 6.176494451 | 1.24E-52 | 4.19E-51 |
| NUSAP1 | 2.599386943 | 4.885358947 | 1.27E-52 | 4.29E-51 |
| CKAP2L | 3.191959382 | 3.407143318 | 1.49E-52 | 4.98E-51 |
| C2orf91 | -2.866788797 | -0.714223072 | 1.49E-52 | 4.98E-51 |
| RRM2 | 3.260113368 | 5.709604406 | 1.51E-52 | 5.03E-51 |
| COL10A1 | 4.632590732 | 5.928907715 | 2.37E-52 | 7.82E-51 |
| FGFR4 | -2.43091131 | 4.476324309 | 3.13E-52 | 1.03E-50 |
| FRMD5 | 3.600747943 | 2.926150939 | 4.87E-52 | 1.60E-50 |
| KCNA5 | -2.25206221 | -0.04385 | 5.35E-52 | 1.75E-50 |
| MCM10 | 3.574288475 | 3.205471563 | 6.50E-52 | 2.12E-50 |
| PERM1 | 3.062154237 | 1.670718486 | 7.87E-52 | 2.56E-50 |
| NME1 | 2.232861037 | 5.951085433 | 9.06E-52 | 2.95E-50 |
| IGSF9 | 3.269876026 | 4.802140777 | 1.07E-51 | 3.48E-50 |
| STX1A | 3.088480164 | 4.125627484 | 1.33E-51 | 4.31E-50 |
| FERMT1 | 3.260323956 | 4.961396821 | 1.56E-51 | 5.03E-50 |
| BRIP1 | 2.722257841 | 2.963577261 | 3.50E-51 | 1.12E-49 |
| EPHA10 | 3.654287152 | 3.565122093 | 3.97E-51 | 1.27E-49 |
| CXCL2 | -2.376166875 | 5.763285088 | 5.41E-51 | 1.72E-49 |
| CENPA | 3.661265285 | 2.678753633 | 5.62E-51 | 1.79E-49 |
| FIBIN | -2.112285897 | 3.556081925 | 5.65E-51 | 1.79E-49 |
| PIP5K1B | -2.207427797 | 3.623630601 | 6.33E-51 | 2.00E-49 |
| MRC1 | -2.295801309 | 7.084248672 | 7.35E-51 | 2.32E-49 |

| | | | | |
|---------|--------------|--------------|----------|----------|
| FFAR4 | -2.357984687 | 2.026265499 | 7.62E-51 | 2.40E-49 |
| SLC1A1 | -2.170376032 | 4.797788746 | 8.25E-51 | 2.59E-49 |
| ABCA12 | 5.405214473 | 3.72258621 | 1.15E-50 | 3.59E-49 |
| CDC45 | 3.193309599 | 3.392417817 | 1.17E-50 | 3.65E-49 |
| NDC80 | 3.160848506 | 3.56372872 | 1.47E-50 | 4.57E-49 |
| HMMR | 3.078214522 | 3.906078722 | 1.71E-50 | 5.32E-49 |
| PLPP2 | 2.446942565 | 6.431431683 | 1.72E-50 | 5.32E-49 |
| IQANK1 | 2.303899764 | 5.298433827 | 1.84E-50 | 5.70E-49 |
| WFIKKN2 | -2.998803832 | -1.168584543 | 2.44E-50 | 7.54E-49 |
| PKMYT1 | 3.0184545 | 3.541549328 | 2.53E-50 | 7.78E-49 |
| ACKR4 | -2.371696252 | 0.866650126 | 3.19E-50 | 9.78E-49 |
| MKI67 | 3.14658078 | 6.248290539 | 3.23E-50 | 9.90E-49 |
| RASAL1 | 4.052112969 | 3.465918212 | 3.52E-50 | 1.08E-48 |
| EPN3 | 3.097581666 | 4.273851623 | 3.73E-50 | 1.13E-48 |
| PCLAF | 2.86393493 | 4.110665607 | 3.82E-50 | 1.16E-48 |
| POLQ | 3.337820031 | 2.707081117 | 3.92E-50 | 1.19E-48 |
| AURKB | 3.485985145 | 3.799830141 | 4.76E-50 | 1.44E-48 |
| TTK | 3.32591277 | 3.386872837 | 5.22E-50 | 1.57E-48 |
| FOXM1 | 3.405488943 | 5.124743484 | 5.23E-50 | 1.57E-48 |
| MT1M | -2.721809239 | 2.488069196 | 5.35E-50 | 1.61E-48 |
| EME1 | 2.788988553 | 2.123656062 | 7.12E-50 | 2.13E-48 |
| LILRA5 | -2.014930239 | 2.393261653 | 7.15E-50 | 2.14E-48 |
| RHBDL2 | 2.702738745 | 3.393016792 | 8.20E-50 | 2.45E-48 |
| NCAPH | 3.044493306 | 3.787950638 | 1.01E-49 | 3.00E-48 |
| PTPRH | 5.211899039 | 4.036866871 | 1.12E-49 | 3.33E-48 |
| NCAPG | 3.249766867 | 3.912106961 | 1.93E-49 | 5.70E-48 |
| GPT2 | 3.447162177 | 6.165611736 | 2.41E-49 | 7.14E-48 |
| ANO2 | -2.076561544 | 0.179900609 | 3.05E-49 | 8.94E-48 |
| HMGB3 | 3.533267146 | 8.165943742 | 3.41E-49 | 9.98E-48 |
| PRC1 | 2.557662049 | 5.028947725 | 3.55E-49 | 1.04E-47 |
| KRT79 | -3.09718083 | -1.204057269 | 6.12E-49 | 1.78E-47 |
| KCNT2 | -2.456345209 | 1.671760327 | 6.76E-49 | 1.96E-47 |
| KDELR3 | 2.264030258 | 5.700200321 | 7.94E-49 | 2.29E-47 |
| CRABP2 | 5.610135067 | 7.486771983 | 1.57E-48 | 4.52E-47 |
| CELSR3 | 3.412679135 | 4.144487484 | 2.12E-48 | 6.07E-47 |
| CDCA2 | 3.001626069 | 2.595609642 | 2.24E-48 | 6.40E-47 |
| SCN7A | -2.336530643 | 4.655703624 | 2.69E-48 | 7.68E-47 |
| KNTC1 | 2.158996358 | 4.905103296 | 2.80E-48 | 7.99E-47 |
| SLC6A13 | -2.617123802 | -0.963367103 | 2.82E-48 | 8.01E-47 |
| PSAT1 | 3.525424513 | 4.796670965 | 3.56E-48 | 1.01E-46 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| C1QTNF7 | -2.375865024 | 2.477386676 | 3.75E-48 | 1.06E-46 |
| ZYG11A | 5.380848492 | 1.797690633 | 3.90E-48 | 1.10E-46 |
| MDK | 3.100175084 | 8.269617887 | 4.12E-48 | 1.16E-46 |
| CDCA5 | 3.011025976 | 4.500879996 | 6.30E-48 | 1.77E-46 |
| OTX1 | 3.353970359 | 2.602852757 | 6.86E-48 | 1.92E-46 |
| GPRIN1 | 2.734885185 | 3.36315922 | 6.91E-48 | 1.93E-46 |
| C17orf53 | 2.765063957 | 2.722292832 | 8.15E-48 | 2.27E-46 |
| CCNA2 | 2.933436902 | 4.349287054 | 8.38E-48 | 2.33E-46 |
| MFAP3L | -2.067918554 | 2.471750606 | 1.17E-47 | 3.24E-46 |
| GPER1 | -2.179530421 | 2.258018791 | 1.53E-47 | 4.22E-46 |
| CELA2B | -2.109004214 | -1.982182146 | 1.58E-47 | 4.34E-46 |
| GREM1 | 5.042331153 | 5.922840913 | 2.20E-47 | 6.00E-46 |
| C6orf229 | -3.425273687 | -2.72613959 | 2.20E-47 | 6.00E-46 |
| RDM1 | 3.589144044 | -0.171709709 | 2.34E-47 | 6.38E-46 |
| TICRR | 2.956588131 | 2.518129469 | 3.11E-47 | 8.42E-46 |
| PADI4 | -2.489525912 | -1.04509224 | 3.37E-47 | 9.12E-46 |
| CCL14 | -2.406378216 | 1.020460114 | 3.61E-47 | 9.75E-46 |
| NECTIN4 | 2.374600728 | 6.062551559 | 3.74E-47 | 1.01E-45 |
| SVEP1 | -2.057092216 | 4.981434679 | 3.79E-47 | 1.02E-45 |
| LOXHD1 | -2.154496005 | -0.45272903 | 3.79E-47 | 1.02E-45 |
| KIF15 | 2.721477421 | 3.032392398 | 3.92E-47 | 1.05E-45 |
| PAFAH1B3 | 2.256164102 | 5.169040843 | 4.29E-47 | 1.15E-45 |
| MCM4 | 2.244689364 | 6.4802628 | 5.56E-47 | 1.48E-45 |
| ESPL1 | 3.159049476 | 3.903364165 | 5.62E-47 | 1.50E-45 |
| GINS2 | 2.88260537 | 3.578911061 | 6.57E-47 | 1.75E-45 |
| RADIL | -2.20910132 | 2.01868912 | 8.05E-47 | 2.13E-45 |
| FAM111B | 2.772123673 | 3.580630853 | 8.47E-47 | 2.24E-45 |
| UNC5CL | 3.133985732 | 4.009209519 | 8.49E-47 | 2.24E-45 |
| HELLS | 2.425507852 | 3.998149139 | 1.14E-46 | 3.00E-45 |
| TNFRSF21 | 2.002483497 | 7.643886737 | 1.49E-46 | 3.92E-45 |
| RETN | -2.932229643 | 1.821691242 | 1.72E-46 | 4.49E-45 |
| CENPI | 2.77310328 | 2.435808319 | 2.40E-46 | 6.23E-45 |
| SPC24 | 2.701867521 | 3.113619531 | 2.40E-46 | 6.23E-45 |
| KNL1 | 2.662416556 | 3.429918702 | 2.56E-46 | 6.62E-45 |
| AQP4 | -2.937827613 | 7.230826385 | 2.86E-46 | 7.36E-45 |
| SIRPD | -2.117382721 | -2.364334555 | 3.84E-46 | 9.85E-45 |
| DNA2 | 2.268774216 | 3.162247327 | 4.98E-46 | 1.27E-44 |
| SLC25A10 | 2.232108036 | 4.160004779 | 6.42E-46 | 1.64E-44 |
| BCHE | -2.427827778 | 2.159665894 | 8.44E-46 | 2.14E-44 |
| MYO7A | 2.012172322 | 4.126363832 | 9.45E-46 | 2.39E-44 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| ASF1B | 2.3962506 | 4.2352619 | 1.17E-45 | 2.94E-44 |
| ANGPTL1 | -2.274807444 | 2.050453794 | 1.23E-45 | 3.10E-44 |
| TMCO2 | -2.533851523 | -3.744244816 | 1.42E-45 | 3.56E-44 |
| HIST1H2BD | 2.658985186 | 4.39748072 | 1.43E-45 | 3.59E-44 |
| FANCI | 2.022404452 | 4.931366695 | 1.57E-45 | 3.92E-44 |
| NEIL3 | 4.307982588 | 2.302470983 | 1.60E-45 | 4.00E-44 |
| ORC1 | 2.778870478 | 2.871959554 | 2.14E-45 | 5.34E-44 |
| ADCYAP1R1 | -2.106629918 | 0.015882311 | 2.26E-45 | 5.61E-44 |
| FGF10 | -2.906739195 | -0.39242514 | 2.26E-45 | 5.62E-44 |
| TONSL | 2.15431693 | 4.504548189 | 2.31E-45 | 5.72E-44 |
| MYBL2 | 3.858111497 | 5.679799338 | 2.89E-45 | 7.16E-44 |
| SLC2A1 | 3.538576481 | 7.45608451 | 3.55E-45 | 8.76E-44 |
| ANGPTL5 | -2.420300354 | -1.775116368 | 4.12E-45 | 1.02E-43 |
| FOLR3 | -3.256647014 | 0.162784451 | 4.38E-45 | 1.08E-43 |
| MME | -2.470556166 | 4.832821832 | 5.15E-45 | 1.26E-43 |
| POLE2 | 2.387288038 | 2.679055524 | 5.22E-45 | 1.28E-43 |
| NDRG4 | -2.009399706 | 3.660882786 | 6.08E-45 | 1.49E-43 |
| ESCO2 | 2.665828354 | 2.408353459 | 6.13E-45 | 1.50E-43 |
| CACNA1S | -3.292648493 | -1.687214443 | 8.14E-45 | 1.98E-43 |
| HS6ST2 | 3.717746057 | 5.468381829 | 1.25E-44 | 3.02E-43 |
| RGS17 | 3.752607093 | 3.572269612 | 1.49E-44 | 3.61E-43 |
| RAB26 | 3.669318219 | 1.957876293 | 1.64E-44 | 3.95E-43 |
| CENPU | 2.412837437 | 3.994734996 | 1.95E-44 | 4.69E-43 |
| TK1 | 2.679001359 | 5.901093751 | 3.10E-44 | 7.40E-43 |
| PLEK2 | 2.749639764 | 4.258211515 | 3.52E-44 | 8.38E-43 |
| ACKR1 | -2.353414525 | 4.216409523 | 3.58E-44 | 8.52E-43 |
| GJB2 | 4.574387893 | 5.194704451 | 4.43E-44 | 1.05E-42 |
| CDT1 | 2.76891125 | 4.048998574 | 5.11E-44 | 1.21E-42 |
| KIFC1 | 2.77423792 | 4.645923301 | 8.66E-44 | 2.02E-42 |
| NTM | -2.092843129 | 4.4669936 | 9.05E-44 | 2.11E-42 |
| AGMAT | 2.634427541 | 1.836087112 | 1.06E-43 | 2.47E-42 |
| BUB1 | 2.685386996 | 4.598785044 | 1.10E-43 | 2.54E-42 |
| SKA1 | 3.06202174 | 2.548902837 | 1.14E-43 | 2.64E-42 |
| KCNIP1 | -2.08483318 | -0.863911308 | 1.26E-43 | 2.90E-42 |
| CHEK1 | 2.266437974 | 4.067502317 | 2.31E-43 | 5.28E-42 |
| ONECUT1 | 6.611553867 | -0.001090868 | 2.31E-43 | 5.28E-42 |
| TSACC | 3.085148689 | -0.191579355 | 2.44E-43 | 5.55E-42 |
| ECT2 | 2.202936154 | 5.711975475 | 2.56E-43 | 5.82E-42 |
| MNX1 | 4.323055111 | 1.397880033 | 2.64E-43 | 5.99E-42 |
| PBK | 3.428769291 | 3.258314421 | 2.82E-43 | 6.41E-42 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| EXD1 | -2.373013347 | -2.218590428 | 4.87E-43 | 1.10E-41 |
| SLC5A9 | -2.503113456 | 1.820512402 | 5.79E-43 | 1.30E-41 |
| CAV3 | -2.998199239 | -2.256284477 | 6.79E-43 | 1.52E-41 |
| C1QTNF6 | 2.298941675 | 4.940296059 | 7.58E-43 | 1.70E-41 |
| SPP1 | 4.81051546 | 9.253298498 | 8.60E-43 | 1.91E-41 |
| KIF23 | 2.618363931 | 4.211261442 | 9.18E-43 | 2.04E-41 |
| AURKA | 2.673812943 | 4.56214683 | 9.42E-43 | 2.09E-41 |
| MMP11 | 5.282584938 | 6.619096716 | 1.26E-42 | 2.79E-41 |
| CCNE1 | 3.316197711 | 3.1969244 | 1.40E-42 | 3.10E-41 |
| GRHL3 | 3.534080668 | 1.846910311 | 2.10E-42 | 4.62E-41 |
| CYP1A2 | -3.792570309 | -1.080748404 | 2.36E-42 | 5.20E-41 |
| OVCH2 | -2.922915006 | -0.941595851 | 2.74E-42 | 6.01E-41 |
| BLM | 2.115746779 | 3.140093591 | 2.76E-42 | 6.06E-41 |
| AFF3 | -2.353182893 | 3.505482441 | 3.57E-42 | 7.80E-41 |
| TFR2 | 3.12501418 | 1.911802643 | 3.83E-42 | 8.35E-41 |
| TFAP2A | 3.770398858 | 4.011169049 | 4.20E-42 | 9.15E-41 |
| HSPB3 | -2.489579916 | -1.633169334 | 4.66E-42 | 1.01E-40 |
| CENPE | 2.692190406 | 3.663382101 | 4.97E-42 | 1.08E-40 |
| PIMREG | 3.210396316 | 2.718638239 | 4.99E-42 | 1.08E-40 |
| KISS1R | 6.159301188 | 0.892251723 | 5.78E-42 | 1.25E-40 |
| ERICH4 | -2.247716275 | -3.019346452 | 9.35E-42 | 2.02E-40 |
| ARSH | 5.057403302 | -1.043882132 | 9.66E-42 | 2.08E-40 |
| SALL4 | 3.433988791 | 1.430646019 | 1.21E-41 | 2.59E-40 |
| SHCBP1 | 2.311847169 | 3.485675516 | 1.47E-41 | 3.13E-40 |
| ATP10B | 5.506447897 | 4.036890892 | 1.72E-41 | 3.67E-40 |
| DBNDD1 | 2.005342337 | 5.02161493 | 2.66E-41 | 5.63E-40 |
| ADTRP | -2.080542277 | 2.716774699 | 3.45E-41 | 7.24E-40 |
| MAD2L1 | 2.593771361 | 4.311888134 | 3.91E-41 | 8.18E-40 |
| TRAPPC3L | -2.013478261 | -2.649848442 | 4.85E-41 | 1.01E-39 |
| P3H4 | 2.100528704 | 5.359828972 | 5.14E-41 | 1.07E-39 |
| ERO1A | 2.062236302 | 7.849904781 | 6.47E-41 | 1.34E-39 |
| LHFPL5 | 4.997656675 | -1.356373112 | 6.75E-41 | 1.39E-39 |
| SBSPON | -2.230385517 | 2.603146485 | 1.07E-40 | 2.19E-39 |
| ATP1A2 | -2.255690751 | 1.7203479 | 1.14E-40 | 2.33E-39 |
| PITX2 | 8.118382011 | 2.909993242 | 1.21E-40 | 2.47E-39 |
| KL | -2.270012296 | 2.535529923 | 1.65E-40 | 3.35E-39 |
| BCL2L15 | 3.547990606 | 3.833374069 | 2.16E-40 | 4.39E-39 |
| CAMP | -2.611941699 | -0.168650031 | 2.44E-40 | 4.94E-39 |
| IL33 | -2.045872805 | 5.251834743 | 2.46E-40 | 4.97E-39 |
| PROM2 | 2.637433725 | 6.450849142 | 3.07E-40 | 6.20E-39 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| CLDN18 | -3.516749867 | 7.692817148 | 3.55E-40 | 7.13E-39 |
| SLC24A2 | 5.03897503 | 0.302033702 | 4.23E-40 | 8.49E-39 |
| STYK1 | 2.624415468 | 3.311948227 | 4.52E-40 | 9.07E-39 |
| NIM1K | -2.226533106 | 1.163865535 | 4.78E-40 | 9.58E-39 |
| DAO | -2.375195147 | -3.056306489 | 4.91E-40 | 9.83E-39 |
| COL11A1 | 6.251268013 | 6.113783109 | 5.12E-40 | 1.02E-38 |
| CLSPN | 2.756669421 | 2.917231815 | 6.29E-40 | 1.25E-38 |
| CDKN3 | 2.923166774 | 3.202652621 | 6.39E-40 | 1.27E-38 |
| E2F2 | 2.375847825 | 2.819903439 | 9.08E-40 | 1.80E-38 |
| ECE2 | 2.117851839 | 3.685933326 | 9.80E-40 | 1.93E-38 |
| ODAM | -3.102878155 | -0.482507741 | 1.03E-39 | 2.03E-38 |
| ABCC3 | 2.56704095 | 7.952357365 | 1.50E-39 | 2.95E-38 |
| FCGR3B | -2.326697865 | 1.955252368 | 1.57E-39 | 3.07E-38 |
| PCDH15 | -2.972666234 | 0.201860197 | 1.58E-39 | 3.09E-38 |
| GCNT3 | 5.168716626 | 5.677304137 | 1.60E-39 | 3.12E-38 |
| XDH | 4.093044315 | 4.545523385 | 1.81E-39 | 3.53E-38 |
| MAST1 | 3.259588316 | 1.163590461 | 1.95E-39 | 3.78E-38 |
| CDK1 | 2.493748469 | 5.10312297 | 2.31E-39 | 4.47E-38 |
| PTTG1 | 2.36202324 | 4.574326967 | 2.32E-39 | 4.48E-38 |
| RHBG | 4.60121878 | 0.141828075 | 2.73E-39 | 5.26E-38 |
| LBX2 | 2.12770197 | 0.604813654 | 3.07E-39 | 5.89E-38 |
| ENTPD8 | 4.676817897 | 2.377905374 | 3.10E-39 | 5.94E-38 |
| PRSS35 | -2.200696161 | 0.02258379 | 3.28E-39 | 6.28E-38 |
| RAD51 | 2.229359161 | 2.777206498 | 3.34E-39 | 6.38E-38 |
| ITIH5 | -2.065322664 | 4.679437744 | 3.56E-39 | 6.79E-38 |
| P2RY6 | 3.020306854 | 4.209641172 | 3.76E-39 | 7.17E-38 |
| IL1RL1 | -2.82343872 | 3.726121924 | 3.81E-39 | 7.25E-38 |
| PPP1R14D | 5.997983808 | 3.754683886 | 5.23E-39 | 9.91E-38 |
| INAVA | 2.223474045 | 5.44062683 | 5.26E-39 | 9.96E-38 |
| CDCA7 | 2.964992074 | 4.73062568 | 7.60E-39 | 1.43E-37 |
| LYPD1 | 4.097629674 | 2.505735528 | 9.57E-39 | 1.79E-37 |
| ITPKA | 5.18396716 | 3.795045319 | 1.18E-38 | 2.20E-37 |
| C5orf34 | 2.052954762 | 2.028673495 | 1.23E-38 | 2.29E-37 |
| SYT12 | 5.495445478 | 4.910098327 | 1.25E-38 | 2.32E-37 |
| SYT7 | 3.472289717 | 6.063744704 | 1.33E-38 | 2.47E-37 |
| SERINC2 | 2.068352825 | 7.604241409 | 1.36E-38 | 2.53E-37 |
| ADAMTS14 | 2.681551322 | 2.898844731 | 1.40E-38 | 2.60E-37 |
| CENPK | 2.266721105 | 2.811589928 | 1.60E-38 | 2.95E-37 |
| CCDC150 | 2.641036635 | 1.35273299 | 1.67E-38 | 3.09E-37 |
| RHBDL1 | 3.219576798 | 2.422795156 | 1.71E-38 | 3.15E-37 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| DCSTAMP | -2.184116469 | 1.421100843 | 1.79E-38 | 3.30E-37 |
| CYP24A1 | 6.724113388 | 6.564322262 | 2.00E-38 | 3.68E-37 |
| GIN54 | 2.451067902 | 2.848140094 | 2.38E-38 | 4.37E-37 |
| PCOLCE2 | -2.329085026 | 3.406013496 | 2.48E-38 | 4.56E-37 |
| HBG2 | -2.405218314 | -2.607010749 | 2.58E-38 | 4.73E-37 |
| SPC25 | 2.400137889 | 2.282737766 | 2.99E-38 | 5.46E-37 |
| DMBX1 | 6.350475456 | 0.749951449 | 3.01E-38 | 5.50E-37 |
| CHRDL1 | -2.267381344 | 4.852381638 | 3.22E-38 | 5.87E-37 |
| HNF4G | 3.531415313 | 3.165528753 | 3.75E-38 | 6.80E-37 |
| ANKRD29 | -2.133394535 | 4.621607144 | 6.27E-38 | 1.13E-36 |
| PODXL2 | 3.265662379 | 5.653919335 | 6.33E-38 | 1.14E-36 |
| WNT3 | 2.096078356 | 3.431067049 | 9.03E-38 | 1.62E-36 |
| PLK4 | 2.079436175 | 3.17054038 | 1.04E-37 | 1.86E-36 |
| CRTAC1 | -2.557036663 | 5.558039849 | 1.14E-37 | 2.04E-36 |
| HEMGN | -2.364793415 | -3.090244762 | 1.49E-37 | 2.65E-36 |
| KCNN4 | 3.268241698 | 5.744077079 | 1.63E-37 | 2.89E-36 |
| TERT | 5.404926853 | 0.092215317 | 1.64E-37 | 2.91E-36 |
| CYP3A7 | -2.020619502 | -0.30042046 | 1.74E-37 | 3.08E-36 |
| CDC25A | 2.380550406 | 2.434358266 | 2.11E-37 | 3.73E-36 |
| MYEOV | 6.297984069 | 4.344176524 | 2.49E-37 | 4.38E-36 |
| NR4A3 | -2.232236004 | 4.376938244 | 2.57E-37 | 4.52E-36 |
| ABCA3 | -2.086482028 | 8.444314578 | 4.96E-37 | 8.63E-36 |
| STAC | -2.056926237 | 3.341948607 | 5.43E-37 | 9.44E-36 |
| C2orf71 | -2.947075749 | -0.933944396 | 6.44E-37 | 1.12E-35 |
| CHRM2 | -3.367822877 | -1.10329265 | 6.57E-37 | 1.14E-35 |
| DNAH14 | 2.118355784 | 3.580518233 | 7.32E-37 | 1.26E-35 |
| RBP2 | -2.819919 | -0.269544866 | 8.24E-37 | 1.42E-35 |
| LIPN | -2.46803723 | -1.952454407 | 1.06E-36 | 1.83E-35 |
| MCM2 | 2.039813757 | 5.772821136 | 1.31E-36 | 2.24E-35 |
| CABYR | 4.680821428 | 3.71067642 | 1.96E-36 | 3.34E-35 |
| VWC2 | -2.459186442 | -1.852001494 | 2.34E-36 | 3.97E-35 |
| B4GALNT4 | 4.775890624 | 3.532890872 | 2.58E-36 | 4.36E-35 |
| THBS2 | 2.931521105 | 7.724450245 | 3.13E-36 | 5.27E-35 |
| CCL24 | -2.417369141 | 1.062566216 | 3.92E-36 | 6.59E-35 |
| TMPRSS11E | 6.720994276 | 3.741624365 | 3.94E-36 | 6.62E-35 |
| GALNT14 | 3.701736016 | 4.365726872 | 5.09E-36 | 8.51E-35 |
| IL1RL2 | 2.317492641 | 1.789120639 | 6.48E-36 | 1.08E-34 |
| IL1RAPL2 | 6.14364069 | -0.89514226 | 7.10E-36 | 1.18E-34 |
| STRA6 | 4.508667437 | 3.99353327 | 7.19E-36 | 1.19E-34 |
| F12 | 2.857037461 | 2.403007011 | 8.03E-36 | 1.33E-34 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| GPA33 | -2.718519043 | 2.194738954 | 1.13E-35 | 1.85E-34 |
| HHIP | -2.842234669 | 4.884936793 | 1.14E-35 | 1.88E-34 |
| DNAJC22 | 3.488034203 | 3.382779414 | 1.78E-35 | 2.92E-34 |
| PARPBP | 2.141157063 | 2.750102462 | 1.82E-35 | 2.97E-34 |
| ART4 | -2.188449235 | 1.105649585 | 1.91E-35 | 3.12E-34 |
| HMGA1 | 2.312774235 | 8.056921296 | 2.06E-35 | 3.35E-34 |
| CILP2 | 3.538092623 | 3.619259014 | 2.25E-35 | 3.65E-34 |
| PLXNB3 | 3.415927774 | 4.459811166 | 2.58E-35 | 4.17E-34 |
| SEMA6D | -2.024950255 | 3.055024167 | 2.59E-35 | 4.19E-34 |
| DCST1 | 2.688333935 | 0.014600752 | 3.32E-35 | 5.36E-34 |
| OIP5 | 2.409912508 | 1.424383365 | 3.45E-35 | 5.57E-34 |
| PTGES | 3.011081176 | 5.452554846 | 5.22E-35 | 8.36E-34 |
| CNTD2 | 4.319032614 | 2.063865792 | 5.30E-35 | 8.46E-34 |
| CGREF1 | 4.161481126 | 2.892492185 | 5.40E-35 | 8.62E-34 |
| HPSE2 | -2.361477609 | 0.624899229 | 5.84E-35 | 9.30E-34 |
| KIAA1024 | 2.050665684 | 0.854711023 | 1.04E-34 | 1.63E-33 |
| HTR3A | 5.884434852 | 3.109649921 | 1.27E-34 | 1.99E-33 |
| GPC3 | -2.129864317 | 5.481597209 | 1.30E-34 | 2.03E-33 |
| CARD14 | 3.484343383 | 3.365215171 | 1.41E-34 | 2.20E-33 |
| TPPP3 | -2.178809305 | 6.010850725 | 1.65E-34 | 2.58E-33 |
| C2CD4A | 4.1353448 | 4.024516895 | 1.72E-34 | 2.68E-33 |
| CPNE7 | 3.233638511 | 3.013106323 | 1.81E-34 | 2.82E-33 |
| SLCO5A1 | 3.252391036 | 2.147154713 | 1.89E-34 | 2.94E-33 |
| AUNIP | 2.371858351 | 1.478762521 | 2.03E-34 | 3.16E-33 |
| HSD17B6 | -2.240647628 | 5.084812748 | 2.21E-34 | 3.43E-33 |
| HSF2BP | 2.261291033 | -0.031435581 | 3.51E-34 | 5.41E-33 |
| WDR62 | 2.37798002 | 3.69461299 | 3.62E-34 | 5.58E-33 |
| ALG1L | 3.308103905 | 2.726769469 | 3.82E-34 | 5.87E-33 |
| DEFA3 | -3.468745543 | -3.075296622 | 3.83E-34 | 5.88E-33 |
| SNORC | 2.510766232 | 0.82159308 | 4.09E-34 | 6.27E-33 |
| CHRNA5 | 3.640886224 | 2.369883114 | 4.21E-34 | 6.45E-33 |
| FHL2 | 2.369906136 | 6.007132557 | 4.39E-34 | 6.71E-33 |
| NMU | 4.6182642 | 2.463588155 | 4.91E-34 | 7.48E-33 |
| EEF1A2 | 6.39485781 | 5.979250025 | 5.35E-34 | 8.14E-33 |
| ADAM12 | 3.11613899 | 4.824273008 | 5.88E-34 | 8.93E-33 |
| CYP27B1 | 2.36733498 | 2.932319612 | 6.44E-34 | 9.74E-33 |
| ANKRD22 | 2.823472048 | 4.242615672 | 7.17E-34 | 1.08E-32 |
| SPRED3 | 2.504707918 | 1.811487546 | 7.56E-34 | 1.14E-32 |
| KRT80 | 2.472449175 | 5.958550065 | 8.07E-34 | 1.21E-32 |
| TRPM8 | 7.050438218 | 3.313887356 | 9.36E-34 | 1.40E-32 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| ARHGAP11A | 2.094711863 | 4.157809344 | 9.44E-34 | 1.41E-32 |
| CA3 | -2.086544377 | 2.012200792 | 9.87E-34 | 1.47E-32 |
| PRR19 | 2.20427553 | 1.079792561 | 1.05E-33 | 1.56E-32 |
| PRR11 | 2.282506997 | 4.121243886 | 1.11E-33 | 1.65E-32 |
| TRIP13 | 2.566380652 | 4.456138718 | 1.20E-33 | 1.78E-32 |
| PITX1 | 4.557830107 | 3.956722993 | 1.33E-33 | 1.96E-32 |
| FGF11 | 3.226052609 | 0.238359322 | 1.71E-33 | 2.52E-32 |
| ZNF695 | 4.43548705 | 0.307453679 | 1.76E-33 | 2.59E-32 |
| DNAJC12 | 4.294387958 | 4.668691236 | 1.87E-33 | 2.75E-32 |
| PFKP | 2.172781043 | 7.374703438 | 2.30E-33 | 3.36E-32 |
| FEZF1 | 5.628810762 | 1.887990095 | 2.59E-33 | 3.78E-32 |
| WFDC3 | 3.943982209 | 3.444684445 | 3.37E-33 | 4.90E-32 |
| LARGE2 | 2.496032363 | 5.137600505 | 3.87E-33 | 5.62E-32 |
| FAM83D | 2.298965865 | 3.868009416 | 4.38E-33 | 6.34E-32 |
| LCN6 | -2.421144866 | -2.248812376 | 4.55E-33 | 6.57E-32 |
| RSPO4 | -2.286001653 | 1.740235052 | 5.19E-33 | 7.48E-32 |
| TMEM63C | 4.040621401 | 3.581443956 | 5.22E-33 | 7.51E-32 |
| RBBP8NL | 2.120565557 | 2.381445934 | 5.23E-33 | 7.53E-32 |
| C2CD4D | 2.570992357 | 0.998067588 | 5.73E-33 | 8.23E-32 |
| PIF1 | 2.39067208 | 2.055673424 | 5.87E-33 | 8.42E-32 |
| RSPO2 | -2.583923463 | 1.289813254 | 6.06E-33 | 8.69E-32 |
| MROH6 | 2.480779717 | 5.467137953 | 6.33E-33 | 9.06E-32 |
| YBX2 | 4.767284009 | 2.536812402 | 6.92E-33 | 9.85E-32 |
| CCDC169 | 2.985138936 | 0.717435392 | 7.74E-33 | 1.10E-31 |
| SPDEF | 3.300810894 | 5.363602484 | 7.80E-33 | 1.11E-31 |
| SLC7A5 | 2.708248553 | 7.073239439 | 7.99E-33 | 1.13E-31 |
| MOGAT1 | -2.52479283 | -3.003661752 | 8.23E-33 | 1.17E-31 |
| SFTPA1 | -2.800981997 | 12.08217949 | 9.43E-33 | 1.33E-31 |
| CCNE2 | 2.063965558 | 2.46584341 | 1.01E-32 | 1.43E-31 |
| ALG1L2 | 2.055914455 | -0.388447083 | 1.26E-32 | 1.76E-31 |
| CCDC54 | -2.04695638 | -3.248183955 | 1.30E-32 | 1.82E-31 |
| GPR19 | 2.457412044 | 0.247332576 | 1.41E-32 | 1.97E-31 |
| SEC14L6 | -2.068432732 | 3.18340412 | 1.48E-32 | 2.06E-31 |
| P4HA3 | 2.267111924 | 2.860662834 | 1.53E-32 | 2.14E-31 |
| CP | 3.518333753 | 8.575713953 | 1.72E-32 | 2.40E-31 |
| BDNF | -2.310247479 | 1.725228531 | 1.86E-32 | 2.58E-31 |
| GYG2 | 2.263037045 | 3.657976053 | 2.65E-32 | 3.65E-31 |
| CASKIN1 | 3.686636289 | 0.19998226 | 2.89E-32 | 3.98E-31 |
| TCEAL2 | -2.494165233 | 0.854849073 | 3.03E-32 | 4.17E-31 |
| ARHGAP40 | 3.702166018 | 3.415360017 | 3.21E-32 | 4.41E-31 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| ADAM8 | 2.159355918 | 6.081212081 | 3.35E-32 | 4.58E-31 |
| STEAP1 | 2.852444257 | 4.573168971 | 3.99E-32 | 5.44E-31 |
| CEACAM1 | 2.097303817 | 5.845117664 | 4.83E-32 | 6.56E-31 |
| TBX15 | 3.773881964 | 3.426074123 | 4.93E-32 | 6.70E-31 |
| CACNA2D2 | -2.363648127 | 6.523522281 | 5.01E-32 | 6.81E-31 |
| CCDC173 | -2.039028589 | 0.989188772 | 5.66E-32 | 7.66E-31 |
| PHLDA2 | 2.348518024 | 4.882630605 | 6.55E-32 | 8.85E-31 |
| ADGRF4 | 4.502917822 | 2.606576623 | 7.26E-32 | 9.78E-31 |
| COL1A1 | 2.912906867 | 11.54892339 | 8.02E-32 | 1.08E-30 |
| FBXO32 | 2.137822261 | 6.04680423 | 1.02E-31 | 1.36E-30 |
| PLPP4 | 4.102290304 | 1.263722842 | 1.09E-31 | 1.45E-30 |
| SCN8A | 2.974620254 | 2.320501279 | 1.24E-31 | 1.65E-30 |
| SBK1 | 2.575670033 | 4.970258913 | 1.44E-31 | 1.91E-30 |
| AKR7A3 | 5.03993023 | 3.36207383 | 1.98E-31 | 2.60E-30 |
| RAD51AP1 | 2.101340719 | 3.307173398 | 2.30E-31 | 3.00E-30 |
| BARX2 | 3.914342075 | 3.50599985 | 2.40E-31 | 3.13E-30 |
| AL645922.1 | -2.212097927 | -3.588671951 | 2.64E-31 | 3.43E-30 |
| ABCB6 | 2.039853931 | 3.285506909 | 2.96E-31 | 3.83E-30 |
| HHIPL2 | 6.047513813 | 3.265038267 | 3.05E-31 | 3.95E-30 |
| MMP13 | 6.134973346 | 5.013136781 | 3.52E-31 | 4.55E-30 |
| FUT3 | 2.341464054 | 4.900480772 | 3.64E-31 | 4.70E-30 |
| C11orf86 | 7.921598258 | 1.573549683 | 4.00E-31 | 5.16E-30 |
| HPDL | 3.522413255 | 1.055426492 | 4.07E-31 | 5.24E-30 |
| TMEM132A | 2.071159657 | 5.854817043 | 4.16E-31 | 5.35E-30 |
| SYNDIG1L | -2.337107101 | 0.450772533 | 4.38E-31 | 5.63E-30 |
| FAP | 2.289184711 | 4.500891298 | 4.45E-31 | 5.71E-30 |
| E2F7 | 2.763285256 | 2.169117309 | 4.59E-31 | 5.89E-30 |
| NRG3 | -2.38860031 | -0.693683205 | 5.30E-31 | 6.78E-30 |
| KIAA0408 | -2.3301414 | -0.809397434 | 9.60E-31 | 1.22E-29 |
| KCNK3 | -2.176861703 | 4.31642649 | 9.65E-31 | 1.22E-29 |
| WISP1 | 2.239859047 | 3.738273265 | 1.05E-30 | 1.33E-29 |
| PRAME | 7.58092242 | 4.605635749 | 1.15E-30 | 1.46E-29 |
| PLAC1 | 4.833732798 | -0.08967713 | 1.16E-30 | 1.46E-29 |
| SYN2 | -2.280377356 | 0.206632273 | 1.40E-30 | 1.76E-29 |
| SLC22A18AS | 2.476794068 | 2.17636415 | 1.85E-30 | 2.31E-29 |
| CA9 | 5.629051828 | 4.381238509 | 2.04E-30 | 2.55E-29 |
| BEAN1 | 2.872724089 | 3.330201418 | 2.51E-30 | 3.13E-29 |
| SEC14L3 | -3.039776578 | 0.300526415 | 2.76E-30 | 3.44E-29 |
| COL3A1 | 2.544812559 | 11.07923012 | 3.13E-30 | 3.88E-29 |
| ITGA11 | 2.879597692 | 5.472807774 | 3.21E-30 | 3.98E-29 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| FBXO43 | 2.354430108 | -0.228564296 | 3.63E-30 | 4.48E-29 |
| BAIAP2L2 | 3.712628495 | 2.75068483 | 4.18E-30 | 5.16E-29 |
| MMP1 | 5.255744117 | 6.858408316 | 4.78E-30 | 5.88E-29 |
| RAC3 | 2.344838969 | 3.854377387 | 5.18E-30 | 6.34E-29 |
| CST1 | 6.438627036 | 4.377640807 | 5.32E-30 | 6.52E-29 |
| GAD1 | 3.816482845 | 1.940084879 | 5.96E-30 | 7.28E-29 |
| SRPK3 | 3.177314933 | 2.548215855 | 7.78E-30 | 9.44E-29 |
| C2orf40 | -2.502241585 | 1.830306153 | 8.43E-30 | 1.02E-28 |
| SPINK1 | 6.677472834 | 7.668753235 | 8.66E-30 | 1.05E-28 |
| CYP4B1 | -2.499522078 | 7.310607034 | 9.49E-30 | 1.15E-28 |
| SULF1 | 2.565867203 | 7.444948656 | 1.07E-29 | 1.30E-28 |
| TMEM105 | 2.23259309 | 1.850880093 | 1.20E-29 | 1.44E-28 |
| ADAM28 | 2.319387675 | 5.21909632 | 1.47E-29 | 1.76E-28 |
| CIP2A | 2.002830495 | 3.271706145 | 1.61E-29 | 1.93E-28 |
| GOLGA7B | 2.747280469 | 4.721246523 | 1.64E-29 | 1.96E-28 |
| B3GNT6 | 5.792726328 | 4.19559518 | 1.90E-29 | 2.26E-28 |
| GPC2 | 3.410270354 | 1.477137342 | 1.91E-29 | 2.27E-28 |
| ONECUT2 | 4.950241882 | 2.238632277 | 1.97E-29 | 2.33E-28 |
| AOC1 | 5.003938132 | 5.363871172 | 2.13E-29 | 2.53E-28 |
| TNFRSF18 | 2.671534456 | 3.035638296 | 2.16E-29 | 2.56E-28 |
| SFTPA2 | -2.647979243 | 12.41870476 | 2.54E-29 | 3.00E-28 |
| SPP2 | 7.403143998 | 0.412541262 | 3.10E-29 | 3.66E-28 |
| SLITRK2 | -2.394125683 | -0.620216069 | 3.76E-29 | 4.43E-28 |
| TNFSF11 | 4.080777044 | 1.375729939 | 4.26E-29 | 4.99E-28 |
| BMP8A | 2.353224402 | 0.534995239 | 4.59E-29 | 5.38E-28 |
| AGBL1 | -2.884416811 | -2.546242898 | 4.77E-29 | 5.59E-28 |
| AK4 | 2.620101247 | 4.753253973 | 5.18E-29 | 6.05E-28 |
| CNFN | 2.68987938 | 1.337934628 | 5.91E-29 | 6.87E-28 |
| LGSN | 4.60310892 | 4.435617132 | 6.02E-29 | 7.00E-28 |
| CHRNB4 | 3.406339249 | -0.439292812 | 6.39E-29 | 7.42E-28 |
| VIL1 | 6.986687678 | 4.702492873 | 6.47E-29 | 7.51E-28 |
| NETO1 | 4.755903333 | 0.530496286 | 6.88E-29 | 7.97E-28 |
| PABPC1L | 2.169444193 | 5.127142064 | 7.15E-29 | 8.27E-28 |
| FAM189A1 | -2.130216947 | 0.538602023 | 7.46E-29 | 8.60E-28 |
| BMPER | -2.18195009 | 2.011921653 | 1.09E-28 | 1.24E-27 |
| SLC29A4 | 3.144162656 | 4.819587188 | 1.38E-28 | 1.57E-27 |
| AL049634.2 | -2.191831357 | -3.816340254 | 1.45E-28 | 1.65E-27 |
| COCH | 3.752741591 | 2.788318921 | 1.55E-28 | 1.75E-27 |
| HIST1H2AI | 5.015606526 | 0.536336225 | 1.71E-28 | 1.94E-27 |
| CLPSL2 | 5.340000066 | -0.743489997 | 1.82E-28 | 2.05E-27 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| PROC | 4.044786809 | 2.251672259 | 1.88E-28 | 2.12E-27 |
| GNGT1 | 6.179565097 | -0.141807844 | 2.11E-28 | 2.38E-27 |
| LPL | -2.051940147 | 6.282285526 | 2.14E-28 | 2.41E-27 |
| COL22A1 | 3.582288645 | 2.476361853 | 2.25E-28 | 2.52E-27 |
| DERL3 | 2.243612286 | 5.343444574 | 2.41E-28 | 2.70E-27 |
| PTX3 | -2.013354747 | 1.921738389 | 2.53E-28 | 2.83E-27 |
| HIST1H2AM | 4.903430448 | -0.516715479 | 3.19E-28 | 3.56E-27 |
| EGLN3 | 3.072798412 | 6.05998302 | 3.48E-28 | 3.87E-27 |
| CCDC185 | 4.473289854 | -1.221607257 | 3.56E-28 | 3.96E-27 |
| NKX1-2 | 7.490828335 | 1.103760385 | 3.66E-28 | 4.07E-27 |
| DLL3 | 6.809309887 | 2.039285232 | 4.39E-28 | 4.85E-27 |
| SRRM3 | 2.321089979 | 2.133944573 | 4.63E-28 | 5.11E-27 |
| C6orf222 | 5.43731351 | 1.086838937 | 4.72E-28 | 5.20E-27 |
| ACY3 | 2.932132671 | 1.987044537 | 5.09E-28 | 5.59E-27 |
| NQO1 | 3.065438684 | 8.269667333 | 5.20E-28 | 5.70E-27 |
| MUC3A | 4.701950114 | 6.053209697 | 5.45E-28 | 5.97E-27 |
| COL5A2 | 2.202086917 | 7.702200818 | 5.60E-28 | 6.12E-27 |
| HPCA | 2.388895891 | -0.761871669 | 7.56E-28 | 8.24E-27 |
| MMP12 | 3.981947023 | 5.108418117 | 7.64E-28 | 8.32E-27 |
| PRDM12 | 3.0105063 | -2.466322552 | 8.33E-28 | 9.05E-27 |
| EPHB2 | 2.290172315 | 5.319122128 | 8.72E-28 | 9.46E-27 |
| BCL2L10 | 4.107719414 | -0.334759509 | 8.90E-28 | 9.65E-27 |
| EFNA2 | 5.595662407 | -1.122117474 | 9.78E-28 | 1.06E-26 |
| DCST2 | 2.378918936 | 1.272896943 | 1.03E-27 | 1.11E-26 |
| EPHX4 | 2.652984257 | 1.942103455 | 1.13E-27 | 1.22E-26 |
| SLC2A5 | 2.436457816 | 3.237614365 | 1.21E-27 | 1.30E-26 |
| GRIN1 | 3.112577637 | 1.355412459 | 1.39E-27 | 1.49E-26 |
| DUSP13 | 6.072856116 | 1.344174049 | 1.39E-27 | 1.49E-26 |
| F11 | -2.715201831 | 1.138560028 | 1.49E-27 | 1.59E-26 |
| INSL3 | 2.095923013 | -1.096262078 | 1.76E-27 | 1.87E-26 |
| TEX11 | 3.463789369 | -1.420952497 | 1.78E-27 | 1.89E-26 |
| TRHDE | -2.590681692 | 1.230007448 | 1.88E-27 | 2.00E-26 |
| IL31RA | 4.085646951 | 1.894679944 | 1.90E-27 | 2.01E-26 |
| C1orf61 | 5.507259766 | 1.906159323 | 2.22E-27 | 2.35E-26 |
| SLC17A9 | 2.53087928 | 4.780412614 | 2.26E-27 | 2.39E-26 |
| FGL1 | 7.257616928 | 5.819066869 | 2.29E-27 | 2.43E-26 |
| SYNGR4 | 4.283105943 | -0.956505017 | 2.50E-27 | 2.64E-26 |
| PEBP4 | -2.538878884 | 5.202428526 | 2.59E-27 | 2.73E-26 |
| NGEF | 3.016031708 | 3.415957956 | 2.60E-27 | 2.74E-26 |
| MB | 3.253763692 | 3.277701318 | 2.98E-27 | 3.13E-26 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| PPP1R17 | -2.715052356 | -2.901132413 | 3.00E-27 | 3.15E-26 |
| SSTR1 | -2.204741381 | 2.644645454 | 3.03E-27 | 3.18E-26 |
| HAVCR1 | 5.169063414 | 1.463605377 | 3.10E-27 | 3.25E-26 |
| RPL39L | 2.34733831 | 3.94604078 | 3.23E-27 | 3.38E-26 |
| KRTAP4-1 | 7.125130946 | 0.259180693 | 3.41E-27 | 3.56E-26 |
| GSG1L | -2.379150767 | -2.595886286 | 3.52E-27 | 3.66E-26 |
| CCDC178 | -2.155506694 | -1.599530335 | 3.55E-27 | 3.69E-26 |
| FAM72B | 2.310372568 | 0.159119786 | 4.74E-27 | 4.89E-26 |
| ADCY8 | -3.301062733 | -0.117482511 | 5.05E-27 | 5.19E-26 |
| CDH3 | 2.81225504 | 6.921547662 | 6.08E-27 | 6.22E-26 |
| SCGB1A1 | -3.212346102 | 8.237899862 | 7.22E-27 | 7.35E-26 |
| ANXA8L1 | -2.425177811 | 1.584302295 | 7.72E-27 | 7.83E-26 |
| SFRP5 | -2.610739463 | 1.144704481 | 8.01E-27 | 8.11E-26 |
| GGTLC3 | -2.302136261 | -3.023562985 | 8.32E-27 | 8.42E-26 |
| OVOL1 | 2.347743944 | 2.450710157 | 8.89E-27 | 8.98E-26 |
| MESP1 | 2.405284702 | 2.136904542 | 9.54E-27 | 9.61E-26 |
| C15orf48 | 3.08774253 | 5.972890031 | 9.60E-27 | 9.66E-26 |
| GUCA1A | 4.356119996 | -1.585002781 | 9.89E-27 | 9.95E-26 |
| RTN4RL2 | 2.89247375 | 3.833567557 | 1.01E-26 | 1.01E-25 |
| CNTFR | -2.396090852 | -0.225130026 | 1.13E-26 | 1.14E-25 |
| SRPX2 | 2.341048408 | 4.86267029 | 1.16E-26 | 1.16E-25 |
| RXRG | -2.322781634 | 1.03634519 | 1.20E-26 | 1.20E-25 |
| S100P | 5.084041895 | 7.89444435 | 1.21E-26 | 1.21E-25 |
| BARX1 | 7.546194337 | 3.973407761 | 1.27E-26 | 1.27E-25 |
| IL22RA2 | 3.729960769 | 0.62204977 | 1.28E-26 | 1.27E-25 |
| DDIT4L | 3.321421915 | 3.566576982 | 1.53E-26 | 1.52E-25 |
| IGF2BP3 | 4.039045069 | 3.784964124 | 1.64E-26 | 1.63E-25 |
| TESMIN | 2.788884821 | 2.422360171 | 1.68E-26 | 1.67E-25 |
| MELTF | 2.83202014 | 4.70332308 | 1.69E-26 | 1.68E-25 |
| ATP6V1C2 | 3.004659393 | 3.427825932 | 1.73E-26 | 1.72E-25 |
| LGI2 | 2.732224622 | 3.808922123 | 1.89E-26 | 1.87E-25 |
| MAP7D2 | 3.374976955 | 3.348573664 | 1.96E-26 | 1.94E-25 |
| MMP17 | 2.7125914 | 3.041907193 | 2.27E-26 | 2.23E-25 |
| FAM155B | 3.214257772 | 1.66063846 | 2.63E-26 | 2.58E-25 |
| IL5RA | -2.074732701 | 1.64113282 | 2.75E-26 | 2.70E-25 |
| RHOV | 3.651151907 | 4.959438983 | 2.76E-26 | 2.70E-25 |
| ZPLD1 | 4.660341376 | -0.049327546 | 2.81E-26 | 2.75E-25 |
| GREB1L | 3.33517014 | 2.30862093 | 2.88E-26 | 2.82E-25 |
| HECW1 | 2.405160784 | 1.029469321 | 2.89E-26 | 2.82E-25 |
| SEL1L2 | -2.366706047 | -3.785626219 | 2.94E-26 | 2.87E-25 |

| | | | | |
|---------|--------------|--------------|----------|----------|
| NPSR1 | 5.998848609 | -1.004550509 | 2.96E-26 | 2.89E-25 |
| SYNGR3 | 2.833484827 | 2.047508208 | 3.25E-26 | 3.17E-25 |
| PODNL1 | 2.834775867 | 3.97183972 | 3.39E-26 | 3.30E-25 |
| BHLHA15 | 2.914554009 | 1.679897233 | 3.96E-26 | 3.84E-25 |
| HELT | -3.084141636 | -2.936414798 | 4.16E-26 | 4.03E-25 |
| IL36RN | 6.206171036 | 1.664387704 | 5.28E-26 | 5.07E-25 |
| HBD | -2.23700486 | -2.486857809 | 5.94E-26 | 5.70E-25 |
| AWAT2 | -2.546630034 | -1.678870157 | 6.32E-26 | 6.05E-25 |
| KREMEN2 | 2.978462892 | 0.587291722 | 8.26E-26 | 7.87E-25 |
| CEACAM5 | 4.798137082 | 9.488065425 | 8.71E-26 | 8.29E-25 |
| PLA2G2C | 3.133320592 | -1.080382756 | 1.02E-25 | 9.69E-25 |
| FAM178B | 2.941484972 | 1.800190142 | 1.09E-25 | 1.03E-24 |
| MCIDAS | 2.962645545 | 1.281292232 | 1.15E-25 | 1.09E-24 |
| TRIM31 | 4.096868634 | 3.413900389 | 1.18E-25 | 1.11E-24 |
| METTL7B | 2.627182164 | 4.067168886 | 1.27E-25 | 1.20E-24 |
| IGFL2 | 3.783906926 | 1.401633196 | 1.44E-25 | 1.35E-24 |
| JSRP1 | 3.089877488 | 2.510296288 | 1.50E-25 | 1.41E-24 |
| DNMT3B | 2.079210924 | 2.832824457 | 1.52E-25 | 1.43E-24 |
| SFTPD | -2.215548535 | 8.225019841 | 1.53E-25 | 1.43E-24 |
| EPHX3 | 2.250792822 | 4.185368832 | 1.57E-25 | 1.47E-24 |
| COL5A1 | 2.027693062 | 8.340741512 | 1.72E-25 | 1.61E-24 |
| PGLYRP4 | 4.282998692 | 1.17716469 | 1.77E-25 | 1.66E-24 |
| PRR36 | 2.184178623 | 4.489130723 | 1.78E-25 | 1.67E-24 |
| ACRV1 | 2.686132556 | -1.634171437 | 1.79E-25 | 1.67E-24 |
| XKRX | 2.860320343 | 3.965766154 | 1.80E-25 | 1.68E-24 |
| GPX2 | 5.981941393 | 6.755696821 | 1.92E-25 | 1.79E-24 |
| CBX2 | 2.522364283 | 4.201383328 | 2.04E-25 | 1.90E-24 |
| LYPD3 | 3.473691143 | 4.229482304 | 2.06E-25 | 1.92E-24 |
| PAEP | 7.670001878 | 6.372172145 | 2.14E-25 | 1.99E-24 |
| PANX2 | 2.478721129 | 4.030134145 | 2.68E-25 | 2.47E-24 |
| NKAIN1 | 4.747779948 | 0.184986668 | 2.69E-25 | 2.48E-24 |
| NPW | 5.095344653 | 1.941667897 | 2.72E-25 | 2.51E-24 |
| RNF182 | -2.009687228 | 0.989767214 | 2.74E-25 | 2.52E-24 |
| ECEL1 | 5.066641874 | 2.405275934 | 2.81E-25 | 2.58E-24 |
| BIK | 2.029113635 | 2.933267434 | 2.82E-25 | 2.59E-24 |
| NXPH4 | 4.222143972 | 2.464340057 | 2.90E-25 | 2.66E-24 |
| LIPM | 2.618101621 | 0.496387031 | 3.00E-25 | 2.74E-24 |
| NKPD1 | 2.541103547 | -1.118318775 | 3.37E-25 | 3.08E-24 |
| RCOR2 | 2.827723551 | 2.382348656 | 3.54E-25 | 3.23E-24 |
| PLAU | 2.611873109 | 7.507704549 | 4.21E-25 | 3.83E-24 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| DRP2 | 3.081434532 | 0.317990814 | 5.46E-25 | 4.95E-24 |
| RNFT2 | 2.240852115 | 2.742030544 | 5.64E-25 | 5.10E-24 |
| CCBE1 | -2.054842394 | 3.512249962 | 7.47E-25 | 6.71E-24 |
| MESP2 | 3.148576468 | 0.461938888 | 8.61E-25 | 7.70E-24 |
| COL7A1 | 3.170048008 | 4.805089276 | 8.68E-25 | 7.76E-24 |
| HIST1H3H | 2.688743831 | 2.231243741 | 9.03E-25 | 8.06E-24 |
| CDKN2A | 3.56108623 | 4.632448743 | 9.10E-25 | 8.12E-24 |
| ERFE | 3.34401115 | 2.485033175 | 9.85E-25 | 8.76E-24 |
| ARNTL2 | 2.520108444 | 5.201445796 | 1.05E-24 | 9.32E-24 |
| INHA | 6.367547477 | 3.601115361 | 1.06E-24 | 9.37E-24 |
| APCDD1L | 4.099172654 | 1.253264571 | 1.49E-24 | 1.32E-23 |
| FOXI3 | 6.731043621 | 1.583226598 | 1.61E-24 | 1.42E-23 |
| FA2H | 2.553418611 | 4.775793784 | 1.62E-24 | 1.43E-23 |
| CST4 | 6.916545936 | 0.296344671 | 1.65E-24 | 1.46E-23 |
| DSP | 2.210772474 | 8.552849373 | 1.75E-24 | 1.54E-23 |
| PROK2 | -2.017623563 | -1.203321164 | 1.85E-24 | 1.63E-23 |
| AQP10 | -2.157756196 | -2.432664432 | 1.93E-24 | 1.70E-23 |
| OGN | -2.131106599 | 3.330051104 | 1.99E-24 | 1.75E-23 |
| ASPHD1 | 2.776389629 | 3.497387353 | 2.59E-24 | 2.26E-23 |
| IL23A | 2.158252937 | 1.51353444 | 2.61E-24 | 2.27E-23 |
| IL37 | 6.35474398 | 3.2721482 | 3.49E-24 | 3.01E-23 |
| RASGRF1 | -2.061465646 | 4.637274048 | 3.96E-24 | 3.41E-23 |
| AKR1B15 | 5.877306854 | 1.999621468 | 4.07E-24 | 3.49E-23 |
| PPP2R2C | 5.019776248 | 3.538363538 | 4.42E-24 | 3.79E-23 |
| KPNA7 | 2.275517551 | 1.980880307 | 4.45E-24 | 3.81E-23 |
| STRIP2 | 2.767100094 | 3.646113799 | 4.56E-24 | 3.91E-23 |
| PLA2G2F | 5.553201877 | -1.157051602 | 4.62E-24 | 3.96E-23 |
| CELF5 | 3.360522682 | 0.531581613 | 4.81E-24 | 4.11E-23 |
| PCP4 | 5.445434286 | 4.010461277 | 5.18E-24 | 4.43E-23 |
| LHX2 | 4.717556443 | -0.434890777 | 5.40E-24 | 4.61E-23 |
| HES6 | 2.867932009 | 4.554019934 | 5.43E-24 | 4.63E-23 |
| DUSP9 | 4.572563651 | 1.43448334 | 5.81E-24 | 4.96E-23 |
| VGFB | 5.952440898 | 2.615897119 | 5.99E-24 | 5.10E-23 |
| PLPPR5 | -2.408504935 | -2.670333996 | 6.51E-24 | 5.53E-23 |
| ANKRD34B | 5.083072094 | 1.357064098 | 6.60E-24 | 5.61E-23 |
| FUT9 | 6.609871332 | 1.421288085 | 7.09E-24 | 6.01E-23 |
| RNF186 | 5.174298573 | 0.076394351 | 7.60E-24 | 6.42E-23 |
| TFF1 | 9.311354432 | 5.889677977 | 7.75E-24 | 6.55E-23 |
| HIST1H3J | 5.840439659 | -1.137365245 | 7.85E-24 | 6.63E-23 |
| IGFBP3 | 2.200730259 | 8.432457705 | 7.99E-24 | 6.74E-23 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| TLL2 | 2.975287311 | 0.460584227 | 8.12E-24 | 6.85E-23 |
| SCARA5 | -2.287387612 | 3.181030588 | 8.43E-24 | 7.10E-23 |
| RAB3B | 4.245544594 | 3.126339363 | 8.59E-24 | 7.24E-23 |
| PADI1 | 6.410819228 | 2.420529106 | 9.11E-24 | 7.67E-23 |
| RTBDN | 5.085419615 | -0.072849226 | 1.23E-23 | 1.03E-22 |
| EPYC | 5.227113141 | 0.374421641 | 1.27E-23 | 1.07E-22 |
| CDH17 | 5.299715979 | 3.723777209 | 1.38E-23 | 1.16E-22 |
| TTYH1 | 2.474504618 | 0.079295509 | 1.74E-23 | 1.45E-22 |
| PRSS50 | 3.308873097 | 0.941917999 | 1.81E-23 | 1.50E-22 |
| TMEM156 | 2.500924225 | 2.803902345 | 1.88E-23 | 1.56E-22 |
| PPFIA4 | 2.42839052 | 2.468725574 | 1.92E-23 | 1.59E-22 |
| TRIM15 | 6.233699146 | 0.78633714 | 2.06E-23 | 1.71E-22 |
| C12orf42 | 2.936719314 | -0.655518551 | 2.29E-23 | 1.88E-22 |
| SLC7A11 | 3.095271245 | 5.472100354 | 2.31E-23 | 1.90E-22 |
| GJB6 | 5.13140827 | 2.114339588 | 2.33E-23 | 1.91E-22 |
| BCAN | 3.068642668 | 1.072512759 | 2.48E-23 | 2.03E-22 |
| RNF183 | 4.159027499 | 1.825521371 | 2.63E-23 | 2.15E-22 |
| RXFP2 | -2.718973747 | -2.218858085 | 2.68E-23 | 2.19E-22 |
| C9orf24 | -2.370313569 | 2.590159069 | 2.71E-23 | 2.21E-22 |
| HIST1H2BG | 4.145674236 | 1.515962455 | 3.05E-23 | 2.48E-22 |
| FAM72D | 2.308913291 | -0.542118138 | 3.38E-23 | 2.75E-22 |
| CPB2 | -2.676433556 | 3.507586194 | 3.55E-23 | 2.88E-22 |
| TCN1 | 6.468911513 | 4.760553023 | 3.83E-23 | 3.10E-22 |
| FAM72C | 2.746345819 | -1.092744214 | 3.89E-23 | 3.14E-22 |
| CFAP161 | -2.035443938 | -0.097389166 | 3.97E-23 | 3.20E-22 |
| IL20RB | 3.867850537 | 3.279976854 | 4.16E-23 | 3.36E-22 |
| GLB1L3 | 5.23575027 | 4.48147609 | 4.48E-23 | 3.62E-22 |
| HIST2H4A | 2.260167801 | -1.064668603 | 4.58E-23 | 3.69E-22 |
| SP8 | 6.771799277 | 1.19857326 | 4.69E-23 | 3.78E-22 |
| SCG5 | 2.862229316 | 3.585583953 | 4.81E-23 | 3.87E-22 |
| MUC13 | 5.959832227 | 5.984666823 | 4.85E-23 | 3.90E-22 |
| MIOX | 4.125543097 | 0.789243349 | 5.59E-23 | 4.48E-22 |
| FUT6 | 3.929085615 | 2.867422848 | 6.08E-23 | 4.86E-22 |
| HMGA2 | 5.788539651 | 4.157398413 | 6.22E-23 | 4.96E-22 |
| PGLYRP3 | 5.63628351 | -0.371472134 | 6.54E-23 | 5.20E-22 |
| TOX3 | 2.83867395 | 4.805091339 | 7.19E-23 | 5.71E-22 |
| FAM180B | -2.037598827 | -3.114723184 | 7.86E-23 | 6.23E-22 |
| COL17A1 | 4.186247255 | 6.063363208 | 7.97E-23 | 6.31E-22 |
| ARTN | 2.751015413 | 1.405668492 | 8.19E-23 | 6.47E-22 |
| PACSIN1 | 2.488251704 | 1.397691477 | 8.19E-23 | 6.47E-22 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| CPNE4 | 2.738457726 | 1.971938366 | 1.01E-22 | 7.92E-22 |
| CATSPERD | -2.525357145 | -0.116042837 | 1.01E-22 | 7.93E-22 |
| AGR2 | 2.52512666 | 9.252717953 | 1.03E-22 | 8.06E-22 |
| B3GNT4 | 2.144826646 | 1.363306772 | 1.18E-22 | 9.23E-22 |
| CYP27C1 | 3.033886697 | 1.880157519 | 1.22E-22 | 9.56E-22 |
| FOXA3 | 3.30431833 | 3.121366697 | 1.24E-22 | 9.68E-22 |
| TESC | 3.627053171 | 6.349424528 | 1.24E-22 | 9.71E-22 |
| HOXC13 | 6.969775966 | 1.108654496 | 1.34E-22 | 1.04E-21 |
| CRYGN | 3.248165364 | 0.185794609 | 1.44E-22 | 1.12E-21 |
| ZIC2 | 5.205756246 | 0.892591889 | 1.45E-22 | 1.12E-21 |
| RAMP1 | 2.245864145 | 5.134268922 | 1.60E-22 | 1.24E-21 |
| SLC7A10 | 4.764462406 | 1.659733371 | 1.77E-22 | 1.37E-21 |
| GSTA3 | -2.490231847 | -1.047454226 | 1.82E-22 | 1.41E-21 |
| PRB3 | 4.488654466 | 0.470652391 | 1.83E-22 | 1.42E-21 |
| STK32A | 2.099974383 | 4.543441637 | 1.86E-22 | 1.44E-21 |
| FCRL5 | 2.589571975 | 3.902935705 | 2.04E-22 | 1.57E-21 |
| ALDH3B2 | 2.858035997 | 3.691762234 | 2.06E-22 | 1.58E-21 |
| MYO3B | 3.518530009 | 1.642322946 | 2.09E-22 | 1.61E-21 |
| PRSS3 | 5.159176836 | 2.000711582 | 2.10E-22 | 1.61E-21 |
| MMP3 | 3.919812741 | 1.197285271 | 2.17E-22 | 1.67E-21 |
| VSX1 | 3.8179021 | -1.114409221 | 2.18E-22 | 1.68E-21 |
| NRK | 3.756322624 | 3.224359489 | 2.30E-22 | 1.77E-21 |
| AKR1B10 | 7.439304146 | 6.385515956 | 2.42E-22 | 1.86E-21 |
| HIST1H1D | 6.799916942 | 1.382659545 | 2.45E-22 | 1.87E-21 |
| PACRG | -2.029945629 | 0.955604337 | 2.57E-22 | 1.96E-21 |
| TNS4 | 3.943774332 | 5.186479721 | 2.62E-22 | 2.00E-21 |
| HIST1H1E | 5.858623384 | 2.09504689 | 2.66E-22 | 2.03E-21 |
| SGK2 | 2.629826636 | 2.107485396 | 2.94E-22 | 2.24E-21 |
| MUC20 | 2.344969627 | 5.737739157 | 3.02E-22 | 2.30E-21 |
| HOXB9 | 7.186256302 | 3.644568712 | 3.04E-22 | 2.32E-21 |
| IL11 | 2.736663928 | 0.826954126 | 3.24E-22 | 2.46E-21 |
| HIST1H2BH | 4.804204014 | 0.368159732 | 3.36E-22 | 2.55E-21 |
| PKHD1L1 | -2.193576307 | 1.890990932 | 3.45E-22 | 2.61E-21 |
| PLOD2 | 2.078223429 | 6.964806059 | 3.45E-22 | 2.62E-21 |
| GNG4 | 4.43080395 | 3.465839906 | 3.46E-22 | 2.62E-21 |
| C8B | -2.607989396 | 2.080066471 | 3.46E-22 | 2.62E-21 |
| IL36G | 4.333176586 | -0.554720682 | 3.49E-22 | 2.64E-21 |
| C11orf88 | -2.414578229 | 1.752245715 | 3.63E-22 | 2.74E-21 |
| CXCL14 | 4.332119494 | 7.291689295 | 3.87E-22 | 2.92E-21 |
| OR2B6 | 3.524736622 | -2.012826716 | 3.91E-22 | 2.95E-21 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| POU4F1 | 5.368793941 | 0.20177307 | 4.02E-22 | 3.02E-21 |
| UMODL1 | 4.237206936 | 2.806126196 | 4.02E-22 | 3.02E-21 |
| FGF19 | 8.882305632 | 1.355176405 | 4.03E-22 | 3.03E-21 |
| TMEM82 | 4.78293081 | -1.099584036 | 4.33E-22 | 3.26E-21 |
| HOXA10 | 4.22541626 | 1.762136933 | 4.45E-22 | 3.34E-21 |
| CT83 | 6.631477427 | 2.011875259 | 4.57E-22 | 3.42E-21 |
| SUSD2 | -2.007539897 | 7.976063996 | 4.75E-22 | 3.56E-21 |
| GREB1 | 2.711637763 | 3.432047845 | 5.05E-22 | 3.78E-21 |
| SIX1 | 2.391678061 | 4.802135061 | 5.10E-22 | 3.82E-21 |
| HGD | 3.827039926 | 4.592895695 | 5.19E-22 | 3.88E-21 |
| LRRC18 | -2.167303807 | -0.138165125 | 5.27E-22 | 3.94E-21 |
| SPTB | 3.325735651 | 4.984238581 | 5.86E-22 | 4.36E-21 |
| STK31 | 2.069761633 | 2.559281557 | 5.92E-22 | 4.40E-21 |
| RASGEF1A | 2.021385118 | 3.642922126 | 6.23E-22 | 4.63E-21 |
| ZBTB16 | -2.099451339 | 3.142085602 | 6.38E-22 | 4.74E-21 |
| SLC25A48 | 4.217566952 | -1.529982557 | 6.44E-22 | 4.78E-21 |
| HIST1H2AG | 3.275240364 | 1.406748629 | 6.50E-22 | 4.82E-21 |
| SERPINA4 | 8.124370341 | 1.775587744 | 6.51E-22 | 4.83E-21 |
| LEMD1 | 2.814346418 | 2.032794028 | 6.76E-22 | 5.01E-21 |
| SRSF12 | 2.13764408 | 1.182564075 | 6.83E-22 | 5.05E-21 |
| HIST1H3D | 3.581294623 | 0.233206721 | 6.84E-22 | 5.06E-21 |
| GAL | 5.434025705 | 1.943322734 | 7.74E-22 | 5.71E-21 |
| UCN2 | 4.012511892 | -0.92737157 | 8.29E-22 | 6.10E-21 |
| TUBB2B | 3.95648068 | 3.730883505 | 8.34E-22 | 6.13E-21 |
| SHOX2 | 3.503217344 | 1.318014221 | 8.93E-22 | 6.54E-21 |
| REEP6 | 2.260601138 | 4.396647711 | 9.00E-22 | 6.59E-21 |
| TMEM52 | 2.024160119 | 1.40182619 | 9.18E-22 | 6.71E-21 |
| CLDN10 | 4.117868569 | 4.362813305 | 9.33E-22 | 6.81E-21 |
| ABCA4 | 3.727692149 | 4.461055287 | 9.79E-22 | 7.14E-21 |
| POU3F2 | 6.882861976 | 2.221891003 | 1.06E-21 | 7.72E-21 |
| DMRTA2 | 5.061441389 | 1.245260774 | 1.08E-21 | 7.87E-21 |
| NAT8L | 3.37825042 | 1.98863598 | 1.12E-21 | 8.13E-21 |
| LIPK | 6.506988904 | -1.530553329 | 1.12E-21 | 8.13E-21 |
| AIM2 | 2.840627828 | 3.393096926 | 1.14E-21 | 8.26E-21 |
| CAMK2N2 | 3.25931463 | -0.344981648 | 1.16E-21 | 8.40E-21 |
| SPERT | 4.889542131 | -0.673368747 | 1.17E-21 | 8.46E-21 |
| HIST2H2BF | 2.853033773 | 1.732501217 | 1.18E-21 | 8.55E-21 |
| LY6D | 5.685278359 | 3.277126268 | 1.22E-21 | 8.80E-21 |
| IGF2BP1 | 6.453763598 | 3.117711868 | 1.39E-21 | 1.00E-20 |
| COX6B2 | 3.262076887 | -0.118297982 | 1.46E-21 | 1.05E-20 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| CPS1 | 6.668393221 | 7.882917645 | 1.57E-21 | 1.13E-20 |
| HIST1H2BF | 5.229702869 | -0.526856395 | 1.61E-21 | 1.15E-20 |
| LCN12 | 2.466840539 | 1.226880078 | 1.88E-21 | 1.34E-20 |
| TAS1R3 | 2.265630625 | 2.301771916 | 1.91E-21 | 1.36E-20 |
| XAGE1A | 4.598618818 | -2.985289544 | 1.94E-21 | 1.38E-20 |
| TMEM171 | 2.901753888 | 0.720692126 | 2.08E-21 | 1.48E-20 |
| KCNK12 | 3.327516471 | 0.055683136 | 2.16E-21 | 1.53E-20 |
| SMC1B | 3.53953807 | 1.190098966 | 2.38E-21 | 1.69E-20 |
| ANXA10 | 7.545599411 | 3.615118254 | 2.47E-21 | 1.75E-20 |
| GFAP | 3.080296482 | -0.028557653 | 2.54E-21 | 1.80E-20 |
| KRT83 | 5.456344699 | -0.364263884 | 2.56E-21 | 1.81E-20 |
| METTL11B | 4.64394684 | -2.749399244 | 2.62E-21 | 1.85E-20 |
| SUGCT | 2.000566316 | 2.160833229 | 2.65E-21 | 1.87E-20 |
| FAM57B | 3.041432406 | -1.186288917 | 2.74E-21 | 1.93E-20 |
| HIST1H2AE | 3.968907864 | 1.069066701 | 2.89E-21 | 2.04E-20 |
| HIST1H4H | 2.51507977 | 1.855153806 | 2.95E-21 | 2.08E-20 |
| FGB | 8.986821614 | 7.940118782 | 2.99E-21 | 2.10E-20 |
| KRT81 | 5.950716165 | 4.619701215 | 2.99E-21 | 2.10E-20 |
| ARL9 | 2.47407059 | 0.246233349 | 3.09E-21 | 2.17E-20 |
| HRASLS | 2.809720655 | 0.768666768 | 3.13E-21 | 2.19E-20 |
| IL17C | 4.221352659 | -0.191073774 | 3.29E-21 | 2.30E-20 |
| GPR37 | 2.770383726 | 2.858787486 | 3.70E-21 | 2.58E-20 |
| C12orf56 | 4.820257224 | 1.153656797 | 4.25E-21 | 2.95E-20 |
| BPIFA2 | 5.347212518 | 2.417089654 | 4.27E-21 | 2.96E-20 |
| KCNA10 | -2.247085139 | -3.486383646 | 4.47E-21 | 3.10E-20 |
| TEKT5 | 2.388290033 | -0.646476931 | 4.60E-21 | 3.19E-20 |
| HIST1H2BO | 4.938627594 | -0.417248014 | 5.05E-21 | 3.48E-20 |
| APOBEC1 | 7.124511544 | -0.276342861 | 5.16E-21 | 3.56E-20 |
| TMEM145 | 2.889091274 | 0.305906864 | 6.17E-21 | 4.25E-20 |
| DEPDC7 | 2.575227663 | 2.016599681 | 6.39E-21 | 4.39E-20 |
| TRIM54 | 3.724799081 | 1.324574086 | 6.66E-21 | 4.56E-20 |
| FAM131C | 3.43058774 | -1.419379285 | 7.68E-21 | 5.24E-20 |
| FOXO6 | 2.292862615 | 2.262886279 | 8.24E-21 | 5.63E-20 |
| CFAP52 | -2.047633002 | 1.923130704 | 8.34E-21 | 5.69E-20 |
| SLC16A9 | 3.247715269 | 4.756872835 | 8.36E-21 | 5.70E-20 |
| CPXM1 | 2.03425759 | 3.910494445 | 8.90E-21 | 6.06E-20 |
| CEACAM7 | 5.390790021 | 3.376272678 | 9.04E-21 | 6.15E-20 |
| FOXH1 | 4.166025057 | -0.688348922 | 9.96E-21 | 6.75E-20 |
| KLK6 | 6.658627898 | 3.149736583 | 1.06E-20 | 7.15E-20 |
| RFX8 | 2.165888988 | -0.27738181 | 1.12E-20 | 7.54E-20 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| HORMAD1 | 4.45642294 | 2.584837226 | 1.16E-20 | 7.84E-20 |
| CNGB1 | 2.958453706 | 1.411496634 | 1.18E-20 | 7.99E-20 |
| SPTSSB | 4.543834758 | 2.532483835 | 1.22E-20 | 8.21E-20 |
| PNMA8C | -2.039489788 | -3.432115245 | 1.28E-20 | 8.59E-20 |
| TMEM249 | 2.835093013 | -1.977239398 | 1.33E-20 | 8.93E-20 |
| SPOCK1 | 3.114890995 | 3.951349815 | 1.43E-20 | 9.60E-20 |
| ABCC2 | 4.886591801 | 4.404054654 | 1.59E-20 | 1.06E-19 |
| LINGO1 | 2.518624522 | 2.456653386 | 1.65E-20 | 1.10E-19 |
| ALOXE3 | 2.749056792 | -0.587244832 | 1.99E-20 | 1.33E-19 |
| GPR35 | 2.503753655 | 3.27138594 | 2.06E-20 | 1.37E-19 |
| CDH19 | -2.171342534 | 0.000272347 | 2.19E-20 | 1.45E-19 |
| CRABP1 | 6.162003133 | 2.039508504 | 2.22E-20 | 1.47E-19 |
| IGLL5 | 2.467176478 | 7.037538776 | 2.25E-20 | 1.49E-19 |
| TMEM59L | 4.198470172 | 4.592389252 | 2.50E-20 | 1.65E-19 |
| FOXB1 | 4.71990924 | 0.550769344 | 2.56E-20 | 1.69E-19 |
| ESPN | 2.38743055 | 3.933927552 | 2.57E-20 | 1.69E-19 |
| CNGA3 | 4.816844714 | 2.751603932 | 2.85E-20 | 1.87E-19 |
| PDX1 | 8.181547625 | 0.510661533 | 2.97E-20 | 1.95E-19 |
| TAF7L | 4.299858204 | -0.319722621 | 2.97E-20 | 1.95E-19 |
| KCNQ3 | 2.004954685 | 5.17127861 | 3.13E-20 | 2.05E-19 |
| KRT16 | 4.746542179 | 3.949134175 | 3.16E-20 | 2.07E-19 |
| HIST1H3B | 7.082275963 | 0.47617943 | 3.26E-20 | 2.13E-19 |
| CLDN3 | 2.029196215 | 6.54671193 | 3.28E-20 | 2.15E-19 |
| SMCO2 | 2.480609088 | -1.256178871 | 3.32E-20 | 2.17E-19 |
| SLC16A14 | 2.949199416 | 5.205488456 | 3.39E-20 | 2.21E-19 |
| GPR87 | 4.111382808 | 3.396591073 | 3.49E-20 | 2.28E-19 |
| ADAMTS16 | 2.323554741 | 2.663752621 | 3.53E-20 | 2.30E-19 |
| BRDT | 6.140994787 | 2.734471563 | 3.58E-20 | 2.34E-19 |
| SOHLH2 | 4.865801819 | 0.656176675 | 3.66E-20 | 2.38E-19 |
| TBC1D26 | -2.280817451 | -3.064371676 | 3.72E-20 | 2.42E-19 |
| HIST1H3C | 7.038674461 | -0.165122201 | 3.74E-20 | 2.43E-19 |
| ABCB4 | 2.174224031 | 1.251370133 | 3.74E-20 | 2.43E-19 |
| HIST1H1B | 7.638728161 | 1.66459079 | 4.09E-20 | 2.64E-19 |
| SLCO1B3 | 6.983952344 | 1.672228868 | 4.29E-20 | 2.78E-19 |
| PAH | 6.154571678 | 2.488960522 | 4.32E-20 | 2.79E-19 |
| KCNQ5 | 2.649306296 | 2.343560978 | 4.37E-20 | 2.82E-19 |
| RGS20 | 2.927307518 | 1.055019357 | 4.40E-20 | 2.84E-19 |
| ALB | 9.099069178 | 6.708007321 | 4.44E-20 | 2.87E-19 |
| UNC93A | 5.749006721 | -1.194273419 | 4.59E-20 | 2.96E-19 |
| COLEC10 | -2.059399273 | -0.42943898 | 4.80E-20 | 3.09E-19 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| PCSK1 | 6.657731855 | 5.686550337 | 4.82E-20 | 3.10E-19 |
| NKAIN3 | 5.285880792 | -1.381543712 | 4.90E-20 | 3.15E-19 |
| HOXC11 | 6.835120673 | 1.464706779 | 5.00E-20 | 3.21E-19 |
| ANKS4B | 6.280898646 | 1.797571167 | 5.29E-20 | 3.40E-19 |
| GSDMC | 2.580544285 | 2.995321221 | 5.32E-20 | 3.42E-19 |
| CKMT1A | 2.876813652 | 1.36988012 | 5.43E-20 | 3.48E-19 |
| COMP | 2.910414995 | 5.443652941 | 5.46E-20 | 3.50E-19 |
| SLC16A8 | 2.232157513 | 0.656545138 | 5.61E-20 | 3.59E-19 |
| HIST1H2AD | 4.472946774 | 0.205375945 | 5.78E-20 | 3.70E-19 |
| SYT2 | 2.880034364 | 2.158595224 | 5.93E-20 | 3.79E-19 |
| KRTAP5-1 | 2.194059473 | -0.751994058 | 6.03E-20 | 3.85E-19 |
| SLCO1A2 | -2.646555751 | 1.576389014 | 6.45E-20 | 4.11E-19 |
| SEPT12 | 4.124601704 | -2.972993993 | 6.77E-20 | 4.30E-19 |
| XKR9 | 2.217129018 | 2.316574628 | 6.88E-20 | 4.37E-19 |
| BECN2 | 4.006492086 | -2.809792955 | 7.01E-20 | 4.45E-19 |
| SLC15A1 | 4.019486377 | 2.021924737 | 7.12E-20 | 4.52E-19 |
| GLRA3 | 3.959827416 | 1.013342473 | 7.13E-20 | 4.52E-19 |
| NKX3-2 | 3.546556175 | -1.119077693 | 7.38E-20 | 4.67E-19 |
| C1orf194 | -2.167837277 | 1.95406011 | 7.58E-20 | 4.80E-19 |
| HIST1H2BC | 2.279891779 | 2.984403816 | 8.17E-20 | 5.17E-19 |
| CKMT1B | 2.940355513 | 1.682567273 | 8.36E-20 | 5.28E-19 |
| S100A2 | 3.396270241 | 5.545550723 | 8.42E-20 | 5.32E-19 |
| APBA2 | 2.026952974 | 4.247785219 | 8.71E-20 | 5.49E-19 |
| PLA2G4A | 2.464035811 | 5.851968496 | 8.71E-20 | 5.49E-19 |
| NPC1L1 | 4.42911354 | 2.294886666 | 8.79E-20 | 5.53E-19 |
| SNTN | -2.186216864 | 2.812132451 | 9.02E-20 | 5.67E-19 |
| DIRAS1 | 2.607059523 | 2.676038513 | 9.73E-20 | 6.11E-19 |
| SOX11 | 4.85651082 | 2.322574715 | 1.05E-19 | 6.58E-19 |
| SPINK4 | 8.977079157 | 3.994086022 | 1.10E-19 | 6.85E-19 |
| APOBEC3B | 2.233102452 | 3.084345745 | 1.22E-19 | 7.61E-19 |
| PAX9 | 2.733391381 | 3.874458476 | 1.25E-19 | 7.78E-19 |
| SMKR1 | 2.810607841 | 2.04652384 | 1.36E-19 | 8.42E-19 |
| QPCT | 2.67969374 | 5.561270272 | 1.46E-19 | 9.04E-19 |
| DOK5 | 2.292880359 | 1.819339203 | 1.60E-19 | 9.88E-19 |
| DIO2 | 2.386216436 | 3.842725128 | 1.80E-19 | 1.10E-18 |
| ABCC11 | 2.426487656 | -0.679945148 | 1.91E-19 | 1.17E-18 |
| NR2E1 | 4.48484444 | -1.423735726 | 1.97E-19 | 1.21E-18 |
| FAM177B | 3.333225749 | 2.331415561 | 2.03E-19 | 1.24E-18 |
| EPS8L3 | 7.218832959 | 2.897975539 | 2.11E-19 | 1.29E-18 |
| UCHL1 | 3.505161104 | 6.12966225 | 2.26E-19 | 1.38E-18 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| SRMS | 2.475041571 | 0.926475467 | 2.27E-19 | 1.38E-18 |
| SMIM24 | 4.236438518 | 1.436408292 | 2.30E-19 | 1.40E-18 |
| REG4 | 10.57261497 | 5.901985789 | 2.47E-19 | 1.50E-18 |
| TSHR | 3.030971127 | 0.278944373 | 2.58E-19 | 1.57E-18 |
| EDN3 | -2.684805393 | -1.277466755 | 2.64E-19 | 1.60E-18 |
| FAM216B | -2.328405964 | 3.253181477 | 3.33E-19 | 2.02E-18 |
| HIST1H2BE | 4.360067115 | -0.486403958 | 3.41E-19 | 2.06E-18 |
| TUBA4B | -2.158292957 | 1.550482498 | 3.79E-19 | 2.28E-18 |
| MROH9 | -2.272800839 | -0.381441897 | 3.91E-19 | 2.35E-18 |
| OR51E1 | 3.008614303 | -0.233718435 | 3.93E-19 | 2.37E-18 |
| TPTE2 | 2.507791858 | -1.856978382 | 4.09E-19 | 2.46E-18 |
| DUSP4 | 2.458913235 | 6.748595189 | 4.24E-19 | 2.54E-18 |
| TGFBR3L | 2.508218153 | -0.548301233 | 4.25E-19 | 2.55E-18 |
| RHCE | 2.001660221 | 0.744390605 | 4.29E-19 | 2.57E-18 |
| C9orf84 | 3.140311206 | 2.000970951 | 4.39E-19 | 2.63E-18 |
| EGF | 2.272678367 | 3.34068493 | 4.51E-19 | 2.69E-18 |
| HIST1H4E | 5.444388722 | 0.927768046 | 4.96E-19 | 2.96E-18 |
| HIST1H4K | 2.464249076 | -1.6949793 | 5.05E-19 | 3.01E-18 |
| FNDC1 | 2.409546318 | 5.369348576 | 5.12E-19 | 3.05E-18 |
| NKAIN4 | 3.236843494 | 0.649605058 | 5.19E-19 | 3.09E-18 |
| MUC21 | 3.776370729 | 6.518355758 | 5.70E-19 | 3.38E-18 |
| CLPSL1 | 4.873597998 | -1.379579369 | 6.20E-19 | 3.67E-18 |
| TDRD5 | 3.680888545 | 1.844734885 | 6.43E-19 | 3.80E-18 |
| BCO1 | 2.494830771 | 1.461367147 | 7.25E-19 | 4.28E-18 |
| GRIN2D | 2.548610828 | 2.884893992 | 7.27E-19 | 4.29E-18 |
| TRIM67 | 2.452636705 | -1.248063453 | 7.50E-19 | 4.42E-18 |
| TCTE1 | -2.176862505 | 0.598171568 | 7.67E-19 | 4.52E-18 |
| CLDN6 | 5.715593534 | 4.335135805 | 7.98E-19 | 4.70E-18 |
| KIF5A | 2.717214098 | 0.908416996 | 8.03E-19 | 4.72E-18 |
| G6PC2 | -2.350669291 | -3.720914487 | 8.38E-19 | 4.92E-18 |
| HOXC10 | 6.061999432 | 2.756468063 | 8.47E-19 | 4.98E-18 |
| CRLF1 | 4.061686595 | 7.063421812 | 8.99E-19 | 5.27E-18 |
| WDR86 | 2.272323441 | 3.12458334 | 1.21E-18 | 7.06E-18 |
| PDIA2 | 4.772522397 | 2.382285281 | 1.22E-18 | 7.12E-18 |
| SLC27A6 | -2.410965692 | -0.54672297 | 1.30E-18 | 7.54E-18 |
| CCDC198 | 5.444996478 | 0.832849019 | 1.35E-18 | 7.83E-18 |
| EN2 | 4.140376271 | -0.34869634 | 1.37E-18 | 7.93E-18 |
| PLA2G1B | -2.143214746 | 2.617632819 | 1.41E-18 | 8.13E-18 |
| C2CD6 | 2.283908234 | 1.558721114 | 1.41E-18 | 8.17E-18 |
| HIST1H2AJ | 6.688631989 | -0.884379765 | 1.55E-18 | 8.94E-18 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| HCN2 | 2.356812212 | 0.770209982 | 1.58E-18 | 9.11E-18 |
| TRIM58 | -2.102905824 | -0.287506379 | 1.62E-18 | 9.34E-18 |
| KCND2 | 2.264475268 | 1.644327028 | 1.80E-18 | 1.03E-17 |
| GJB3 | 3.294307928 | 3.654320023 | 1.81E-18 | 1.04E-17 |
| TRPM1 | -2.092312888 | -3.069239012 | 1.91E-18 | 1.10E-17 |
| AHNAK2 | 2.206489623 | 6.775826936 | 2.03E-18 | 1.16E-17 |
| UPK3A | 3.12234501 | 0.666335821 | 2.21E-18 | 1.26E-17 |
| THPO | 3.093695041 | 1.298431311 | 2.49E-18 | 1.42E-17 |
| BPIFB4 | 6.63083116 | 0.919200221 | 2.52E-18 | 1.43E-17 |
| HOXB13 | 6.43504237 | 1.4693138 | 2.88E-18 | 1.63E-17 |
| CDHR2 | 4.115876809 | 2.273357131 | 2.89E-18 | 1.63E-17 |
| NCCRP1 | 3.761250615 | 3.004167468 | 2.98E-18 | 1.68E-17 |
| UGT2B15 | 6.065219432 | 2.190007476 | 3.11E-18 | 1.76E-17 |
| KIF1A | 5.473857413 | 5.149986782 | 3.52E-18 | 1.98E-17 |
| MYCN | 4.023455847 | 2.597264938 | 3.76E-18 | 2.11E-17 |
| GCLC | 2.287930452 | 6.836994392 | 4.08E-18 | 2.28E-17 |
| TBXT | 5.875216297 | 0.264893947 | 4.19E-18 | 2.34E-17 |
| STRC | 2.79819335 | -2.05264204 | 4.58E-18 | 2.55E-17 |
| HIST1H3G | 3.824777185 | 0.121006355 | 4.71E-18 | 2.62E-17 |
| TFAP2D | 7.004739617 | 0.547111717 | 4.87E-18 | 2.71E-17 |
| FADS6 | 5.139138849 | 0.223791528 | 5.32E-18 | 2.95E-17 |
| ANKRD66 | -2.300746075 | 0.719135595 | 5.52E-18 | 3.06E-17 |
| B4GALNT1 | 2.527794884 | 2.537771622 | 5.76E-18 | 3.19E-17 |
| FAM133A | 5.535955083 | 2.242377089 | 5.84E-18 | 3.23E-17 |
| SIX2 | 3.323584488 | 2.709475869 | 6.15E-18 | 3.40E-17 |
| MMP10 | 3.941546835 | 3.043915248 | 6.66E-18 | 3.67E-17 |
| DDN | 2.381712764 | -0.481176455 | 6.77E-18 | 3.73E-17 |
| SCUBE3 | 2.382637517 | 4.214634169 | 6.79E-18 | 3.74E-17 |
| SMOC1 | 3.851578922 | 4.545133255 | 6.80E-18 | 3.74E-17 |
| PNCK | 3.246921705 | 0.859075709 | 7.03E-18 | 3.87E-17 |
| FOXD3 | 3.993638724 | -1.496952617 | 7.54E-18 | 4.14E-17 |
| TINAG | 6.823174761 | 0.393378508 | 7.71E-18 | 4.23E-17 |
| TEX48 | 3.632362937 | -2.337853138 | 7.81E-18 | 4.28E-17 |
| PTHLH | 2.768634885 | 2.791968651 | 8.40E-18 | 4.60E-17 |
| SYT14 | 4.901706124 | 0.555419793 | 8.45E-18 | 4.62E-17 |
| IGFBPL1 | 2.388947053 | 1.334604262 | 8.63E-18 | 4.72E-17 |
| DQX1 | 3.055767314 | 0.461825047 | 9.19E-18 | 5.01E-17 |
| DGKI | 2.055609678 | 0.530279479 | 9.25E-18 | 5.04E-17 |
| TBX10 | 5.216044445 | -1.09301006 | 9.42E-18 | 5.12E-17 |
| PRSS2 | 6.20379047 | 5.116467126 | 9.82E-18 | 5.33E-17 |

| | | | | |
|---------------|--------------|--------------|----------|----------|
| FSD1 | 2.579050924 | -0.165453271 | 1.02E-17 | 5.54E-17 |
| TM4SF4 | 5.772235475 | 5.365252237 | 1.03E-17 | 5.56E-17 |
| PTPRN | 4.378921759 | 2.426439976 | 1.05E-17 | 5.71E-17 |
| HIST1H2AL | 5.541068481 | -1.248697755 | 1.06E-17 | 5.72E-17 |
| C1orf87 | -2.380828418 | 1.353341275 | 1.12E-17 | 6.03E-17 |
| NXPH1 | 5.133420019 | -1.340274527 | 1.20E-17 | 6.45E-17 |
| HOXB7 | 2.110281006 | 3.462865887 | 1.22E-17 | 6.57E-17 |
| CCNO | 2.171016824 | 3.373613848 | 1.29E-17 | 6.96E-17 |
| CFAP77 | -2.146337655 | 1.133443768 | 1.42E-17 | 7.59E-17 |
| ANGPTL3 | 4.176458949 | -0.97117146 | 1.49E-17 | 7.96E-17 |
| HOXC9 | 3.302132218 | 0.741692821 | 1.77E-17 | 9.43E-17 |
| DLX6 | 4.949314136 | 0.030730475 | 1.83E-17 | 9.74E-17 |
| TMEM88B | 2.87740482 | -1.974272051 | 1.92E-17 | 1.02E-16 |
| F2 | 7.249006213 | 1.029773125 | 1.93E-17 | 1.03E-16 |
| GCKR | 3.053124016 | 0.171561237 | 1.96E-17 | 1.04E-16 |
| OGDHL | 3.490702117 | 1.804061863 | 2.01E-17 | 1.07E-16 |
| RUFY4 | 2.284865886 | 0.766585027 | 2.17E-17 | 1.15E-16 |
| C11orf97 | -2.465106375 | -0.611105066 | 2.18E-17 | 1.15E-16 |
| SERPINA9 | -2.114902171 | -1.671781573 | 2.20E-17 | 1.16E-16 |
| PIWIL1 | 5.15077679 | -0.985457687 | 2.21E-17 | 1.17E-16 |
| NOX5 | 3.051249212 | 0.954917655 | 2.27E-17 | 1.20E-16 |
| DEFA4 | -2.535638952 | -3.661773593 | 2.41E-17 | 1.27E-16 |
| MEIOC | 2.67801853 | 0.7732652 | 2.41E-17 | 1.27E-16 |
| HIST1H4C | 6.164253128 | 0.898341586 | 2.43E-17 | 1.28E-16 |
| MYADML2 | 2.490515693 | -2.526878371 | 2.44E-17 | 1.28E-16 |
| KRT15 | 2.648645082 | 5.86585952 | 2.46E-17 | 1.29E-16 |
| ZNF670-ZNF695 | 2.107604318 | -1.9795254 | 2.57E-17 | 1.35E-16 |
| CNGA1 | 2.353504532 | 1.062093893 | 2.60E-17 | 1.36E-16 |
| SLC39A5 | 4.008372513 | 0.89981587 | 2.78E-17 | 1.45E-16 |
| OTP | -2.391474585 | -3.055840585 | 2.81E-17 | 1.47E-16 |
| CSTL1 | 4.659803465 | -2.184192077 | 2.83E-17 | 1.48E-16 |
| LCT | 4.001404462 | 0.506446785 | 2.88E-17 | 1.50E-16 |
| TRIM72 | 4.327963201 | 1.239602595 | 2.96E-17 | 1.55E-16 |
| SPINK2 | 2.770713886 | 0.265210559 | 3.03E-17 | 1.58E-16 |
| MZB1 | 2.120300609 | 5.451574061 | 3.15E-17 | 1.64E-16 |
| CHGB | 5.852416588 | 5.434505346 | 3.18E-17 | 1.66E-16 |
| MCHR1 | 2.040666611 | -0.128317348 | 3.20E-17 | 1.66E-16 |
| LHX5 | 5.149002376 | -0.974347453 | 3.26E-17 | 1.69E-16 |
| KCNE1B | -2.040888915 | -1.647624833 | 3.33E-17 | 1.73E-16 |
| THEGL | 2.902224122 | -2.413963931 | 3.38E-17 | 1.76E-16 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| HIST1H2BM | 6.464466651 | -1.564963761 | 3.54E-17 | 1.84E-16 |
| TUBB8 | 2.126513136 | -1.126385375 | 3.58E-17 | 1.86E-16 |
| CACNA1E | 2.708942929 | -0.087869776 | 3.63E-17 | 1.88E-16 |
| HGFAC | 2.947846467 | -0.499411202 | 3.66E-17 | 1.89E-16 |
| MYBPC1 | 5.970386305 | 2.788191908 | 3.71E-17 | 1.92E-16 |
| RFLNA | 2.58114162 | 2.731195055 | 3.99E-17 | 2.06E-16 |
| ARL14 | 5.094888731 | 1.913838026 | 4.39E-17 | 2.26E-16 |
| NUP210L | 2.462670583 | 1.230911548 | 4.56E-17 | 2.34E-16 |
| ANKRD36C | 3.138884371 | 3.562914071 | 4.66E-17 | 2.39E-16 |
| MIXL1 | 2.011494845 | 0.007177457 | 4.66E-17 | 2.39E-16 |
| TM4SF5 | 8.257305105 | 1.804179462 | 4.80E-17 | 2.46E-16 |
| CALCA | 8.59333535 | 7.876085238 | 4.88E-17 | 2.50E-16 |
| ENO3 | 2.570382299 | 3.834041805 | 4.92E-17 | 2.52E-16 |
| IGLON5 | 2.3723117 | -0.43958446 | 4.96E-17 | 2.54E-16 |
| LHB | 2.122459534 | -1.921525116 | 4.99E-17 | 2.55E-16 |
| GLDC | 2.91185466 | 2.621151213 | 5.05E-17 | 2.58E-16 |
| CATSPERB | 2.298862487 | 2.323583892 | 5.08E-17 | 2.60E-16 |
| TFF2 | 11.64813184 | 5.658639051 | 5.37E-17 | 2.74E-16 |
| SALL1 | 5.819710205 | 1.081592111 | 5.47E-17 | 2.79E-16 |
| LCN2 | 2.725820459 | 7.654453407 | 6.41E-17 | 3.26E-16 |
| CKM | 3.023924075 | 0.642005357 | 6.47E-17 | 3.29E-16 |
| OR2W3 | -2.214813976 | -2.604785177 | 6.52E-17 | 3.32E-16 |
| AC083902.2 | 3.824826993 | 0.290080801 | 6.70E-17 | 3.40E-16 |
| SERPINB5 | 4.423127738 | 4.015330481 | 6.73E-17 | 3.42E-16 |
| LHX1 | 6.752533962 | -0.206390623 | 6.76E-17 | 3.43E-16 |
| EYS | 2.252112806 | 2.062054252 | 7.21E-17 | 3.65E-16 |
| TNNT1 | 3.234488989 | 4.476391858 | 7.30E-17 | 3.70E-16 |
| MUC6 | 6.395687466 | 6.219359738 | 7.34E-17 | 3.72E-16 |
| ACHE | 2.477084032 | 4.130073381 | 7.40E-17 | 3.75E-16 |
| TFPI2 | 3.887363684 | 7.538253938 | 7.67E-17 | 3.88E-16 |
| GABRA3 | 5.98258832 | 1.3782551 | 7.92E-17 | 4.00E-16 |
| EFCAB1 | -2.046411238 | 2.623262131 | 8.16E-17 | 4.12E-16 |
| WFDC10B | 2.38859461 | 0.400428937 | 8.20E-17 | 4.14E-16 |
| HIST3H2A | 2.539247666 | 3.258196317 | 8.25E-17 | 4.16E-16 |
| CLDN14 | 2.188482006 | -0.654611136 | 8.38E-17 | 4.23E-16 |
| KRT6A | 5.503437532 | 6.608587393 | 8.45E-17 | 4.26E-16 |
| ALPK2 | 2.257043308 | 0.795387645 | 8.66E-17 | 4.36E-16 |
| PRSS1 | 6.108041157 | 2.131637251 | 8.70E-17 | 4.38E-16 |
| GDNF | 2.953799902 | -0.063539763 | 9.27E-17 | 4.66E-16 |
| SPRR1B | 6.026749698 | 3.072093734 | 9.34E-17 | 4.70E-16 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| MTNR1A | 3.669004957 | -2.052349705 | 9.82E-17 | 4.93E-16 |
| CCDC129 | 4.569559164 | 2.083474652 | 9.85E-17 | 4.94E-16 |
| LY6K | 3.70652956 | 3.511419471 | 9.94E-17 | 4.98E-16 |
| C1orf105 | 3.256562685 | -2.503631346 | 1.07E-16 | 5.35E-16 |
| HIST1H2BL | 3.963899669 | -0.736975277 | 1.12E-16 | 5.60E-16 |
| GCM1 | 2.803098014 | -1.25254102 | 1.15E-16 | 5.73E-16 |
| PADI3 | 6.932082908 | 2.361523904 | 1.17E-16 | 5.86E-16 |
| CTSIV | 2.297144973 | 3.201073806 | 1.21E-16 | 6.03E-16 |
| MAG | -2.043482699 | -1.561243532 | 1.24E-16 | 6.16E-16 |
| TMEM132C | -2.118704575 | -0.312950214 | 1.26E-16 | 6.28E-16 |
| CCL25 | 2.890671605 | -1.742959326 | 1.30E-16 | 6.48E-16 |
| MMP9 | 2.028296835 | 6.322569138 | 1.31E-16 | 6.50E-16 |
| ACTL8 | 7.807704408 | 0.242194838 | 1.34E-16 | 6.65E-16 |
| ACMSD | 3.205340161 | 0.8928076 | 1.35E-16 | 6.69E-16 |
| MEGF10 | 2.777725687 | 0.413040136 | 1.36E-16 | 6.73E-16 |
| FSIP2 | 3.007177654 | 1.913642382 | 1.39E-16 | 6.87E-16 |
| LYPD8 | 4.189749071 | -0.670677003 | 1.44E-16 | 7.11E-16 |
| PRRX2 | 2.214153601 | 2.473829506 | 1.46E-16 | 7.20E-16 |
| SYT16 | 3.032322034 | 0.993327156 | 1.52E-16 | 7.50E-16 |
| GRIK2 | 2.642855514 | 1.204410253 | 1.53E-16 | 7.55E-16 |
| KIRREL2 | 3.636887655 | 0.485513493 | 1.55E-16 | 7.65E-16 |
| CHRNA9 | 5.142608627 | 2.180969307 | 1.56E-16 | 7.70E-16 |
| TWIST1 | 2.478215689 | 1.5189668 | 1.56E-16 | 7.70E-16 |
| LRRC14B | 3.414671897 | -2.601015704 | 1.69E-16 | 8.31E-16 |
| AGT | 3.109068451 | 5.014254893 | 1.74E-16 | 8.52E-16 |
| SPINK13 | 3.774081463 | 1.112793137 | 1.78E-16 | 8.71E-16 |
| ENTPD2 | 2.182108465 | 2.100935752 | 1.83E-16 | 8.96E-16 |
| HAL | 2.674507229 | 3.467331704 | 1.89E-16 | 9.24E-16 |
| HNF1A | 3.833713823 | 1.244033299 | 1.89E-16 | 9.27E-16 |
| ERVV-1 | 4.502819538 | -1.653189642 | 2.00E-16 | 9.74E-16 |
| WNK2 | 2.077283091 | 3.871455984 | 2.00E-16 | 9.76E-16 |
| CILP | 2.46178349 | 4.374173546 | 2.15E-16 | 1.05E-15 |
| SH3GL2 | -2.211289035 | 0.240645202 | 2.21E-16 | 1.08E-15 |
| KCNJ10 | 2.153691737 | 0.769596584 | 2.22E-16 | 1.08E-15 |
| WDR97 | 2.066750962 | 1.432821271 | 2.36E-16 | 1.14E-15 |
| PNPLA5 | 5.875144308 | -1.535701514 | 2.38E-16 | 1.15E-15 |
| CALML6 | 2.386253762 | -1.178279954 | 2.38E-16 | 1.15E-15 |
| FOXE1 | 4.422711176 | 1.861155584 | 2.46E-16 | 1.19E-15 |
| CRYBA2 | 5.217165214 | -1.284349167 | 2.63E-16 | 1.27E-15 |
| GFY | 5.941512458 | -0.863831469 | 2.76E-16 | 1.34E-15 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| MORN5 | -2.168399343 | 0.943332623 | 2.81E-16 | 1.35E-15 |
| IGSF1 | 3.007802732 | 1.029280158 | 2.91E-16 | 1.40E-15 |
| UGT8 | 2.201538806 | 3.913524193 | 3.03E-16 | 1.46E-15 |
| FETUB | 5.793147282 | -1.729827829 | 3.11E-16 | 1.50E-15 |
| TRIM9 | 2.772916666 | 1.783783866 | 3.13E-16 | 1.50E-15 |
| PKIB | 2.048103855 | 3.98055724 | 3.17E-16 | 1.52E-15 |
| LHFPL3 | -2.021911048 | 0.508744137 | 3.17E-16 | 1.52E-15 |
| TEKT1 | -2.222243171 | 2.803682603 | 3.26E-16 | 1.56E-15 |
| CCDC154 | 2.509674628 | 1.417141881 | 3.32E-16 | 1.59E-15 |
| ZIC5 | 5.430512008 | -0.665505637 | 3.45E-16 | 1.65E-15 |
| CSAG1 | 7.153974691 | 1.889611073 | 3.63E-16 | 1.74E-15 |
| UGT2B11 | 7.270956024 | 0.374087907 | 3.97E-16 | 1.89E-15 |
| HTR1D | 2.711904549 | 1.697888308 | 4.01E-16 | 1.91E-15 |
| AKR1C2 | 4.646936003 | 8.389851914 | 4.13E-16 | 1.96E-15 |
| GCGR | 3.524093496 | -1.904389627 | 4.45E-16 | 2.11E-15 |
| TF | 4.757623723 | 5.542757268 | 4.52E-16 | 2.14E-15 |
| CEMIP | 2.119158365 | 6.166351258 | 4.59E-16 | 2.17E-15 |
| HIST1H2BJ | 2.332263795 | 1.512772866 | 4.76E-16 | 2.25E-15 |
| HIST2H2AC | 3.0176758 | 0.943992131 | 4.78E-16 | 2.26E-15 |
| NPTX1 | 3.756848033 | 5.030399019 | 4.84E-16 | 2.29E-15 |
| MUC4 | 2.475470823 | 7.123305371 | 4.85E-16 | 2.29E-15 |
| ADGRB1 | 3.209423527 | 3.580391291 | 5.07E-16 | 2.39E-15 |
| CIT | 2.046371759 | 7.124385696 | 5.16E-16 | 2.43E-15 |
| LRRC71 | -2.039221597 | 0.927848144 | 5.26E-16 | 2.47E-15 |
| CDK5R2 | 4.362437311 | 0.628812021 | 5.31E-16 | 2.50E-15 |
| TRIM17 | 2.200578928 | 2.409527971 | 5.47E-16 | 2.57E-15 |
| FGF5 | 5.675722459 | -0.248175852 | 5.76E-16 | 2.71E-15 |
| MUC5B | 3.982138109 | 9.482592766 | 5.96E-16 | 2.80E-15 |
| MAGEC1 | 7.984762275 | 1.307724084 | 6.21E-16 | 2.91E-15 |
| SLC6A3 | 3.990833327 | 3.217566921 | 6.64E-16 | 3.11E-15 |
| LRRC15 | 2.325226198 | 4.833797264 | 6.92E-16 | 3.23E-15 |
| ANKRD34C | -2.235948398 | -3.583231604 | 7.12E-16 | 3.33E-15 |
| PRAP1 | 4.461256354 | 1.583003839 | 7.44E-16 | 3.47E-15 |
| DLX5 | 2.685583962 | 0.538720193 | 7.57E-16 | 3.53E-15 |
| SULT4A1 | 3.866361113 | 0.305541296 | 8.15E-16 | 3.79E-15 |
| CDX2 | 5.508288742 | 0.183206479 | 8.63E-16 | 4.01E-15 |
| SLC28A2 | 4.42681644 | 2.464975103 | 9.06E-16 | 4.20E-15 |
| TLX1 | 5.294529709 | -2.029604663 | 9.11E-16 | 4.23E-15 |
| KLHDC8A | 2.128206114 | 1.237834354 | 9.26E-16 | 4.29E-15 |
| SCN4A | 3.336355528 | 1.334591972 | 1.04E-15 | 4.81E-15 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| RIMS2 | 3.850773015 | 1.356195019 | 1.08E-15 | 4.96E-15 |
| ELAVL2 | 3.471819269 | 0.10633403 | 1.08E-15 | 5.00E-15 |
| NMNAT2 | 2.645497183 | 4.289901855 | 1.12E-15 | 5.16E-15 |
| KCNQ2 | 5.343383317 | 0.83730123 | 1.13E-15 | 5.20E-15 |
| CALB1 | 5.773649978 | 3.691730031 | 1.28E-15 | 5.88E-15 |
| ALOX15 | -2.093971034 | 3.468191608 | 1.44E-15 | 6.57E-15 |
| RASGEF1C | 3.792540677 | -0.536166398 | 1.49E-15 | 6.81E-15 |
| MYBPH | 3.729867934 | 2.148507474 | 1.49E-15 | 6.82E-15 |
| PRDM13 | 5.292481345 | -2.19018279 | 1.53E-15 | 7.00E-15 |
| CYP2D6 | 2.046659116 | 1.297431547 | 1.56E-15 | 7.10E-15 |
| INSL4 | 8.124465915 | 2.298083623 | 1.56E-15 | 7.10E-15 |
| GPT | 2.040355175 | 1.76065266 | 1.62E-15 | 7.38E-15 |
| KCNE4 | 2.323502821 | 4.544375237 | 1.75E-15 | 7.96E-15 |
| HCAR1 | 2.507130763 | 3.361542142 | 1.78E-15 | 8.08E-15 |
| COL9A3 | 2.324436458 | 1.797265131 | 1.79E-15 | 8.13E-15 |
| STPG3 | 2.270760278 | -0.268732054 | 1.86E-15 | 8.45E-15 |
| CGA | 8.893365728 | 3.751591809 | 1.88E-15 | 8.54E-15 |
| PIH1D3 | -2.19163804 | 0.000642913 | 1.91E-15 | 8.66E-15 |
| HIST1H4D | 5.592732519 | 0.266783332 | 2.02E-15 | 9.16E-15 |
| CALCB | 4.245708637 | 0.399941546 | 2.03E-15 | 9.19E-15 |
| KCNG2 | 2.016150211 | -0.589558539 | 2.03E-15 | 9.20E-15 |
| ADAMDEC1 | 2.249610911 | 3.604758849 | 2.16E-15 | 9.75E-15 |
| PPEF1 | 2.209244216 | 0.594155756 | 2.21E-15 | 9.96E-15 |
| SLCO1B1 | 6.470085231 | -1.002906123 | 2.37E-15 | 1.07E-14 |
| SLC9A3 | 2.430510275 | 0.760836835 | 2.40E-15 | 1.08E-14 |
| MYH6 | 4.0655962 | -2.688234336 | 2.47E-15 | 1.11E-14 |
| FTCD | 2.931432343 | -0.320006429 | 2.55E-15 | 1.14E-14 |
| CALML3 | 6.074816904 | 2.16973838 | 2.56E-15 | 1.15E-14 |
| ST8SIA2 | 3.325782278 | -0.592806978 | 2.57E-15 | 1.15E-14 |
| CDH15 | 2.185578816 | 2.268792018 | 2.61E-15 | 1.17E-14 |
| IGLL1 | 2.804128234 | -1.303706774 | 2.69E-15 | 1.20E-14 |
| GTSF1L | 2.546378079 | -3.335469884 | 2.91E-15 | 1.30E-14 |
| STEAP1B | 2.434740953 | 0.86316952 | 2.91E-15 | 1.30E-14 |
| WIF1 | -2.246661591 | 5.740538906 | 3.08E-15 | 1.37E-14 |
| SLC7A9 | 2.960385188 | 0.286420389 | 3.13E-15 | 1.39E-14 |
| HIST1H3F | 6.90575195 | -0.536506778 | 3.21E-15 | 1.43E-14 |
| SP5 | 2.361633957 | 2.521601227 | 3.24E-15 | 1.44E-14 |
| COL25A1 | 4.436672725 | 3.085150948 | 3.25E-15 | 1.44E-14 |
| PNMA5 | 5.501316995 | 1.703494263 | 3.25E-15 | 1.45E-14 |
| FANCD2OS | 2.260585027 | -3.141273091 | 3.26E-15 | 1.45E-14 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| KCP | 2.188100397 | 2.256195026 | 3.50E-15 | 1.55E-14 |
| HOXA13 | 6.42546637 | -0.166251163 | 3.69E-15 | 1.63E-14 |
| KHDC1L | 5.336084515 | -0.744368663 | 3.76E-15 | 1.66E-14 |
| CREG2 | 2.834158455 | 0.819053393 | 3.93E-15 | 1.73E-14 |
| AFP | 8.574934141 | 2.498986546 | 3.99E-15 | 1.76E-14 |
| ACSM2A | -2.004495451 | -3.754367222 | 4.36E-15 | 1.91E-14 |
| SLC44A5 | 2.518013867 | 3.749463506 | 4.50E-15 | 1.97E-14 |
| C3orf30 | 3.693226482 | -2.038578307 | 4.54E-15 | 1.99E-14 |
| CFHR3 | 2.1535921 | 0.30568975 | 4.60E-15 | 2.01E-14 |
| PNMA3 | 2.691516163 | 1.278189641 | 4.74E-15 | 2.07E-14 |
| MAGEA3 | 8.130989143 | 3.201654929 | 4.80E-15 | 2.10E-14 |
| KLK12 | 6.149875472 | 5.165215481 | 4.84E-15 | 2.11E-14 |
| SUN3 | 4.023627077 | 0.083523806 | 4.91E-15 | 2.14E-14 |
| POU6F2 | 3.997994597 | 2.254005838 | 5.20E-15 | 2.27E-14 |
| HOXC6 | 2.431472076 | 1.556362269 | 5.21E-15 | 2.27E-14 |
| UBE2QL1 | 2.415299553 | 0.909988067 | 5.27E-15 | 2.29E-14 |
| SLC28A1 | 2.262147993 | -1.888480902 | 5.36E-15 | 2.33E-14 |
| KRT3 | 3.580779407 | -1.728719382 | 5.69E-15 | 2.47E-14 |
| OLFM4 | 6.412039148 | 3.908026702 | 5.90E-15 | 2.56E-14 |
| FCRL4 | 2.490482744 | -0.877151926 | 6.27E-15 | 2.71E-14 |
| IVL | 4.299265949 | 3.13375669 | 6.40E-15 | 2.77E-14 |
| GDPD4 | 2.054586763 | -2.134432775 | 6.74E-15 | 2.91E-14 |
| CYP2F1 | -2.171741943 | 0.812368465 | 6.75E-15 | 2.92E-14 |
| INA | 4.126167452 | 1.822525866 | 6.77E-15 | 2.93E-14 |
| VSTM2L | 2.098020319 | 6.23666854 | 6.78E-15 | 2.93E-14 |
| AC011604.2 | 5.527354086 | -2.787580462 | 7.01E-15 | 3.02E-14 |
| SLC25A21 | 2.22402277 | 1.214760157 | 7.43E-15 | 3.20E-14 |
| WDR38 | -2.023206965 | 2.06540309 | 7.51E-15 | 3.23E-14 |
| KRT78 | 3.19306969 | -0.617073736 | 7.61E-15 | 3.27E-14 |
| AKR1C4 | 5.057773085 | 1.093438202 | 7.71E-15 | 3.32E-14 |
| GRM4 | 3.342277417 | 0.435779052 | 7.93E-15 | 3.40E-14 |
| PLK5 | 3.600991206 | -2.425025045 | 8.17E-15 | 3.50E-14 |
| TMEM190 | -2.075140563 | 1.410879708 | 8.43E-15 | 3.61E-14 |
| RNF225 | 2.570724226 | -1.110159299 | 8.88E-15 | 3.79E-14 |
| SLC6A11 | 3.751319505 | 0.989046897 | 8.89E-15 | 3.80E-14 |
| TTC29 | -2.048908763 | 0.888327103 | 9.09E-15 | 3.88E-14 |
| BHMT2 | 2.900982303 | 4.072706542 | 9.25E-15 | 3.95E-14 |
| TEX45 | 2.10652043 | -0.271020706 | 9.74E-15 | 4.15E-14 |
| AGTR2 | -2.322047936 | 3.515715674 | 1.00E-14 | 4.26E-14 |
| TMPRSS11D | 4.303429474 | -0.309914343 | 1.09E-14 | 4.61E-14 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| DLX3 | 2.206366397 | 1.997856346 | 1.14E-14 | 4.83E-14 |
| SLC13A5 | 3.439345611 | 0.643085412 | 1.18E-14 | 5.01E-14 |
| C1orf158 | -2.231479649 | 0.553412069 | 1.20E-14 | 5.08E-14 |
| A2ML1 | 4.640944395 | 2.297933549 | 1.30E-14 | 5.50E-14 |
| ONECUT3 | 5.832649873 | 0.644654696 | 1.37E-14 | 5.78E-14 |
| PLD5 | 2.785469287 | 2.498284444 | 1.43E-14 | 6.01E-14 |
| LPO | 2.376741275 | -0.753325667 | 1.45E-14 | 6.08E-14 |
| AQP6 | 2.884436069 | -0.011863816 | 1.45E-14 | 6.08E-14 |
| HIST1H4B | 5.599742003 | -0.375541375 | 1.45E-14 | 6.09E-14 |
| FABP7 | 5.863073949 | 2.008072927 | 1.57E-14 | 6.58E-14 |
| CDA | 2.470860808 | 4.090337607 | 1.62E-14 | 6.75E-14 |
| COL2A1 | 5.70134272 | 3.697554422 | 1.67E-14 | 6.96E-14 |
| PNMA6A | 2.157677481 | 1.373635599 | 1.80E-14 | 7.47E-14 |
| CA7 | 2.701982058 | -2.448333686 | 1.83E-14 | 7.60E-14 |
| EPHA8 | 3.887471595 | -2.017195435 | 1.90E-14 | 7.91E-14 |
| GPR78 | 2.527418665 | -0.687428127 | 1.98E-14 | 8.21E-14 |
| HRG | 4.875528913 | -1.271120781 | 2.02E-14 | 8.36E-14 |
| SYNPR | 4.564690283 | -1.984407752 | 2.06E-14 | 8.55E-14 |
| TAC4 | 2.885219546 | 0.818256335 | 2.17E-14 | 8.99E-14 |
| XAGE1B | 3.179416985 | -2.341435787 | 2.27E-14 | 9.36E-14 |
| IGFL4 | 2.761602735 | -1.567173414 | 2.30E-14 | 9.51E-14 |
| HIST2H2AB | 5.325893601 | -0.599694359 | 2.33E-14 | 9.61E-14 |
| EVX1 | 5.12133648 | -2.190903624 | 2.45E-14 | 1.01E-13 |
| HIST1H2AB | 5.865866653 | -1.117009056 | 2.47E-14 | 1.02E-13 |
| FAM83B | 3.304125816 | 1.312300812 | 2.47E-14 | 1.02E-13 |
| HOXC12 | 8.127248574 | 1.053476948 | 2.61E-14 | 1.07E-13 |
| BPIFA1 | 5.192921707 | 8.837421057 | 2.66E-14 | 1.09E-13 |
| USH1C | 3.965148583 | 2.644844976 | 2.67E-14 | 1.10E-13 |
| ADGRG4 | -2.262062422 | -3.340177076 | 2.70E-14 | 1.11E-13 |
| WNT16 | 4.101377975 | 1.829056343 | 2.70E-14 | 1.11E-13 |
| MUC2 | 5.770524456 | 2.594807024 | 2.90E-14 | 1.19E-13 |
| CAPSL | -2.044030061 | 1.678816161 | 3.10E-14 | 1.27E-13 |
| DLX1 | 3.381018045 | -2.028730966 | 3.22E-14 | 1.31E-13 |
| CELF3 | 4.515265056 | 1.69730995 | 3.29E-14 | 1.34E-13 |
| ZG16B | 2.528730991 | 2.878935911 | 3.65E-14 | 1.49E-13 |
| USH1G | 3.413585074 | -1.124675088 | 3.74E-14 | 1.52E-13 |
| NTSR1 | 4.62507827 | 1.283057214 | 3.89E-14 | 1.58E-13 |
| SLC35F3 | 2.171156776 | 1.680976468 | 4.23E-14 | 1.72E-13 |
| MC4R | 2.725527977 | -2.682161273 | 4.27E-14 | 1.73E-13 |
| TLX2 | 2.844051391 | -1.817844163 | 4.36E-14 | 1.77E-13 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| SALL3 | 5.50017667 | -0.092829368 | 4.58E-14 | 1.85E-13 |
| HIST1H2BI | 6.588916732 | -0.706728965 | 4.58E-14 | 1.85E-13 |
| PPBP | -2.008168797 | 1.177885915 | 4.63E-14 | 1.87E-13 |
| MAGEA8 | 5.461737767 | 0.376962025 | 4.65E-14 | 1.88E-13 |
| TGM5 | 3.048892825 | -0.956846541 | 4.99E-14 | 2.01E-13 |
| KCNK9 | 3.803448575 | -0.348771118 | 5.27E-14 | 2.12E-13 |
| C6orf15 | 5.73033992 | -1.055872605 | 5.33E-14 | 2.14E-13 |
| KRT20 | 7.683718981 | 4.152859764 | 5.59E-14 | 2.24E-13 |
| JAKMIP3 | 2.26898824 | 1.253934382 | 5.59E-14 | 2.25E-13 |
| RETNLB | 4.29073719 | -2.673552679 | 5.81E-14 | 2.33E-13 |
| LRRIQ4 | 2.101283228 | -0.564574622 | 6.07E-14 | 2.43E-13 |
| ETNPPL | 6.189612602 | 0.642886284 | 6.15E-14 | 2.46E-13 |
| ADGRG7 | 6.412876649 | -0.527495026 | 6.16E-14 | 2.46E-13 |
| RAET1L | 4.030916961 | -1.828349408 | 6.25E-14 | 2.50E-13 |
| NFE4 | 4.292520096 | 1.128195646 | 6.45E-14 | 2.58E-13 |
| AKAP14 | -2.030817749 | 0.10540427 | 6.47E-14 | 2.59E-13 |
| CALML5 | 7.430139475 | 2.571980458 | 6.77E-14 | 2.71E-13 |
| SLC30A2 | 2.974024903 | 0.266720022 | 6.80E-14 | 2.72E-13 |
| C5orf46 | 2.116501638 | 0.384704015 | 7.00E-14 | 2.79E-13 |
| ZBTB8B | 2.697929059 | -0.763144047 | 7.04E-14 | 2.81E-13 |
| PAX7 | 6.498117222 | 3.491821711 | 7.08E-14 | 2.82E-13 |
| HEPHL1 | 3.107135429 | 0.693971584 | 7.20E-14 | 2.87E-13 |
| VTCN1 | 2.84981713 | 3.462981311 | 7.29E-14 | 2.90E-13 |
| ERVV-2 | 5.664144396 | -2.01056018 | 7.43E-14 | 2.96E-13 |
| AC136428.1 | 2.427993342 | -0.232777991 | 7.47E-14 | 2.98E-13 |
| CNGB3 | 2.829363129 | -1.005479623 | 7.88E-14 | 3.13E-13 |
| CALY | 4.00721253 | 0.677435395 | 8.10E-14 | 3.21E-13 |
| ANKRD18B | 2.837250309 | 0.468075306 | 8.25E-14 | 3.27E-13 |
| PI15 | 2.56474059 | 3.543688346 | 8.27E-14 | 3.28E-13 |
| TEX19 | 4.69545989 | -0.436485657 | 8.42E-14 | 3.34E-13 |
| ZMAT4 | 4.845752086 | 0.687796824 | 8.46E-14 | 3.35E-13 |
| KRT4 | -2.071418804 | 3.892375634 | 8.60E-14 | 3.40E-13 |
| SLC9A4 | 5.716283273 | 0.374294169 | 8.95E-14 | 3.54E-13 |
| C1QL2 | 4.975605168 | 1.457516063 | 8.98E-14 | 3.55E-13 |
| SLC38A11 | 2.798240849 | 0.998574412 | 9.19E-14 | 3.63E-13 |
| NAT16 | 3.12965327 | -2.112150051 | 9.48E-14 | 3.74E-13 |
| EMX1 | 3.306786576 | -1.466190372 | 9.69E-14 | 3.82E-13 |
| NLRP11 | 4.316654694 | -0.150620665 | 1.01E-13 | 3.96E-13 |
| AICF | 4.520661073 | -0.217106047 | 1.01E-13 | 3.97E-13 |
| CA10 | 4.935018386 | 1.42403993 | 1.03E-13 | 4.05E-13 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| CABP7 | 2.18446969 | -0.009697927 | 1.04E-13 | 4.07E-13 |
| BTBD16 | 2.305031461 | 0.135564112 | 1.04E-13 | 4.10E-13 |
| KRT75 | 6.241584462 | 0.367120592 | 1.06E-13 | 4.18E-13 |
| HOXC8 | 2.73647694 | 0.067032594 | 1.10E-13 | 4.32E-13 |
| MAGEA12 | 7.326977503 | 2.319605026 | 1.15E-13 | 4.51E-13 |
| TMEM212 | -2.156539502 | 0.165460025 | 1.24E-13 | 4.84E-13 |
| CNTNAP4 | 4.534816614 | -1.36885395 | 1.24E-13 | 4.85E-13 |
| MAGEC2 | 7.76728322 | 1.826145717 | 1.25E-13 | 4.87E-13 |
| SLC5A5 | 3.522616555 | 2.325552573 | 1.29E-13 | 5.05E-13 |
| HIST1H4J | 2.16318226 | -2.258874075 | 1.33E-13 | 5.20E-13 |
| MAGEA6 | 8.085277322 | 2.877961084 | 1.36E-13 | 5.30E-13 |
| SYT13 | 4.143586453 | 4.109824814 | 1.41E-13 | 5.50E-13 |
| PRKCG | 2.610774077 | -1.191301036 | 1.44E-13 | 5.59E-13 |
| HOXD4 | 2.84577135 | -0.968651663 | 1.51E-13 | 5.87E-13 |
| SBSN | 4.31054333 | 1.045224669 | 1.54E-13 | 5.96E-13 |
| HIST1H4A | 5.451902175 | -1.571871237 | 1.55E-13 | 6.00E-13 |
| C20orf85 | -2.221494933 | 3.538842972 | 1.56E-13 | 6.05E-13 |
| TNNC2 | 3.028284862 | 3.266663804 | 1.60E-13 | 6.21E-13 |
| SERPINB4 | 5.003956331 | 1.046157526 | 1.62E-13 | 6.26E-13 |
| MAGEA10 | 7.780537887 | 1.923533239 | 1.72E-13 | 6.63E-13 |
| F5 | 2.390644325 | 4.385101778 | 1.76E-13 | 6.79E-13 |
| JPH3 | 2.918076031 | 1.078845104 | 1.77E-13 | 6.82E-13 |
| SOHLH1 | 5.513413446 | -1.664661114 | 1.77E-13 | 6.82E-13 |
| RET | 2.971273555 | 3.664247044 | 1.82E-13 | 7.01E-13 |
| ANKRD7 | 2.148197674 | -1.451856081 | 1.84E-13 | 7.08E-13 |
| ZNF280A | 5.126341705 | -2.002254346 | 1.93E-13 | 7.41E-13 |
| STOML3 | -2.033055703 | 1.299618078 | 2.03E-13 | 7.78E-13 |
| FAM196A | 2.39281613 | 1.089409215 | 2.04E-13 | 7.82E-13 |
| VSIG1 | 3.533984208 | 5.946790747 | 2.05E-13 | 7.84E-13 |
| OPRD1 | 2.314149359 | 1.089149356 | 2.15E-13 | 8.21E-13 |
| HIST1H3A | 3.921738709 | -1.275364539 | 2.16E-13 | 8.28E-13 |
| GABRQ | 3.489000147 | -0.812913581 | 2.18E-13 | 8.35E-13 |
| THEG | 3.484591503 | -1.190601176 | 2.19E-13 | 8.39E-13 |
| HIST1H2AH | 5.585179576 | -0.895415174 | 2.20E-13 | 8.42E-13 |
| MUC16 | 2.940811458 | 6.062454917 | 2.28E-13 | 8.73E-13 |
| DMRT1 | 4.325411779 | -2.216983475 | 2.31E-13 | 8.82E-13 |
| UNC13A | 2.800770528 | 2.089851085 | 2.38E-13 | 9.10E-13 |
| CAMK2B | 2.963958135 | 1.609306126 | 2.43E-13 | 9.28E-13 |
| GLYATL2 | 4.574117549 | 0.911022586 | 2.43E-13 | 9.29E-13 |
| FOXE3 | 3.149099777 | -2.506445495 | 2.46E-13 | 9.39E-13 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| HIST1H3I | 5.955823144 | -1.208856437 | 2.53E-13 | 9.63E-13 |
| DDX4 | 2.72164064 | -2.598275667 | 2.54E-13 | 9.66E-13 |
| PRAC2 | 5.189512115 | -2.002680769 | 2.81E-13 | 1.07E-12 |
| CEL | 3.212923897 | 2.217555925 | 3.06E-13 | 1.16E-12 |
| RNF222 | 2.598623409 | -2.003248877 | 3.18E-13 | 1.20E-12 |
| NEB | 2.056584379 | 2.926947887 | 3.38E-13 | 1.28E-12 |
| LINC00483 | 4.264648846 | -2.218229155 | 3.42E-13 | 1.29E-12 |
| SLC14A2 | 4.238323825 | 2.891703149 | 3.48E-13 | 1.31E-12 |
| KCNU1 | 6.400074301 | -0.656108542 | 3.52E-13 | 1.33E-12 |
| ALX3 | 4.84401 | -1.995887984 | 3.62E-13 | 1.36E-12 |
| VWDE | 2.10032513 | 2.121636485 | 3.65E-13 | 1.37E-12 |
| C10orf90 | 3.862223789 | -1.577110166 | 3.76E-13 | 1.41E-12 |
| F7 | 3.008411047 | 0.312155483 | 3.86E-13 | 1.45E-12 |
| SLC38A3 | 3.103037029 | 1.051175494 | 3.87E-13 | 1.45E-12 |
| RGR | -2.043405338 | -3.924770012 | 4.04E-13 | 1.51E-12 |
| AMBP | 3.588792077 | 3.687660471 | 4.17E-13 | 1.56E-12 |
| DMRTC2 | 5.488581582 | -1.17187876 | 4.17E-13 | 1.56E-12 |
| LIN28B | 7.762051822 | -0.091824163 | 4.28E-13 | 1.60E-12 |
| IL17REL | 2.528710758 | 0.008170146 | 4.37E-13 | 1.63E-12 |
| SYT6 | 2.633537857 | -1.446548092 | 4.51E-13 | 1.68E-12 |
| DSG4 | 4.661323728 | -2.507368984 | 4.59E-13 | 1.71E-12 |
| HOXB8 | 3.528193282 | 1.701007837 | 4.60E-13 | 1.71E-12 |
| HIST1H2BB | 6.416757027 | -0.812733988 | 4.64E-13 | 1.73E-12 |
| CACNA1I | 2.113650319 | 1.053519937 | 4.64E-13 | 1.73E-12 |
| B3GAT1 | 2.299901226 | 2.64525948 | 4.65E-13 | 1.73E-12 |
| ARSE | 2.059441307 | 4.903098603 | 4.65E-13 | 1.73E-12 |
| CEACAM8 | -2.081222919 | -0.201481478 | 4.92E-13 | 1.83E-12 |
| MIA | 3.934735749 | 0.600520393 | 5.04E-13 | 1.87E-12 |
| INSRR | 2.944898421 | -1.587207691 | 5.07E-13 | 1.88E-12 |
| ADGRF1 | 2.443109233 | 6.387410312 | 5.14E-13 | 1.91E-12 |
| CLDN9 | 2.223764617 | 2.925688427 | 5.32E-13 | 1.97E-12 |
| KCNC2 | 6.007900869 | -0.330480191 | 5.59E-13 | 2.06E-12 |
| SLCO1B7 | 5.843006158 | -2.582566994 | 5.78E-13 | 2.13E-12 |
| LBP | 4.941008114 | 3.058974345 | 5.91E-13 | 2.18E-12 |
| TFF3 | 3.051006205 | 7.003019836 | 5.92E-13 | 2.18E-12 |
| SPRR2D | 4.864930033 | 1.851059945 | 6.00E-13 | 2.21E-12 |
| SLC6A17 | 2.571972314 | 0.22795852 | 6.02E-13 | 2.22E-12 |
| AHSG | 3.961785946 | -2.281874552 | 6.41E-13 | 2.35E-12 |
| CDHR5 | 3.606904258 | 2.019919391 | 6.42E-13 | 2.36E-12 |
| ITIH6 | 3.102813176 | -1.269607329 | 6.71E-13 | 2.46E-12 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| SMPX | 2.774988824 | -1.266848944 | 7.42E-13 | 2.72E-12 |
| KCNA7 | 2.627170237 | -2.375347938 | 8.00E-13 | 2.93E-12 |
| CGB5 | 7.439624118 | 0.796237648 | 8.02E-13 | 2.93E-12 |
| ERN2 | 3.1083844 | 4.653528322 | 8.08E-13 | 2.95E-12 |
| LIN28A | 6.3032917 | 0.05051743 | 8.19E-13 | 2.99E-12 |
| ERICH3 | -2.022695141 | 2.797266401 | 8.44E-13 | 3.08E-12 |
| RLN3 | 2.585925665 | -1.520941814 | 8.46E-13 | 3.09E-12 |
| COL11A2 | 2.764943971 | 2.447626238 | 8.47E-13 | 3.09E-12 |
| WDR87 | 4.117632038 | 0.168923742 | 8.53E-13 | 3.11E-12 |
| SLC18A3 | 6.38799249 | -1.148008397 | 8.72E-13 | 3.18E-12 |
| CLRN3 | 2.92034471 | -0.292614821 | 8.95E-13 | 3.26E-12 |
| SLC38A8 | 4.274455569 | -0.548586038 | 8.99E-13 | 3.27E-12 |
| NGB | 5.58067847 | -1.769420746 | 9.04E-13 | 3.29E-12 |
| FSTL4 | 2.557586735 | 4.288236891 | 9.34E-13 | 3.40E-12 |
| C20orf141 | 4.469364424 | -3.345672905 | 1.09E-12 | 3.96E-12 |
| GFRA3 | 2.99056397 | 4.567908686 | 1.10E-12 | 3.99E-12 |
| UGT1A10 | 7.572561618 | 0.939065895 | 1.14E-12 | 4.12E-12 |
| SLC1A7 | 3.036569436 | 4.991191085 | 1.17E-12 | 4.24E-12 |
| TRPA1 | 2.553756461 | 0.179856142 | 1.21E-12 | 4.36E-12 |
| ADAMTS20 | 4.540833053 | -1.211667861 | 1.21E-12 | 4.37E-12 |
| CST2 | 2.311356365 | 1.353703761 | 1.27E-12 | 4.59E-12 |
| TAC3 | 5.071324625 | 0.169850733 | 1.29E-12 | 4.65E-12 |
| HOXD11 | 5.773990896 | -1.545405416 | 1.32E-12 | 4.75E-12 |
| CAPN14 | 2.115819989 | 0.122920647 | 1.41E-12 | 5.07E-12 |
| SMIM31 | 2.715245858 | 2.402357857 | 1.42E-12 | 5.09E-12 |
| FOXL2NB | 4.308288988 | -2.521598286 | 1.46E-12 | 5.23E-12 |
| BRSK2 | 2.005725509 | 1.136367613 | 1.46E-12 | 5.24E-12 |
| CHODL | 2.096753898 | 1.365235296 | 1.49E-12 | 5.34E-12 |
| SP9 | 5.912783525 | -1.769365637 | 1.50E-12 | 5.36E-12 |
| NPTX2 | 2.549911319 | 2.957055675 | 1.52E-12 | 5.43E-12 |
| MAGEA11 | 7.097218169 | -0.647812515 | 1.52E-12 | 5.44E-12 |
| COL9A1 | 2.393171632 | -1.224930832 | 1.56E-12 | 5.60E-12 |
| TM4SF20 | 6.321463959 | 1.508157367 | 1.66E-12 | 5.94E-12 |
| B4GALNT2 | 3.651506236 | 3.113550349 | 1.71E-12 | 6.10E-12 |
| NR5A1 | 3.342245784 | -1.907839099 | 1.74E-12 | 6.22E-12 |
| CA5A | 2.056196657 | -1.632316027 | 1.76E-12 | 6.28E-12 |
| CA6 | 4.303267163 | -0.518008505 | 1.83E-12 | 6.50E-12 |
| CPN1 | 7.782085523 | -0.698983994 | 1.89E-12 | 6.71E-12 |
| KIAA1549L | 2.161760332 | 1.561533888 | 1.91E-12 | 6.80E-12 |
| TNNI3 | 2.816999182 | 1.74882417 | 1.93E-12 | 6.84E-12 |

| | | | | |
|-----------|--------------|--------------|----------|----------|
| CNTNAP2 | 2.919897449 | 2.933684616 | 2.00E-12 | 7.09E-12 |
| KRT17 | 2.733249629 | 6.964511378 | 2.03E-12 | 7.20E-12 |
| NPBWR1 | 3.380056919 | -0.562240713 | 2.05E-12 | 7.27E-12 |
| KISS1 | 2.012059052 | -0.078889887 | 2.12E-12 | 7.52E-12 |
| DCAF12L2 | 3.306689935 | -1.777293255 | 2.15E-12 | 7.61E-12 |
| OR10H1 | 3.996115901 | -3.10063933 | 2.17E-12 | 7.68E-12 |
| SPATS1 | -2.252175222 | -2.837644096 | 2.28E-12 | 8.05E-12 |
| UGT2B28 | 4.987817898 | -2.473903005 | 2.32E-12 | 8.18E-12 |
| IGFL3 | 4.060755997 | -2.586160632 | 2.33E-12 | 8.22E-12 |
| GALR2 | 2.252697748 | -1.30079676 | 2.42E-12 | 8.55E-12 |
| FAM83F | 2.454499246 | 3.459171464 | 2.43E-12 | 8.56E-12 |
| UGT1A6 | 4.586834765 | 3.263115497 | 2.48E-12 | 8.73E-12 |
| ISM2 | 3.258692189 | -1.399074973 | 2.48E-12 | 8.74E-12 |
| C1QL4 | 3.276334967 | -2.173577415 | 2.69E-12 | 9.47E-12 |
| MYPN | 3.811547338 | -0.915817178 | 2.71E-12 | 9.54E-12 |
| PSG1 | 8.095465941 | -0.410608029 | 2.75E-12 | 9.66E-12 |
| HOXA11 | 4.216874989 | -0.731110544 | 2.78E-12 | 9.74E-12 |
| DISP3 | 2.247125906 | -0.13224925 | 2.79E-12 | 9.80E-12 |
| MAGEA9B | 7.002182838 | -1.568945337 | 2.81E-12 | 9.85E-12 |
| C8orf74 | 4.627730794 | -1.806719093 | 2.89E-12 | 1.01E-11 |
| COX7B2 | 7.549879286 | -0.431186924 | 2.89E-12 | 1.01E-11 |
| TMPRSS11A | 4.151916436 | -1.806955265 | 2.95E-12 | 1.03E-11 |
| AKR1C1 | 3.280508936 | 8.206865979 | 3.11E-12 | 1.08E-11 |
| PCSK1N | 2.332147969 | 3.487968511 | 3.13E-12 | 1.09E-11 |
| NDP | 3.22317152 | 0.526908998 | 3.22E-12 | 1.12E-11 |
| TMEM74 | 2.341139014 | -0.77004116 | 3.33E-12 | 1.16E-11 |
| ATOH7 | 2.154081484 | -2.368874419 | 3.37E-12 | 1.17E-11 |
| VAX1 | 5.751676131 | -2.053644537 | 3.55E-12 | 1.23E-11 |
| NECAB2 | 2.614932484 | 0.116327551 | 3.82E-12 | 1.32E-11 |
| KRTAP2-3 | 3.922274791 | -2.591008479 | 3.99E-12 | 1.38E-11 |
| WNT6 | 2.013523991 | -1.519451375 | 4.20E-12 | 1.45E-11 |
| REG1A | 7.618477559 | 2.928337364 | 4.24E-12 | 1.46E-11 |
| HOXA1 | 2.063555591 | 0.991123279 | 4.47E-12 | 1.54E-11 |
| ISL1 | 4.253239089 | 0.103707774 | 4.58E-12 | 1.58E-11 |
| GDA | 3.478971347 | 1.936762099 | 4.61E-12 | 1.59E-11 |
| ALKAL1 | 2.076032365 | 0.668614272 | 4.67E-12 | 1.61E-11 |
| TAF1L | 2.813195848 | -2.167191062 | 4.84E-12 | 1.66E-11 |
| DHRS2 | 3.325921947 | 3.177553847 | 4.90E-12 | 1.69E-11 |
| OBP2A | 4.325864865 | 0.132373593 | 5.05E-12 | 1.73E-11 |
| FZD9 | 2.562385047 | 1.071301379 | 5.06E-12 | 1.73E-11 |

| | | | | |
|----------|-------------|--------------|----------|----------|
| FOXL2 | 4.391302919 | -1.892562565 | 5.25E-12 | 1.80E-11 |
| DIRC1 | 2.69164325 | -3.520192095 | 5.51E-12 | 1.88E-11 |
| RUNDC3A | 2.23166431 | 1.487779468 | 5.84E-12 | 1.99E-11 |
| NCAN | 2.498828284 | -3.059432466 | 5.93E-12 | 2.02E-11 |
| NSG2 | 4.728519537 | 1.497467533 | 6.08E-12 | 2.07E-11 |
| HIST2H3D | 2.76106597 | -1.544465636 | 6.09E-12 | 2.07E-11 |
| NR1I2 | 2.674413794 | 0.422968848 | 6.14E-12 | 2.09E-11 |
| C4BPB | 2.24634703 | 3.464586805 | 6.29E-12 | 2.14E-11 |
| LHX8 | 5.370617029 | -1.46753561 | 6.57E-12 | 2.23E-11 |
| MAGEC3 | 3.915019303 | -1.373586156 | 6.63E-12 | 2.25E-11 |
| FBXO47 | 2.587780128 | -3.203493177 | 6.73E-12 | 2.28E-11 |
| C17orf78 | 2.440656622 | -2.288899779 | 6.86E-12 | 2.32E-11 |
| MCF2 | 2.552678376 | -0.920532543 | 6.98E-12 | 2.36E-11 |
| EIF4E1B | 6.02956693 | -0.757846435 | 7.04E-12 | 2.38E-11 |
| INSM1 | 4.449752416 | 2.202226281 | 7.19E-12 | 2.43E-11 |
| GIP | 4.255259633 | -2.686642364 | 7.21E-12 | 2.44E-11 |
| LGALS4 | 3.902646512 | 5.819956214 | 7.30E-12 | 2.46E-11 |
| PHOX2B | 6.380520757 | -1.3267189 | 7.31E-12 | 2.47E-11 |
| C14orf39 | 2.555348439 | -1.264944105 | 7.66E-12 | 2.58E-11 |
| MSLNL | 3.042480787 | 1.846511689 | 7.95E-12 | 2.67E-11 |
| HOXD13 | 6.599868689 | -0.261246194 | 8.07E-12 | 2.71E-11 |
| TUBB4A | 2.336926679 | 1.715070503 | 8.14E-12 | 2.74E-11 |
| PRSS56 | 5.640524157 | -1.532209255 | 8.82E-12 | 2.96E-11 |
| CRHR1 | 3.702074343 | -1.49958638 | 8.88E-12 | 2.98E-11 |
| PIWIL3 | 6.036307514 | -0.263077335 | 9.11E-12 | 3.05E-11 |
| BPIFB2 | 4.762094644 | 4.662132281 | 9.56E-12 | 3.19E-11 |
| KLK8 | 4.951316566 | 1.664338979 | 9.95E-12 | 3.32E-11 |
| SLC5A12 | 2.938789468 | 0.264565303 | 1.02E-11 | 3.39E-11 |
| AKR1D1 | 2.55727398 | -2.645125289 | 1.03E-11 | 3.45E-11 |
| ZNF648 | 2.875098849 | -2.452601236 | 1.04E-11 | 3.48E-11 |
| BCAS1 | 2.291488745 | 5.023304989 | 1.11E-11 | 3.70E-11 |
| NR0B1 | 6.350770671 | 2.419906507 | 1.16E-11 | 3.85E-11 |
| ODAPH | 2.586627392 | -1.506009758 | 1.18E-11 | 3.91E-11 |
| MAGEA1 | 7.199852386 | 1.661972298 | 1.20E-11 | 3.97E-11 |
| MMP7 | 2.052095927 | 6.714022939 | 1.24E-11 | 4.10E-11 |
| ENPP3 | 2.190972283 | 3.356974051 | 1.32E-11 | 4.37E-11 |
| HOXD12 | 4.033492909 | -3.589243208 | 1.34E-11 | 4.42E-11 |
| ASCL1 | 5.060986026 | 5.094723503 | 1.35E-11 | 4.44E-11 |
| KCNV1 | 3.642429415 | -0.726775497 | 1.38E-11 | 4.57E-11 |
| ADAM2 | 5.007142605 | -1.956200617 | 1.45E-11 | 4.78E-11 |

| | | | | |
|----------|-------------|--------------|----------|----------|
| PDCL2 | 5.021806481 | -2.192150341 | 1.47E-11 | 4.85E-11 |
| RGS7 | 2.982180269 | 0.4121481 | 1.48E-11 | 4.87E-11 |
| SPDYC | 4.286607353 | -0.438479995 | 1.49E-11 | 4.91E-11 |
| SLCO6A1 | 4.510364747 | -2.087701565 | 1.61E-11 | 5.29E-11 |
| SIM1 | 4.272479004 | -1.364083401 | 1.62E-11 | 5.31E-11 |
| POU5F2 | 4.114629497 | -0.145488855 | 1.62E-11 | 5.31E-11 |
| OTOG | 3.689105001 | -2.728373302 | 1.74E-11 | 5.71E-11 |
| CHRN2 | 2.958509303 | 0.602487803 | 1.79E-11 | 5.85E-11 |
| PRR4 | 2.025854867 | 1.356899797 | 1.83E-11 | 5.98E-11 |
| PSG9 | 5.678335741 | -2.429338589 | 1.84E-11 | 6.03E-11 |
| TDRD1 | 2.794859518 | 1.267374814 | 1.85E-11 | 6.04E-11 |
| DSG3 | 4.626166237 | 1.881145852 | 1.86E-11 | 6.06E-11 |
| RHCG | 3.573504979 | 1.577880906 | 1.87E-11 | 6.10E-11 |
| LGALS7B | 3.193259579 | 0.25404701 | 1.96E-11 | 6.38E-11 |
| OMP | 2.041022896 | -3.005549294 | 1.96E-11 | 6.40E-11 |
| AVPR1B | 2.988264736 | -2.613523085 | 2.03E-11 | 6.62E-11 |
| LHFPL4 | 3.487462092 | 1.473540122 | 2.06E-11 | 6.70E-11 |
| PROKR1 | 3.017125265 | -1.458582697 | 2.08E-11 | 6.77E-11 |
| MSI1 | 2.341513508 | 2.12213954 | 2.09E-11 | 6.79E-11 |
| SCG2 | 3.194481045 | 4.43084251 | 2.09E-11 | 6.81E-11 |
| PRB4 | 8.154879124 | -0.060161905 | 2.20E-11 | 7.15E-11 |
| TMPRSS6 | 2.324819175 | 3.732326149 | 2.24E-11 | 7.27E-11 |
| OR4C6 | 4.219400712 | -2.674686015 | 2.34E-11 | 7.58E-11 |
| GABRA5 | 4.607285105 | -2.260050192 | 2.34E-11 | 7.59E-11 |
| GJA3 | 2.479779441 | -0.699087025 | 2.39E-11 | 7.75E-11 |
| DPYSL5 | 5.664611506 | 0.477094866 | 2.48E-11 | 8.01E-11 |
| TMEM229A | 4.540120892 | 0.87130434 | 2.51E-11 | 8.11E-11 |
| UGT1A8 | 6.836022708 | -1.099913662 | 2.52E-11 | 8.14E-11 |
| SOX21 | 2.711549106 | 2.17778495 | 2.59E-11 | 8.36E-11 |
| RNASE10 | 2.442197366 | -2.557203293 | 2.60E-11 | 8.38E-11 |
| DLK1 | 7.111039728 | 3.866050414 | 2.61E-11 | 8.42E-11 |
| MAEL | 3.725192209 | 1.638642557 | 2.66E-11 | 8.58E-11 |
| BHMT | 3.779100218 | 1.044583988 | 2.68E-11 | 8.64E-11 |
| BOLL | 2.98931797 | -2.52553308 | 2.73E-11 | 8.79E-11 |
| RBM46 | 4.470360247 | -0.878131336 | 2.89E-11 | 9.30E-11 |
| PSG3 | 7.455662997 | 0.141017113 | 3.27E-11 | 1.05E-10 |
| CLDN2 | 3.120044889 | 5.774059329 | 3.28E-11 | 1.05E-10 |
| S100A7 | 5.358928089 | 1.766517889 | 3.43E-11 | 1.10E-10 |
| OTX2 | 6.402390891 | -1.3232033 | 3.45E-11 | 1.10E-10 |
| TMEM78 | 2.432463316 | -3.842004827 | 3.60E-11 | 1.15E-10 |

| | | | | |
|----------|--------------|--------------|----------|----------|
| INHBE | 2.127336348 | -0.07629252 | 3.68E-11 | 1.17E-10 |
| TMEFF1 | 2.867804 | -2.844484982 | 3.76E-11 | 1.20E-10 |
| CFHR4 | 3.898325321 | -3.250511894 | 3.77E-11 | 1.20E-10 |
| C1QL1 | 2.256673346 | -0.59685695 | 3.79E-11 | 1.21E-10 |
| TMEM179 | 3.983316663 | -0.138250777 | 3.97E-11 | 1.26E-10 |
| PCDH8 | 5.402372864 | 0.421569359 | 4.07E-11 | 1.29E-10 |
| MAGEA4 | 8.727154381 | 3.65541254 | 4.22E-11 | 1.34E-10 |
| PAGE2 | 7.701919078 | 1.553114017 | 4.24E-11 | 1.35E-10 |
| TRPM5 | 2.677985283 | -0.320402208 | 4.41E-11 | 1.40E-10 |
| OTOS | 5.299385031 | -2.377617497 | 4.52E-11 | 1.43E-10 |
| GC | 8.197149129 | 1.206354541 | 4.54E-11 | 1.44E-10 |
| DCAF4L2 | 7.776248846 | -0.431041352 | 4.60E-11 | 1.45E-10 |
| ATP4B | 2.175828757 | -1.351517579 | 4.73E-11 | 1.49E-10 |
| GAP43 | 2.308910658 | -0.320915981 | 4.97E-11 | 1.57E-10 |
| SLC35F4 | 3.054359936 | -2.406149954 | 4.98E-11 | 1.57E-10 |
| IGFBP1 | 4.286258408 | 2.122766846 | 5.24E-11 | 1.65E-10 |
| DKK4 | 5.956551056 | 0.89133159 | 5.25E-11 | 1.65E-10 |
| FGA | 3.933340177 | 8.582763098 | 5.56E-11 | 1.75E-10 |
| CYP4F11 | 2.971341308 | 3.735629866 | 5.57E-11 | 1.75E-10 |
| ASIC5 | 3.0346493 | -3.212813798 | 5.63E-11 | 1.77E-10 |
| ZPBP2 | 4.114242007 | -1.981591541 | 5.76E-11 | 1.81E-10 |
| CD177 | 3.280639298 | 3.78430558 | 5.80E-11 | 1.82E-10 |
| CDH18 | 4.874604475 | -0.070581668 | 5.97E-11 | 1.87E-10 |
| CHAT | 5.460675058 | -1.030476666 | 6.05E-11 | 1.89E-10 |
| GDPD2 | 2.516428511 | -0.778827505 | 6.21E-11 | 1.94E-10 |
| NKX6-1 | 2.377490344 | -1.402150397 | 6.28E-11 | 1.97E-10 |
| HEPACAM2 | 3.737004036 | 2.04018715 | 6.59E-11 | 2.06E-10 |
| GABRP | 3.182477254 | 4.051347783 | 6.59E-11 | 2.06E-10 |
| TCF24 | 2.446802657 | -1.077445723 | 6.83E-11 | 2.13E-10 |
| KRT6B | 3.999520403 | 2.340774157 | 6.94E-11 | 2.16E-10 |
| SLC22A8 | -2.116139543 | -3.772272584 | 6.94E-11 | 2.16E-10 |
| CAGE1 | 2.17331995 | -2.308153873 | 6.99E-11 | 2.18E-10 |
| KBTBD12 | 2.076174023 | 2.047826266 | 7.01E-11 | 2.18E-10 |
| LRRC66 | 2.367164551 | 0.474477286 | 7.10E-11 | 2.21E-10 |
| UGT2B10 | 4.020289402 | -3.614017078 | 7.16E-11 | 2.23E-10 |
| HIST1H4L | 7.0285608 | -1.335902396 | 7.69E-11 | 2.38E-10 |
| HABP2 | 2.266834664 | 4.746456147 | 8.30E-11 | 2.57E-10 |
| CYP26A1 | 2.727177361 | -0.1444062 | 8.34E-11 | 2.58E-10 |
| SLC30A10 | 5.083917673 | -0.973450084 | 8.43E-11 | 2.60E-10 |
| CYP21A2 | 2.205229864 | -0.182052907 | 8.59E-11 | 2.65E-10 |

| | | | | |
|----------|-------------|--------------|----------|----------|
| SOX14 | 6.219634403 | 0.763821993 | 8.66E-11 | 2.67E-10 |
| PRDM9 | 5.463430208 | -2.450016221 | 8.83E-11 | 2.72E-10 |
| STRA8 | 4.905036262 | -0.987573299 | 8.91E-11 | 2.75E-10 |
| MYT1 | 2.949087681 | 1.239644621 | 9.02E-11 | 2.78E-10 |
| MSTN | 3.721236943 | 1.391344246 | 9.39E-11 | 2.89E-10 |
| PYDC1 | 4.147581213 | -2.37833574 | 9.44E-11 | 2.90E-10 |
| FGF20 | 2.502638709 | -1.572166799 | 9.44E-11 | 2.90E-10 |
| TAS2R38 | 4.27317094 | -3.210738722 | 9.51E-11 | 2.92E-10 |
| NEFH | 2.549168215 | 2.948203049 | 1.08E-10 | 3.30E-10 |
| PSG4 | 7.661518089 | 1.370452616 | 1.09E-10 | 3.32E-10 |
| MAGEB1 | 6.451214008 | -1.82911676 | 1.13E-10 | 3.47E-10 |
| FGF21 | 4.671966702 | -3.125021715 | 1.17E-10 | 3.57E-10 |
| SH2D5 | 2.332751513 | -0.683966177 | 1.17E-10 | 3.58E-10 |
| CHST4 | 2.304909314 | 1.238180799 | 1.21E-10 | 3.68E-10 |
| VCX | 4.273458536 | -1.479069479 | 1.24E-10 | 3.79E-10 |
| SLC2A2 | 6.24410806 | -0.853833592 | 1.25E-10 | 3.80E-10 |
| FOXG1 | 5.125605196 | -0.876217446 | 1.27E-10 | 3.87E-10 |
| HIST1H1T | 2.549430736 | -3.334746019 | 1.28E-10 | 3.89E-10 |
| WDR72 | 2.604034447 | 3.837391412 | 1.28E-10 | 3.89E-10 |
| DLX2 | 3.233372542 | -2.64827741 | 1.31E-10 | 3.97E-10 |
| APOA2 | 4.57133974 | -0.122657905 | 1.35E-10 | 4.10E-10 |
| SST | 7.372604989 | 3.61572506 | 1.36E-10 | 4.14E-10 |
| STPG4 | 2.292971094 | -1.410399395 | 1.39E-10 | 4.21E-10 |
| MUC17 | 7.675494043 | 1.380961034 | 1.39E-10 | 4.22E-10 |
| DSPP | 4.195829344 | -2.909534215 | 1.40E-10 | 4.25E-10 |
| DDX53 | 5.177116083 | -1.676520725 | 1.40E-10 | 4.25E-10 |
| MYO18B | 3.172476551 | -0.07260262 | 1.43E-10 | 4.32E-10 |
| PSG6 | 5.850376479 | -2.378433645 | 1.45E-10 | 4.41E-10 |
| SERPINA5 | 2.403945513 | 2.063368851 | 1.55E-10 | 4.67E-10 |
| DPP10 | 2.458348223 | 2.036716522 | 1.55E-10 | 4.67E-10 |
| UGT1A3 | 4.553747533 | -3.162451463 | 1.57E-10 | 4.73E-10 |
| MAJIN | 2.596309939 | -0.276085949 | 1.59E-10 | 4.78E-10 |
| PAGE5 | 5.110395988 | -0.144333248 | 1.60E-10 | 4.83E-10 |
| LIPI | 2.079465757 | -3.004491458 | 1.64E-10 | 4.94E-10 |
| HMX2 | 4.513283947 | -2.582245906 | 1.66E-10 | 4.99E-10 |
| NEUROD1 | 6.777181457 | 1.978742987 | 1.66E-10 | 5.00E-10 |
| CSAG3 | 5.1039459 | -0.820976454 | 1.71E-10 | 5.13E-10 |
| VCX3A | 5.734502768 | -1.447508913 | 1.79E-10 | 5.36E-10 |
| CSAG2 | 5.406997607 | -1.453990307 | 1.89E-10 | 5.65E-10 |
| LYPD6B | 2.088767353 | 2.845520136 | 1.91E-10 | 5.73E-10 |

| | | | | |
|-----------|-------------|--------------|----------|----------|
| SYT5 | 2.644394339 | 0.558169599 | 2.08E-10 | 6.20E-10 |
| SSTR5 | 3.82870553 | -2.42897637 | 2.11E-10 | 6.28E-10 |
| KRT14 | 3.976465325 | 3.570958427 | 2.12E-10 | 6.31E-10 |
| GCG | 8.059291986 | 1.198135014 | 2.15E-10 | 6.41E-10 |
| HIST1H2BA | 4.695933957 | -3.24814589 | 2.19E-10 | 6.52E-10 |
| CHRNA | 2.04430843 | -2.242673065 | 2.20E-10 | 6.54E-10 |
| NAA11 | 5.504088263 | -0.954158636 | 2.22E-10 | 6.59E-10 |
| TBX18 | 2.694974307 | 1.627420633 | 2.26E-10 | 6.70E-10 |
| ATP4A | 3.947510683 | -1.972434759 | 2.28E-10 | 6.78E-10 |
| PHYHIPL | 2.440947579 | -0.019739856 | 2.31E-10 | 6.87E-10 |
| ST18 | 2.300433769 | 0.708039185 | 2.50E-10 | 7.41E-10 |
| NKX2-4 | 5.271939263 | -1.793941634 | 2.53E-10 | 7.47E-10 |
| SPANXC | 5.662303489 | -2.688846269 | 2.59E-10 | 7.65E-10 |
| CPA5 | 2.126396932 | -1.68978999 | 2.62E-10 | 7.73E-10 |
| ZIC1 | 4.90048261 | 0.73669383 | 2.67E-10 | 7.87E-10 |
| P2RY4 | 2.383130519 | -1.587244974 | 2.76E-10 | 8.13E-10 |
| GAGE2A | 6.95254782 | -1.592302749 | 2.91E-10 | 8.54E-10 |
| LRRC38 | 4.971999746 | 1.019412136 | 2.99E-10 | 8.79E-10 |
| NLRP7 | 2.006197734 | -0.533881514 | 3.05E-10 | 8.95E-10 |
| NTS | 5.015718306 | 6.290531761 | 3.09E-10 | 9.06E-10 |
| UGT1A7 | 4.530253096 | -1.844149889 | 3.10E-10 | 9.09E-10 |
| PATE4 | 3.493818581 | -3.460363335 | 3.14E-10 | 9.19E-10 |
| PSG5 | 7.360441036 | 0.609147091 | 3.25E-10 | 9.50E-10 |
| SLC6A15 | 3.985844769 | 0.680820175 | 3.30E-10 | 9.64E-10 |
| GRIA4 | 2.421447511 | -0.582852479 | 3.47E-10 | 1.01E-09 |
| CYP2B6 | 3.964433323 | 0.632161766 | 3.48E-10 | 1.02E-09 |
| TMEM210 | 2.880461386 | -3.153607127 | 3.55E-10 | 1.03E-09 |
| SLC9A2 | 2.388975701 | 1.690459279 | 3.57E-10 | 1.04E-09 |
| ZIC4 | 5.015676761 | -0.839233821 | 3.61E-10 | 1.05E-09 |
| GJB4 | 2.801640185 | 0.253940371 | 3.74E-10 | 1.09E-09 |
| UGT1A1 | 4.51178682 | -1.507227287 | 3.83E-10 | 1.11E-09 |
| SLC22A11 | 2.45301773 | -2.006388497 | 3.88E-10 | 1.13E-09 |
| FAM71F1 | 2.404320909 | -3.219531736 | 3.92E-10 | 1.14E-09 |
| CYP4F3 | 3.03564772 | 3.57365147 | 4.10E-10 | 1.19E-09 |
| AKR1C3 | 2.161085183 | 7.450824748 | 4.11E-10 | 1.19E-09 |
| CHRDL2 | 2.014432957 | 2.717960258 | 4.18E-10 | 1.21E-09 |
| ATOH1 | 5.572216804 | -2.396343032 | 4.53E-10 | 1.31E-09 |
| GABRG3 | 3.616408304 | -0.160706607 | 4.67E-10 | 1.35E-09 |
| GH2 | 4.62492949 | -3.236983907 | 4.84E-10 | 1.40E-09 |
| STXBP5L | 3.682884555 | -0.161758579 | 4.89E-10 | 1.41E-09 |

| | | | | |
|------------|-------------|--------------|----------|----------|
| PRDM7 | 2.378031543 | -3.403608468 | 5.22E-10 | 1.50E-09 |
| POM121L2 | 2.419053656 | -2.746297431 | 5.28E-10 | 1.52E-09 |
| NEFL | 3.179107632 | 1.261377472 | 5.39E-10 | 1.55E-09 |
| SPRR3 | 4.528804591 | 1.594954532 | 5.50E-10 | 1.58E-09 |
| SPANXB1 | 6.505684489 | -0.21145157 | 5.71E-10 | 1.64E-09 |
| THBS4 | 2.353705897 | 4.308749985 | 5.78E-10 | 1.66E-09 |
| ZIC3 | 5.60730292 | -1.648726562 | 5.83E-10 | 1.67E-09 |
| IQCM | 3.574242161 | -3.469365068 | 5.87E-10 | 1.68E-09 |
| NPAS3 | 2.421883229 | 2.310749311 | 5.87E-10 | 1.68E-09 |
| GSC | 2.539390778 | -1.270987785 | 6.00E-10 | 1.72E-09 |
| OR1F1 | 3.731841222 | -3.605201252 | 6.18E-10 | 1.77E-09 |
| PRR32 | 3.077176385 | -2.151600306 | 6.39E-10 | 1.82E-09 |
| TEX101 | 3.723603305 | -0.393447046 | 6.79E-10 | 1.93E-09 |
| CCDC166 | 3.034391786 | -3.820634429 | 6.98E-10 | 1.98E-09 |
| FER1L6 | 3.846792528 | 2.894598545 | 7.02E-10 | 2.00E-09 |
| ZNF716 | 4.977361097 | -1.826488344 | 7.39E-10 | 2.10E-09 |
| ISX | 5.197311498 | -0.259020354 | 7.52E-10 | 2.13E-09 |
| PI3 | 2.991019647 | 3.926818439 | 7.81E-10 | 2.21E-09 |
| NKX2-5 | 4.250244241 | -1.927100347 | 8.12E-10 | 2.29E-09 |
| CHRND | 2.836353206 | -2.678090841 | 8.34E-10 | 2.35E-09 |
| FAM163A | 2.311908662 | -0.605063416 | 8.90E-10 | 2.51E-09 |
| TTLL8 | 3.177319374 | -3.418914438 | 9.00E-10 | 2.54E-09 |
| MC5R | 2.81501062 | -2.804107515 | 9.02E-10 | 2.54E-09 |
| IBSP | 2.523305732 | 1.152671951 | 9.09E-10 | 2.56E-09 |
| AC243967.1 | 2.280186511 | -3.273224988 | 9.11E-10 | 2.57E-09 |
| GNRH2 | 2.895782101 | -0.675416632 | 9.12E-10 | 2.57E-09 |
| SPINT4 | 3.892857259 | -2.663680365 | 9.13E-10 | 2.57E-09 |
| RFX6 | 4.669998156 | -0.447281027 | 9.47E-10 | 2.66E-09 |
| CIDEC | 3.276792096 | -0.306526545 | 9.61E-10 | 2.70E-09 |
| SLC38A4 | 2.014945695 | 1.716042192 | 1.02E-09 | 2.87E-09 |
| CDH2 | 2.005546116 | 3.031704061 | 1.04E-09 | 2.92E-09 |
| TSPAN8 | 2.167208401 | 6.596643505 | 1.09E-09 | 3.05E-09 |
| SPANXD | 5.456124147 | -2.846176199 | 1.10E-09 | 3.06E-09 |
| TEX37 | 3.85239876 | -3.559145652 | 1.10E-09 | 3.07E-09 |
| LHCGR | 2.692577188 | -1.280176871 | 1.13E-09 | 3.15E-09 |
| TEX15 | 3.381870497 | -0.112037304 | 1.16E-09 | 3.22E-09 |
| IL19 | 2.883599508 | -2.199867335 | 1.22E-09 | 3.38E-09 |
| SCN3A | 2.775733853 | 2.7504394 | 1.27E-09 | 3.52E-09 |
| GJB5 | 2.381407097 | 1.424903158 | 1.30E-09 | 3.61E-09 |
| IFNE | 2.928359343 | -1.622663032 | 1.34E-09 | 3.70E-09 |

| | | | | |
|------------|-------------|--------------|----------|----------|
| GABRR1 | 3.465606222 | -0.804250047 | 1.44E-09 | 3.97E-09 |
| PSG11 | 6.878304396 | -1.666408033 | 1.49E-09 | 4.10E-09 |
| PAGE2B | 5.085311851 | -0.501761742 | 1.52E-09 | 4.19E-09 |
| PATE2 | 2.680045746 | -3.699320181 | 1.53E-09 | 4.21E-09 |
| KCNJ6 | 2.345316426 | 0.321111045 | 1.56E-09 | 4.29E-09 |
| SLITRK1 | 4.697840918 | -1.718398983 | 1.57E-09 | 4.31E-09 |
| TMEM151B | 2.186957864 | -1.503603623 | 1.63E-09 | 4.48E-09 |
| APOB | 3.207682584 | 1.978828251 | 1.64E-09 | 4.50E-09 |
| ATP6V0A4 | 2.035984142 | 3.129731141 | 1.67E-09 | 4.57E-09 |
| PSCA | 3.409326411 | 5.608081344 | 1.68E-09 | 4.61E-09 |
| SAGE1 | 4.475038276 | -0.955283793 | 1.68E-09 | 4.61E-09 |
| KCNJ13 | 3.560974502 | -0.862143079 | 1.72E-09 | 4.70E-09 |
| SKOR2 | 4.795559222 | -2.902513793 | 1.72E-09 | 4.70E-09 |
| TMEM215 | 2.539394431 | -1.657996292 | 1.73E-09 | 4.73E-09 |
| SSX1 | 6.568847488 | -0.229034009 | 1.73E-09 | 4.74E-09 |
| TGIF2LX | 4.638175517 | -3.32900835 | 1.76E-09 | 4.83E-09 |
| FSTL5 | 4.52233305 | 0.340400452 | 1.77E-09 | 4.83E-09 |
| IAPP | 3.678746909 | -3.563621187 | 1.77E-09 | 4.84E-09 |
| IFNL2 | 3.004879879 | -3.900036291 | 1.81E-09 | 4.94E-09 |
| TUBA3E | 3.831802487 | -1.614444152 | 1.89E-09 | 5.16E-09 |
| LRFN2 | 2.995393537 | -1.195377587 | 1.93E-09 | 5.26E-09 |
| RBFOX1 | 4.240687815 | -0.161960133 | 1.95E-09 | 5.32E-09 |
| STUM | 2.427435703 | 3.19043711 | 2.00E-09 | 5.44E-09 |
| APOF | 3.107994195 | -2.280069754 | 2.02E-09 | 5.50E-09 |
| GAL3ST2 | 2.33044259 | -1.048652418 | 2.07E-09 | 5.63E-09 |
| SHISAL2B | 3.334653928 | -1.635622614 | 2.08E-09 | 5.64E-09 |
| APCS | 5.241970792 | -2.992646428 | 2.09E-09 | 5.69E-09 |
| FAT2 | 2.152954616 | 2.547309563 | 2.09E-09 | 5.69E-09 |
| REC114 | 2.135530269 | -2.772643262 | 2.17E-09 | 5.88E-09 |
| VGLL2 | 6.68718339 | 0.576275428 | 2.20E-09 | 5.95E-09 |
| FMR1NB | 4.567466535 | -1.833557339 | 2.29E-09 | 6.20E-09 |
| TRIM48 | 7.992798434 | 0.495326187 | 2.38E-09 | 6.44E-09 |
| DEFA5 | 9.562069591 | 1.365874875 | 2.40E-09 | 6.47E-09 |
| CALR3 | 2.000301243 | -3.508807474 | 2.46E-09 | 6.63E-09 |
| OXT | 2.068162668 | -2.146017026 | 2.56E-09 | 6.89E-09 |
| PRR26 | 2.003365303 | 1.588671475 | 2.56E-09 | 6.91E-09 |
| AC020922.1 | 3.239694177 | -3.838257783 | 2.67E-09 | 7.18E-09 |
| KCNJ18 | 5.43484385 | -1.27088364 | 2.72E-09 | 7.30E-09 |
| GBX2 | 2.778837382 | -1.941857194 | 2.79E-09 | 7.50E-09 |
| GNRHR | 2.08011054 | -1.554517948 | 2.79E-09 | 7.50E-09 |

| | | | | |
|------------|-------------|--------------|----------|----------|
| LRRC26 | 2.522545346 | -0.139898437 | 2.82E-09 | 7.58E-09 |
| LCN15 | 4.642906071 | 0.178742886 | 2.85E-09 | 7.66E-09 |
| SEPT14 | 4.727779995 | -1.465954024 | 2.88E-09 | 7.73E-09 |
| FBN2 | 2.267902588 | 2.832721785 | 2.89E-09 | 7.74E-09 |
| PPP4R3C | 5.469222099 | -2.59442159 | 2.92E-09 | 7.83E-09 |
| APELA | 2.041710927 | -0.291279864 | 3.01E-09 | 8.05E-09 |
| TENM1 | 2.353607572 | 3.415055566 | 3.01E-09 | 8.06E-09 |
| GALR3 | 2.822357524 | -3.39625297 | 3.15E-09 | 8.41E-09 |
| HIST1H1A | 6.048644516 | -1.638560626 | 3.22E-09 | 8.60E-09 |
| KLK14 | 3.40809247 | 3.494758581 | 3.35E-09 | 8.91E-09 |
| HNF4A | 2.897133691 | 2.772143659 | 3.35E-09 | 8.92E-09 |
| TRIM10 | 2.484947006 | -1.167030533 | 3.38E-09 | 9.01E-09 |
| TPTE | 4.967283791 | -2.983300054 | 3.48E-09 | 9.26E-09 |
| ACTN3 | 2.475924741 | -1.306025355 | 3.50E-09 | 9.30E-09 |
| CGB3 | 4.120763253 | -2.758540382 | 3.52E-09 | 9.36E-09 |
| UNC13C | 2.240286929 | -1.011704315 | 3.83E-09 | 1.02E-08 |
| RTL1 | 4.606707596 | -1.644464214 | 3.97E-09 | 1.05E-08 |
| TBR1 | 2.927671509 | -2.287085951 | 4.04E-09 | 1.07E-08 |
| KRT31 | 4.873703031 | -1.725782299 | 4.17E-09 | 1.10E-08 |
| SULT1C3 | 4.631727729 | -3.089651251 | 4.25E-09 | 1.12E-08 |
| DCAF8L2 | 4.812382718 | -2.734264742 | 4.40E-09 | 1.16E-08 |
| GABBR2 | 2.186801097 | 2.337615012 | 4.46E-09 | 1.18E-08 |
| UGT3A1 | 5.897884884 | 1.5554941 | 4.74E-09 | 1.25E-08 |
| ALX1 | 3.226345306 | -1.305695597 | 4.84E-09 | 1.27E-08 |
| MOGAT2 | 2.129610779 | -2.008863237 | 4.89E-09 | 1.28E-08 |
| IGFL1 | 3.554469691 | -0.147366373 | 4.90E-09 | 1.29E-08 |
| SPRR1A | 3.707420383 | 0.324453324 | 4.98E-09 | 1.31E-08 |
| GABRR3 | 3.180707345 | -3.148239908 | 5.15E-09 | 1.35E-08 |
| F13B | 3.745006074 | -3.840335189 | 5.33E-09 | 1.40E-08 |
| NKX2-2 | 5.130971168 | -1.723374764 | 5.55E-09 | 1.45E-08 |
| NLRP5 | 5.521469968 | -1.330098299 | 5.65E-09 | 1.47E-08 |
| PRB1 | 6.085520556 | -1.802969306 | 5.81E-09 | 1.52E-08 |
| ADGRD2 | 2.294447995 | -3.367133848 | 5.81E-09 | 1.52E-08 |
| LHX3 | 3.220463061 | -3.581194115 | 5.82E-09 | 1.52E-08 |
| HIST1H4F | 6.567401981 | -1.108016044 | 5.98E-09 | 1.56E-08 |
| DKK1 | 2.434728313 | 4.160477017 | 6.02E-09 | 1.57E-08 |
| CCDC177 | 2.591056396 | -2.707326043 | 6.27E-09 | 1.63E-08 |
| TAS2R13 | 3.47876597 | -2.284061075 | 6.44E-09 | 1.68E-08 |
| TUBA3C | 6.627442205 | 0.310167591 | 6.72E-09 | 1.74E-08 |
| AL355102.2 | 2.110066908 | -3.418692772 | 7.00E-09 | 1.81E-08 |

| | | | | |
|----------------|-------------|--------------|----------|----------|
| NT5C1A | 2.419609465 | -1.606296571 | 7.06E-09 | 1.83E-08 |
| EDDM3A | 3.048574775 | -2.948051837 | 7.14E-09 | 1.85E-08 |
| MEIOB | 3.039570252 | -2.701593759 | 7.26E-09 | 1.88E-08 |
| MUCL1 | 3.257712152 | 0.958562691 | 7.32E-09 | 1.89E-08 |
| GPR22 | 3.278604033 | -0.729334977 | 7.45E-09 | 1.93E-08 |
| NPFFR2 | 3.114924921 | -0.201537592 | 7.49E-09 | 1.94E-08 |
| C10orf71 | 3.358657935 | -1.130689537 | 7.56E-09 | 1.95E-08 |
| MOGAT3 | 3.449763089 | -2.90237947 | 7.67E-09 | 1.98E-08 |
| DPPA2 | 6.277641804 | -1.980309376 | 7.73E-09 | 1.99E-08 |
| DAZL | 2.488862784 | -2.285593287 | 7.83E-09 | 2.02E-08 |
| CCDC169-SOHLH2 | 2.214387443 | -3.675227073 | 7.99E-09 | 2.06E-08 |
| PCDHA1 | 2.034884256 | -0.232603181 | 8.03E-09 | 2.07E-08 |
| MKRN3 | 2.525723232 | -0.174211375 | 8.06E-09 | 2.07E-08 |
| SLC1A6 | 3.324581311 | -1.382551567 | 8.25E-09 | 2.12E-08 |
| DEFB126 | 3.866830442 | -3.228905172 | 8.39E-09 | 2.16E-08 |
| PRH2 | 2.497140623 | -1.481937396 | 8.52E-09 | 2.19E-08 |
| ARHGAP36 | 5.044257114 | -1.368339447 | 8.56E-09 | 2.20E-08 |
| TDRD12 | 2.34072942 | 0.657561223 | 8.57E-09 | 2.20E-08 |
| G6PC | 6.085659034 | 0.573178899 | 8.81E-09 | 2.26E-08 |
| PASD1 | 6.557750156 | 0.07831044 | 8.95E-09 | 2.29E-08 |
| ELOA2 | 2.470060776 | -3.604915431 | 9.02E-09 | 2.31E-08 |
| HSD3B2 | 4.495812776 | -1.229056737 | 9.36E-09 | 2.39E-08 |
| EREG | 2.612684539 | 5.080680892 | 9.43E-09 | 2.41E-08 |
| GPR50 | 4.287789504 | -2.258464754 | 9.45E-09 | 2.42E-08 |
| CBLN1 | 2.782843364 | -0.147629466 | 9.68E-09 | 2.47E-08 |
| IFNL3 | 2.685144797 | -3.949046603 | 9.74E-09 | 2.49E-08 |
| IRX4 | 4.370474594 | -0.991529891 | 9.78E-09 | 2.49E-08 |
| CYP11B1 | 6.627562567 | -0.55880765 | 9.89E-09 | 2.52E-08 |
| STAR | 2.429839903 | 0.146272061 | 1.02E-08 | 2.59E-08 |
| PCDHA9 | 2.091861393 | -1.315746204 | 1.10E-08 | 2.79E-08 |
| H3.Y | 4.605390385 | -3.403063632 | 1.11E-08 | 2.81E-08 |
| XAGE5 | 4.514558375 | -3.423976237 | 1.11E-08 | 2.82E-08 |
| EPHA6 | 2.233211094 | -0.748561794 | 1.14E-08 | 2.88E-08 |
| TMEM238L | 3.631270067 | -0.205837628 | 1.14E-08 | 2.90E-08 |
| MAGEB16 | 5.99272512 | -1.88564425 | 1.15E-08 | 2.91E-08 |
| KNG1 | 3.449883087 | 0.167742837 | 1.15E-08 | 2.91E-08 |
| SLC17A4 | 4.088935104 | -2.558541731 | 1.17E-08 | 2.95E-08 |
| TMPRSS15 | 3.148733714 | -2.635413505 | 1.22E-08 | 3.07E-08 |
| ADAM18 | 3.313462497 | -3.645581498 | 1.25E-08 | 3.16E-08 |
| SLC26A4 | 2.263451881 | 3.258024388 | 1.28E-08 | 3.24E-08 |

| | | | | |
|------------|-------------|--------------|----------|----------|
| MYH7 | 2.711712339 | -2.080027137 | 1.28E-08 | 3.24E-08 |
| FAM9C | 3.910987432 | -0.898129233 | 1.31E-08 | 3.29E-08 |
| MGAM2 | 2.694578005 | -0.823120313 | 1.31E-08 | 3.30E-08 |
| CNMD | 4.760597053 | 3.996263313 | 1.32E-08 | 3.33E-08 |
| AC022335.1 | 4.469279309 | -3.515557361 | 1.37E-08 | 3.46E-08 |
| FTHL17 | 6.518471322 | -1.179426096 | 1.41E-08 | 3.55E-08 |
| CTCFL | 3.988948416 | -0.158794822 | 1.43E-08 | 3.59E-08 |
| NKX2-3 | 3.152507752 | -0.531365027 | 1.44E-08 | 3.62E-08 |
| RIMBP2 | 2.512374354 | 1.685292788 | 1.46E-08 | 3.66E-08 |
| PKP1 | 2.281425841 | 5.262944804 | 1.48E-08 | 3.72E-08 |
| GAGE1 | 6.07874411 | -1.922875762 | 1.51E-08 | 3.79E-08 |
| CREB3L3 | 3.015566984 | -0.639702585 | 1.69E-08 | 4.22E-08 |
| UPK1A | 2.53054874 | -1.413883407 | 1.70E-08 | 4.25E-08 |
| EVX2 | 3.362081775 | -3.801301998 | 1.75E-08 | 4.36E-08 |
| PTPRZ1 | 2.09014197 | 3.426845452 | 1.77E-08 | 4.41E-08 |
| FOXR2 | 4.952774878 | -3.185750895 | 1.77E-08 | 4.41E-08 |
| NEUROD4 | 6.216934705 | -1.9362715 | 1.81E-08 | 4.52E-08 |
| AWAT1 | 2.966687789 | -2.783071718 | 1.82E-08 | 4.53E-08 |
| UGT3A2 | 2.024862088 | -1.185024225 | 1.83E-08 | 4.54E-08 |
| ZNF560 | 3.868264278 | -0.059339197 | 1.85E-08 | 4.61E-08 |
| TAS2R30 | 3.81289284 | -1.389225374 | 1.93E-08 | 4.78E-08 |
| FOXD1 | 2.278569026 | 0.488272719 | 1.97E-08 | 4.87E-08 |
| PSG8 | 5.641832903 | -2.183356668 | 2.01E-08 | 4.98E-08 |
| KRT33B | 3.26788205 | -3.763007253 | 2.09E-08 | 5.17E-08 |
| CNTNAP5 | 3.756110123 | -2.805061 | 2.13E-08 | 5.27E-08 |
| BARHL2 | 4.212632526 | -3.164820441 | 2.20E-08 | 5.43E-08 |
| B3GALT5 | 2.804603071 | 2.985304192 | 2.26E-08 | 5.57E-08 |
| AGMO | 2.118681732 | 0.046012954 | 2.26E-08 | 5.59E-08 |
| ORM2 | 2.021859493 | 2.575688515 | 2.35E-08 | 5.80E-08 |
| FGF3 | 4.574640086 | -2.506085276 | 2.35E-08 | 5.80E-08 |
| FAM9A | 4.412592289 | -3.529422001 | 2.51E-08 | 6.18E-08 |
| MAGEA9 | 4.516341769 | -3.430466609 | 2.56E-08 | 6.29E-08 |
| LIPF | 4.817933767 | -1.340309365 | 2.59E-08 | 6.35E-08 |
| LRRTM1 | 3.140933373 | 0.751441535 | 2.59E-08 | 6.36E-08 |
| SPAG11B | 6.836837886 | -1.115735125 | 2.61E-08 | 6.39E-08 |
| OR56A3 | 4.78875045 | -2.965041843 | 2.65E-08 | 6.50E-08 |
| SPAG11A | 6.688598103 | -1.495242512 | 2.67E-08 | 6.56E-08 |
| GPR52 | 3.016819899 | -2.359137913 | 2.69E-08 | 6.59E-08 |
| MUC5AC | 3.820176397 | 8.649835586 | 2.70E-08 | 6.60E-08 |
| TH | 2.281082694 | -1.581094533 | 2.77E-08 | 6.77E-08 |

| | | | | |
|----------|-------------|--------------|----------|----------|
| CPLX2 | 4.178242703 | 4.828832175 | 2.82E-08 | 6.91E-08 |
| CRP | 3.642995522 | -1.127985914 | 2.92E-08 | 7.12E-08 |
| KCNK2 | 2.221779219 | 0.080610376 | 2.92E-08 | 7.14E-08 |
| ALPI | 4.429310828 | -2.956765967 | 3.05E-08 | 7.43E-08 |
| KRTAP3-1 | 3.126659908 | -1.830541931 | 3.10E-08 | 7.56E-08 |
| PHGR1 | 3.403158384 | -0.883916091 | 3.14E-08 | 7.66E-08 |
| ZNF556 | 2.061938434 | -1.500021626 | 3.15E-08 | 7.66E-08 |
| PHOX2A | 3.781312681 | -2.885191619 | 3.30E-08 | 8.01E-08 |
| HTR3B | 4.347234847 | -1.525958209 | 3.36E-08 | 8.17E-08 |
| CACNA1B | 2.608736968 | 0.289627872 | 3.49E-08 | 8.47E-08 |
| DCAF8L1 | 3.952508705 | -3.529280168 | 3.55E-08 | 8.61E-08 |
| KRT34 | 3.273440836 | -3.50199161 | 3.59E-08 | 8.70E-08 |
| KLRF2 | 2.766567127 | -2.830695219 | 3.65E-08 | 8.84E-08 |
| PAGE1 | 5.133216542 | -0.431570142 | 3.83E-08 | 9.26E-08 |
| EN1 | 3.03546844 | -2.217998353 | 3.91E-08 | 9.46E-08 |
| SPATA16 | 3.651415532 | -3.734155235 | 3.94E-08 | 9.51E-08 |
| SLC8A2 | 2.005416479 | -0.058966478 | 3.96E-08 | 9.57E-08 |
| NELL1 | 3.182760317 | 3.179414185 | 3.98E-08 | 9.61E-08 |
| MCCD1 | 3.882872231 | -2.362848633 | 4.15E-08 | 1.00E-07 |
| FAM83C | 3.766283962 | -2.187766759 | 4.41E-08 | 1.06E-07 |
| KRT33A | 5.273247896 | -2.46908557 | 4.44E-08 | 1.07E-07 |
| NWD2 | 3.192115956 | -3.112628503 | 4.81E-08 | 1.15E-07 |
| SPIC | 3.344990528 | -1.647834257 | 5.00E-08 | 1.20E-07 |
| GAST | 3.599631622 | -3.567949467 | 5.18E-08 | 1.24E-07 |
| ACTL6B | 3.516158747 | -1.543297401 | 5.19E-08 | 1.24E-07 |
| CAPNS2 | 2.575547433 | 0.042492602 | 5.21E-08 | 1.24E-07 |
| CLEC2A | 4.890948677 | -1.563539351 | 5.26E-08 | 1.25E-07 |
| FAM69C | 2.286448053 | -2.190960618 | 5.41E-08 | 1.29E-07 |
| LYZL2 | 3.543630592 | -3.856140047 | 5.41E-08 | 1.29E-07 |
| OR10G2 | 2.333149211 | -3.746732185 | 5.45E-08 | 1.30E-07 |
| CACNG5 | 2.90650487 | -3.657523589 | 5.54E-08 | 1.32E-07 |
| MAGEB2 | 5.009927228 | 0.868844327 | 5.56E-08 | 1.32E-07 |
| INS | 5.806183227 | -2.195503129 | 5.62E-08 | 1.34E-07 |
| ANKRD33 | 2.198194158 | -2.678959899 | 5.77E-08 | 1.37E-07 |
| CGB8 | 3.546677341 | -3.17433998 | 6.34E-08 | 1.50E-07 |
| CTAG2 | 5.655268209 | 0.936590845 | 6.38E-08 | 1.51E-07 |
| SOX3 | 3.754509575 | -2.506434953 | 6.43E-08 | 1.52E-07 |
| PLCZ1 | 2.854643149 | -2.252607147 | 6.63E-08 | 1.57E-07 |
| PTH2R | 2.045906656 | -0.13371429 | 7.04E-08 | 1.66E-07 |
| BPIFB6 | 3.941620527 | -3.209989134 | 7.16E-08 | 1.69E-07 |

| | | | | |
|------------|-------------|--------------|----------|----------|
| GLYATL3 | 4.55350003 | -2.757604079 | 8.45E-08 | 1.98E-07 |
| FRG2 | 3.910834432 | -3.74606226 | 8.53E-08 | 2.00E-07 |
| SERPINA7 | 4.143055995 | -3.310535451 | 8.54E-08 | 2.00E-07 |
| CERS3 | 3.15233501 | -0.883760473 | 8.83E-08 | 2.07E-07 |
| MAGEB6 | 3.435701105 | -3.730108434 | 8.90E-08 | 2.08E-07 |
| HCN1 | 2.7409138 | 0.246945283 | 9.06E-08 | 2.12E-07 |
| OLIG3 | 5.009483907 | -2.408090386 | 9.30E-08 | 2.17E-07 |
| CFHR5 | 2.70610017 | -3.735509522 | 9.37E-08 | 2.19E-07 |
| IGDCC3 | 2.459284684 | -0.67099408 | 1.00E-07 | 2.34E-07 |
| CARD18 | 3.966024524 | -3.398734395 | 1.04E-07 | 2.42E-07 |
| KRT23 | 2.437619357 | 2.890921153 | 1.05E-07 | 2.43E-07 |
| POU3F3 | 4.071838121 | -1.373404523 | 1.07E-07 | 2.49E-07 |
| UGT2A3 | 5.065588137 | -0.139377765 | 1.08E-07 | 2.51E-07 |
| CYP4F8 | 3.732309287 | -2.683793496 | 1.14E-07 | 2.65E-07 |
| ADH4 | 2.628329727 | -0.527918686 | 1.18E-07 | 2.74E-07 |
| AC092143.1 | 2.239824013 | -3.974341827 | 1.25E-07 | 2.89E-07 |
| TEX13B | 3.866597289 | -3.452616465 | 1.28E-07 | 2.95E-07 |
| FGF4 | 4.567638671 | -2.843205158 | 1.28E-07 | 2.96E-07 |
| NEUROG2 | 3.054785233 | -3.673405162 | 1.29E-07 | 2.97E-07 |
| FNDC9 | 2.000087031 | -2.876426695 | 1.33E-07 | 3.08E-07 |
| MROH2A | 2.269540041 | 0.214848687 | 1.39E-07 | 3.21E-07 |
| MMP20 | 2.820357399 | -3.303562747 | 1.42E-07 | 3.26E-07 |
| RAX | 3.546279216 | -2.165381802 | 1.44E-07 | 3.31E-07 |
| SLC7A3 | 2.843487343 | -1.333306662 | 1.45E-07 | 3.32E-07 |
| ZG16 | 2.457614682 | -1.319425469 | 1.45E-07 | 3.33E-07 |
| CLU10S | 2.295320842 | -1.745146667 | 1.51E-07 | 3.46E-07 |
| STMN2 | 2.179930984 | 1.051172024 | 1.60E-07 | 3.67E-07 |
| RSPH6A | 2.890723957 | -3.138933259 | 1.70E-07 | 3.89E-07 |
| OR51E2 | 2.452867341 | -2.173512554 | 1.75E-07 | 3.99E-07 |
| STAC2 | 2.008523368 | 1.309075529 | 1.83E-07 | 4.18E-07 |
| CLEC2L | 2.550648852 | -0.511638125 | 1.87E-07 | 4.26E-07 |
| NOTO | 2.615518152 | -1.42010674 | 1.94E-07 | 4.40E-07 |
| NKX6-3 | 2.290513422 | -2.724372357 | 1.97E-07 | 4.48E-07 |
| NTSR2 | 3.726216602 | -3.054406966 | 2.31E-07 | 5.23E-07 |
| BANF2 | 2.964495098 | -3.794908584 | 2.43E-07 | 5.48E-07 |
| DYNAP | 2.987770355 | -3.801377316 | 2.45E-07 | 5.52E-07 |
| DUOXA2 | 2.340752623 | 1.863483928 | 2.46E-07 | 5.55E-07 |
| GJA10 | 3.463187564 | -3.940980467 | 2.47E-07 | 5.57E-07 |
| GALP | 3.074427051 | -3.960712117 | 2.48E-07 | 5.58E-07 |
| LGALS13 | 4.336593455 | -3.566001058 | 2.49E-07 | 5.60E-07 |

| | | | | |
|-----------|-------------|--------------|----------|----------|
| APOA4 | 3.913150294 | -2.887295505 | 2.52E-07 | 5.68E-07 |
| NLRP13 | 4.155972931 | -2.920610303 | 2.54E-07 | 5.72E-07 |
| RPE65 | 2.956094038 | -2.133583101 | 2.55E-07 | 5.73E-07 |
| HHLA1 | 3.505509013 | -3.194423639 | 2.67E-07 | 5.99E-07 |
| GRK1 | 2.026474708 | -0.454692381 | 2.70E-07 | 6.06E-07 |
| INSL6 | 3.047136421 | -1.656584623 | 2.72E-07 | 6.11E-07 |
| C10orf113 | 3.111674599 | -2.639763231 | 2.79E-07 | 6.25E-07 |
| HRH3 | 3.991274753 | -1.99857366 | 2.83E-07 | 6.34E-07 |
| CACNG7 | 3.122347686 | -3.293068051 | 3.12E-07 | 6.97E-07 |
| TRIM49 | 3.503911339 | -3.821761833 | 3.16E-07 | 7.05E-07 |
| DMRTB1 | 3.370389994 | -3.98950579 | 3.31E-07 | 7.36E-07 |
| CASR | 2.833437438 | 0.986739158 | 3.42E-07 | 7.60E-07 |
| BHMG1 | 2.075924021 | -3.18971946 | 3.72E-07 | 8.24E-07 |
| EMX2 | 3.754770405 | -0.924974766 | 3.82E-07 | 8.46E-07 |
| CST11 | 2.657587481 | -3.993237477 | 3.90E-07 | 8.62E-07 |
| FOXI1 | 3.081099241 | -0.63425196 | 4.02E-07 | 8.87E-07 |
| IGF2 | 2.211235193 | 7.530557264 | 4.08E-07 | 9.00E-07 |
| PRLHR | 3.992345934 | -1.777276048 | 4.09E-07 | 9.02E-07 |
| OTOR | 2.926572456 | -3.487135977 | 4.21E-07 | 9.26E-07 |
| KLK15 | 3.297354744 | -3.503159419 | 4.36E-07 | 9.59E-07 |
| DRGX | 2.192612784 | 1.279217086 | 4.37E-07 | 9.61E-07 |
| NPY | 5.211056755 | 2.603792639 | 4.40E-07 | 9.68E-07 |
| SNX31 | 2.216336049 | -1.382933793 | 4.57E-07 | 1.00E-06 |
| GPRC6A | 3.271213004 | -2.746094179 | 4.58E-07 | 1.01E-06 |
| CNBD1 | 2.954969731 | -3.810638486 | 4.63E-07 | 1.02E-06 |
| LUZP4 | 3.328200327 | -3.857653101 | 4.69E-07 | 1.03E-06 |
| KLK13 | 2.289953521 | 2.841014354 | 4.81E-07 | 1.05E-06 |
| HDGFL1 | 3.872818585 | -3.422513463 | 5.04E-07 | 1.10E-06 |
| IFITM5 | 2.331662312 | -1.637399513 | 5.10E-07 | 1.11E-06 |
| PCK1 | 3.517792368 | 1.98349867 | 5.21E-07 | 1.14E-06 |
| GABRG2 | 4.159823252 | -1.092670001 | 5.38E-07 | 1.17E-06 |
| MAGEA2 | 2.951769642 | -4.051436914 | 5.58E-07 | 1.22E-06 |
| TTR | 3.423798577 | 1.17144357 | 5.84E-07 | 1.27E-06 |
| ADH1C | 2.131167302 | 4.559576739 | 5.85E-07 | 1.27E-06 |
| SLURP1 | 2.244644997 | -3.574610648 | 6.28E-07 | 1.36E-06 |
| HHLA2 | 2.269023328 | 4.976617524 | 6.35E-07 | 1.38E-06 |
| RFPL4B | 3.320164247 | -3.078921191 | 6.37E-07 | 1.38E-06 |
| PSG7 | 4.301630872 | -3.441092994 | 6.41E-07 | 1.39E-06 |
| ABCG8 | 2.706802147 | -3.057981247 | 6.61E-07 | 1.43E-06 |
| FAM9B | 2.676918411 | -0.985138242 | 6.69E-07 | 1.45E-06 |

| | | | | |
|------------|--------------|--------------|----------|----------|
| KCNK10 | 2.174918624 | -0.615086679 | 6.83E-07 | 1.48E-06 |
| CDR1 | 2.058298425 | -2.048871075 | 7.24E-07 | 1.56E-06 |
| OR1J1 | 2.127714068 | -3.862144763 | 7.31E-07 | 1.57E-06 |
| KLK3 | -2.158269955 | -1.998711551 | 7.89E-07 | 1.70E-06 |
| TPH2 | 2.572667917 | -2.984335461 | 8.53E-07 | 1.83E-06 |
| CLPS | 2.749076154 | -2.78860184 | 8.68E-07 | 1.86E-06 |
| C11orf53 | 2.689556483 | 0.387990047 | 8.68E-07 | 1.86E-06 |
| GSG1L2 | 4.001914138 | -3.366690915 | 8.83E-07 | 1.89E-06 |
| NBPF4 | 3.007454881 | -2.813862111 | 8.90E-07 | 1.90E-06 |
| ESX1 | 3.8260736 | -3.630384314 | 8.90E-07 | 1.90E-06 |
| HBE1 | 2.939989506 | -1.026446054 | 9.10E-07 | 1.94E-06 |
| MCHR2 | 2.823933421 | -3.588755925 | 9.18E-07 | 1.96E-06 |
| SERPINB7 | 2.5303368 | 0.892628393 | 9.58E-07 | 2.04E-06 |
| BRINP2 | 2.093352349 | -1.011842058 | 9.72E-07 | 2.07E-06 |
| TAC1 | 4.815660428 | 2.003296662 | 1.01E-06 | 2.14E-06 |
| PKLR | 2.182406261 | -3.102646163 | 1.05E-06 | 2.23E-06 |
| OPRM1 | 2.350593738 | -3.874025022 | 1.07E-06 | 2.26E-06 |
| AP003419.1 | 2.232390949 | -3.837235806 | 1.09E-06 | 2.30E-06 |
| GBX1 | 2.461056775 | -2.767455764 | 1.12E-06 | 2.38E-06 |
| SSX3 | 4.128465286 | -3.502861203 | 1.13E-06 | 2.38E-06 |
| ANTXRL | 2.044449151 | -2.697822401 | 1.16E-06 | 2.45E-06 |
| IL36A | 2.493164878 | -3.983726306 | 1.17E-06 | 2.48E-06 |
| CYP2C19 | 2.523786317 | -3.396391205 | 1.21E-06 | 2.56E-06 |
| SCG3 | 2.24241112 | 1.899575797 | 1.26E-06 | 2.65E-06 |
| UCN3 | 2.606066317 | 3.506931042 | 1.28E-06 | 2.70E-06 |
| OR1J4 | 2.158292986 | -3.70503307 | 1.31E-06 | 2.76E-06 |
| OR51B5 | 2.530678944 | -1.640478686 | 1.39E-06 | 2.92E-06 |
| ZNF729 | 3.578640624 | -3.039639161 | 1.39E-06 | 2.93E-06 |
| PVALEF | 2.003429363 | -3.800546551 | 1.44E-06 | 3.01E-06 |
| ASB11 | 2.104716215 | -0.691953781 | 1.47E-06 | 3.07E-06 |
| FRG2C | 2.22193452 | -3.256031328 | 1.47E-06 | 3.07E-06 |
| SOX1 | 3.698795012 | -1.9808437 | 1.49E-06 | 3.11E-06 |
| 11-Mar | 4.337419486 | -1.677958659 | 1.50E-06 | 3.15E-06 |
| NKAIN2 | 2.005975503 | -0.036899407 | 1.61E-06 | 3.35E-06 |
| SERPINA11 | 2.971152115 | -2.147362901 | 1.61E-06 | 3.35E-06 |
| GALNTL5 | 2.54752727 | -3.94198262 | 1.61E-06 | 3.36E-06 |
| DPCR1 | 2.556491985 | 6.225657965 | 1.61E-06 | 3.36E-06 |
| ANKRD30BL | 2.640526038 | -3.701504261 | 1.68E-06 | 3.50E-06 |
| FAM25A | 2.957363155 | -3.606394576 | 1.75E-06 | 3.64E-06 |
| ATCAY | 2.350000638 | -2.426307923 | 1.82E-06 | 3.76E-06 |

| | | | | |
|-----------|-------------|--------------|----------|----------|
| CCKAR | 3.402986713 | -2.541856888 | 1.83E-06 | 3.79E-06 |
| SCGB2A2 | 3.934390819 | -3.359616739 | 1.89E-06 | 3.91E-06 |
| PNLIPRP3 | 3.284139889 | -2.078622891 | 1.95E-06 | 4.02E-06 |
| SPRR2A | 3.337001857 | 0.411485512 | 2.04E-06 | 4.20E-06 |
| PSG2 | 4.205908704 | -2.953782257 | 2.17E-06 | 4.45E-06 |
| CDH12 | 2.536318282 | -0.732448473 | 2.20E-06 | 4.51E-06 |
| LYPD4 | 2.911041844 | -3.426039376 | 2.24E-06 | 4.60E-06 |
| RNF113B | 2.487752033 | -2.927071343 | 2.26E-06 | 4.64E-06 |
| HAO1 | 3.234418356 | -2.694953151 | 2.27E-06 | 4.66E-06 |
| PNMA6F | 3.540652024 | -3.341597548 | 2.29E-06 | 4.69E-06 |
| FOXN4 | 2.344047346 | -0.661533641 | 2.30E-06 | 4.71E-06 |
| ADAM7 | 2.810272029 | -3.968247031 | 2.36E-06 | 4.83E-06 |
| KRTAP29-1 | 2.317180588 | -3.606162583 | 2.38E-06 | 4.87E-06 |
| PAX3 | 2.531211931 | -2.841453512 | 2.42E-06 | 4.94E-06 |
| TAS2R46 | 2.785595104 | -2.863051702 | 2.43E-06 | 4.97E-06 |
| SIX6 | 2.367062279 | -3.726642362 | 2.49E-06 | 5.08E-06 |
| ANXA13 | 2.186458983 | 1.012291446 | 2.59E-06 | 5.28E-06 |
| KRT9 | 2.745689323 | -3.56006636 | 2.69E-06 | 5.47E-06 |
| BLID | 3.164882608 | -3.151906606 | 2.73E-06 | 5.54E-06 |
| SRARP | 2.632379393 | -1.131705234 | 2.80E-06 | 5.69E-06 |
| AQP12B | 3.221775916 | -3.743987041 | 2.81E-06 | 5.71E-06 |
| CTNNA2 | 2.224393204 | -0.85705902 | 3.08E-06 | 6.24E-06 |
| DGAT2L6 | 2.422801157 | -3.116861906 | 3.19E-06 | 6.46E-06 |
| MAGEB17 | 2.240477015 | -2.0366748 | 3.28E-06 | 6.64E-06 |
| SVOP | 2.319217069 | -2.081446772 | 3.46E-06 | 6.98E-06 |
| BTBD17 | 2.595696698 | -2.884574956 | 3.52E-06 | 7.10E-06 |
| CT55 | 2.384687733 | -3.014922922 | 3.58E-06 | 7.21E-06 |
| KCNJ4 | 2.086909737 | -3.427121096 | 3.73E-06 | 7.51E-06 |
| KRT40 | 2.237043661 | 0.670343291 | 3.78E-06 | 7.59E-06 |
| GPR26 | 3.404653025 | -1.020267367 | 3.82E-06 | 7.67E-06 |
| CDC20B | 2.094961394 | 1.484256482 | 3.99E-06 | 8.00E-06 |
| MDGA2 | 2.911936121 | -1.553032093 | 4.17E-06 | 8.34E-06 |
| PCSK2 | 3.003424383 | 6.376489723 | 4.37E-06 | 8.73E-06 |
| GPR12 | 2.397799483 | -1.022732849 | 4.42E-06 | 8.82E-06 |
| ZNF679 | 3.604777449 | -3.460957514 | 4.44E-06 | 8.86E-06 |
| NBPF6 | 2.794300852 | -3.486760405 | 4.52E-06 | 9.01E-06 |
| TSPY1 | 3.679276861 | -3.810783567 | 4.57E-06 | 9.11E-06 |
| ACOT12 | 2.514097846 | -3.496140092 | 4.64E-06 | 9.25E-06 |
| RNASE7 | 2.056925963 | -1.658713695 | 4.69E-06 | 9.34E-06 |
| TMPRSS11F | 2.474019658 | -3.715090041 | 4.80E-06 | 9.55E-06 |

| | | | | |
|------------|-------------|--------------|----------|----------|
| IFNK | 3.486277506 | -2.401897947 | 5.07E-06 | 1.01E-05 |
| SPATA31D1 | 3.107507947 | -3.986071035 | 5.31E-06 | 1.05E-05 |
| PABPC1L2B | 3.420453076 | -3.598900567 | 5.32E-06 | 1.05E-05 |
| PAX2 | 2.884731842 | -2.350053929 | 5.34E-06 | 1.06E-05 |
| GAGE12J | 3.35803316 | -3.971297562 | 5.37E-06 | 1.06E-05 |
| AC115220.1 | 3.704605109 | -3.34381505 | 5.38E-06 | 1.06E-05 |
| OR4A16 | 3.564509536 | -3.864377068 | 5.41E-06 | 1.07E-05 |
| XKR7 | 2.698886397 | -0.105063912 | 5.59E-06 | 1.10E-05 |
| NLRP8 | 2.773967816 | -3.316403832 | 5.70E-06 | 1.13E-05 |
| OPRK1 | 2.084032057 | 0.4788882 | 5.84E-06 | 1.15E-05 |
| CRCT1 | 3.649704827 | -2.344184826 | 5.86E-06 | 1.16E-05 |
| NEUROG3 | 2.37928202 | -1.78774635 | 6.18E-06 | 1.22E-05 |
| ZNF723 | 3.264353038 | -2.609728194 | 6.40E-06 | 1.26E-05 |
| APOC3 | 4.044290943 | -1.471903115 | 6.51E-06 | 1.28E-05 |
| CLEC3A | 3.052763321 | -2.768079181 | 6.52E-06 | 1.28E-05 |
| CDH7 | 2.14405868 | -0.837055607 | 6.60E-06 | 1.29E-05 |
| PIK3C2G | 2.184855126 | 2.097782468 | 6.78E-06 | 1.33E-05 |
| C12orf40 | 2.602910469 | -3.094434412 | 6.90E-06 | 1.35E-05 |
| TLX3 | 3.25834887 | -3.22634767 | 7.09E-06 | 1.38E-05 |
| CEACAM18 | 4.006506396 | -3.197901682 | 7.18E-06 | 1.40E-05 |
| RPTN | 3.171098383 | -2.592610316 | 7.21E-06 | 1.41E-05 |
| PRSS48 | 2.716856941 | -2.017360606 | 7.32E-06 | 1.43E-05 |
| HHATL | 2.425173116 | 1.132945499 | 7.40E-06 | 1.44E-05 |
| CNPY1 | 2.154466693 | -3.753577735 | 7.75E-06 | 1.51E-05 |
| IL17A | 2.036227871 | -3.244714701 | 7.97E-06 | 1.55E-05 |
| PRORY | 4.112399926 | -3.495971439 | 8.48E-06 | 1.65E-05 |
| HOXB1 | 2.576840362 | -2.344128921 | 8.65E-06 | 1.68E-05 |
| NXPE1 | 2.056461739 | -3.071967383 | 9.12E-06 | 1.76E-05 |
| TRPC5 | 2.428742555 | -2.908486884 | 9.20E-06 | 1.78E-05 |
| CAPZA3 | 2.434665877 | -3.51501772 | 9.36E-06 | 1.81E-05 |
| DCAF12L1 | 2.984366471 | -2.08137494 | 9.38E-06 | 1.81E-05 |
| PRODH2 | 3.895880769 | -1.776033527 | 9.47E-06 | 1.83E-05 |
| REG1B | 3.57819122 | -3.613184659 | 9.51E-06 | 1.84E-05 |
| GNAT3 | 3.525567421 | -3.162286112 | 9.76E-06 | 1.88E-05 |
| CLCA4 | 2.156092123 | -0.670323272 | 9.85E-06 | 1.90E-05 |
| ZP2 | 2.54944594 | -0.439460281 | 9.93E-06 | 1.91E-05 |
| RHOXF2B | 3.444431853 | -3.863158138 | 1.02E-05 | 1.96E-05 |
| TUNAR | 3.890413566 | -1.256725921 | 1.03E-05 | 1.99E-05 |
| MEI4 | 2.219106041 | -1.355852149 | 1.04E-05 | 2.00E-05 |
| FAM46D | 2.035711991 | -3.868902913 | 1.05E-05 | 2.02E-05 |

| | | | | |
|---------|--------------|--------------|----------|----------|
| NDST4 | 2.965865473 | -2.444506503 | 1.05E-05 | 2.03E-05 |
| NPPB | 2.817539721 | -3.056038573 | 1.07E-05 | 2.06E-05 |
| TSPY2 | 3.922478493 | -3.563377829 | 1.11E-05 | 2.13E-05 |
| HSD3B1 | 3.330617091 | -2.641561645 | 1.11E-05 | 2.13E-05 |
| SPRR2F | 2.882582259 | -0.552713938 | 1.15E-05 | 2.20E-05 |
| EDDM3B | 2.818619544 | -3.224012677 | 1.17E-05 | 2.23E-05 |
| UMOD | -2.214411607 | -2.49173542 | 1.19E-05 | 2.28E-05 |
| C8A | 2.338277085 | 0.319856105 | 1.24E-05 | 2.37E-05 |
| KCTD4 | 2.586032528 | -2.261976062 | 1.25E-05 | 2.38E-05 |
| CASP14 | 3.879029139 | 1.090136321 | 1.36E-05 | 2.59E-05 |
| VTN | 2.025792861 | 3.733964821 | 1.41E-05 | 2.67E-05 |
| AMER3 | 2.61368917 | -2.385246101 | 1.43E-05 | 2.71E-05 |
| H2BFWT | 2.887482703 | -3.905627305 | 1.45E-05 | 2.75E-05 |
| NEFM | 2.194790097 | -0.275401507 | 1.46E-05 | 2.76E-05 |
| TRIM40 | 2.350395261 | -2.217705353 | 1.48E-05 | 2.80E-05 |
| OR8A1 | 2.745762486 | -4.047308919 | 1.49E-05 | 2.81E-05 |
| GKN1 | 3.686569563 | -1.880245654 | 1.59E-05 | 3.00E-05 |
| CT47B1 | 3.28046261 | -3.955393937 | 1.68E-05 | 3.17E-05 |
| HTR2C | 2.920811691 | -0.563806055 | 1.73E-05 | 3.26E-05 |
| SHISA9 | 2.552679461 | -0.024844446 | 1.84E-05 | 3.46E-05 |
| UNC5D | 2.545331444 | 0.810263487 | 1.86E-05 | 3.49E-05 |
| PRSS38 | 2.921767061 | -3.796821146 | 1.88E-05 | 3.53E-05 |
| OPTC | 2.039456568 | -3.857882455 | 1.89E-05 | 3.55E-05 |
| MYOD1 | 3.058679108 | -3.85807642 | 2.03E-05 | 3.80E-05 |
| DPPA5 | 3.534295436 | -2.815504189 | 2.09E-05 | 3.90E-05 |
| CCKBR | 2.034299436 | -1.946644119 | 2.16E-05 | 4.03E-05 |
| WFDC5 | 3.348079471 | 1.587193632 | 2.16E-05 | 4.03E-05 |
| SLC17A2 | 3.114535427 | -3.650215971 | 2.17E-05 | 4.03E-05 |
| AMBN | 2.435281254 | -3.719076934 | 2.20E-05 | 4.10E-05 |
| S100A7A | 3.403497553 | -1.588150171 | 2.26E-05 | 4.19E-05 |
| REG3A | 4.109430355 | -2.209242626 | 2.45E-05 | 4.54E-05 |
| TRIM43 | 2.857218188 | -3.888471105 | 2.91E-05 | 5.36E-05 |
| TSPY3 | 3.10437156 | -4.040595278 | 2.98E-05 | 5.48E-05 |
| TAS2R50 | 2.144861646 | -2.914736716 | 3.11E-05 | 5.72E-05 |
| UGT2B4 | 2.131436339 | 2.085484142 | 3.14E-05 | 5.77E-05 |
| UPK1B | 2.685490609 | 3.6409022 | 3.22E-05 | 5.91E-05 |
| GFRA4 | 2.753955485 | -3.948847351 | 3.25E-05 | 5.95E-05 |
| UBE2U | 2.191420064 | -2.125089771 | 3.28E-05 | 6.00E-05 |
| KRT6C | 2.412923579 | -0.531112991 | 3.37E-05 | 6.16E-05 |
| KRT38 | 2.571028803 | -3.282856604 | 3.45E-05 | 6.31E-05 |

| | | | | |
|-----------|-------------|--------------|-------------|-------------|
| SLC6A18 | 2.195585659 | -3.096404096 | 3.54E-05 | 6.45E-05 |
| CTXN3 | 2.254009505 | -3.413262335 | 3.65E-05 | 6.65E-05 |
| ADAMTS19 | 2.631127882 | -0.485173447 | 3.74E-05 | 6.81E-05 |
| TSPYL6 | 2.262692437 | -2.399915362 | 3.76E-05 | 6.85E-05 |
| MRGPRX3 | 2.252270535 | -3.558359224 | 3.76E-05 | 6.86E-05 |
| TNMD | 2.726861868 | -0.483070789 | 3.85E-05 | 7.02E-05 |
| OR9A4 | 2.378839174 | -3.677071369 | 3.87E-05 | 7.05E-05 |
| SSX5 | 3.488914604 | -1.305901433 | 3.94E-05 | 7.16E-05 |
| TMEM196 | 2.990043192 | -2.588389892 | 4.09E-05 | 7.42E-05 |
| SPINK8 | 2.117335219 | -3.63431214 | 4.13E-05 | 7.50E-05 |
| TFAP2B | 2.7949111 | 0.436664561 | 4.19E-05 | 7.59E-05 |
| LGALS14 | 3.259888442 | -3.08410295 | 4.46E-05 | 8.07E-05 |
| GLRA4 | 2.593208039 | -2.666243415 | 4.48E-05 | 8.10E-05 |
| SELENOV | 2.30246836 | -3.760743848 | 4.70E-05 | 8.49E-05 |
| SMIM32 | 2.063746947 | -2.277335253 | 4.75E-05 | 8.58E-05 |
| SERPINB13 | 2.634988402 | 0.115630082 | 5.10E-05 | 9.18E-05 |
| OR1N2 | 2.862517833 | -3.611471254 | 5.11E-05 | 9.20E-05 |
| TAAR1 | 2.560234837 | -3.407018594 | 5.17E-05 | 9.30E-05 |
| KRT37 | 2.420804077 | -3.992569831 | 5.58E-05 | 0.000100013 |
| AGXT2 | 2.325543776 | -2.615733729 | 5.84E-05 | 0.000104593 |
| CRISP1 | 3.651434656 | -3.581067196 | 5.90E-05 | 0.000105507 |
| CLVS2 | 3.188272102 | -1.855765091 | 6.13E-05 | 0.000109349 |
| TBX20 | 2.060153709 | -2.584367805 | 6.14E-05 | 0.000109632 |
| CLCA1 | 2.957131416 | -0.896224454 | 6.16E-05 | 0.000109914 |
| MC2R | 2.067300919 | -2.615979649 | 6.18E-05 | 0.000110241 |
| EPHA5 | 2.239142988 | -0.07619657 | 6.81E-05 | 0.000121 |
| AKAIN1 | 2.627109556 | -3.387970908 | 7.76E-05 | 0.000137136 |
| GABRB1 | 2.336456452 | -2.355663447 | 8.00E-05 | 0.000141224 |
| TLE7 | 3.210094271 | -3.586549771 | 8.34E-05 | 0.000146871 |
| DBX1 | 2.432161039 | -3.961645913 | 9.02E-05 | 0.00015844 |
| CXorf67 | 2.218162336 | -1.529991287 | 0.000116026 | 0.000201432 |
| GIF | 2.495742701 | -2.701001996 | 0.000131172 | 0.00022649 |
| FSHB | 3.348451378 | -3.8088624 | 0.000153217 | 0.000262527 |
| SERPINB3 | 2.083320994 | 3.160149919 | 0.000160596 | 0.000274575 |
| DEFA6 | 3.331859614 | -2.672711587 | 0.000163724 | 0.000279737 |
| RTP1 | 2.356926282 | -2.282417762 | 0.000175311 | 0.000298746 |
| SCGB1D2 | 2.829233895 | -2.740073133 | 0.000177279 | 0.000301985 |
| LCE3D | 3.12040827 | -3.412416797 | 0.000200121 | 0.000339016 |
| C10orf99 | 2.591268307 | -2.610861359 | 0.000222508 | 0.000375223 |
| SI | 2.568687103 | -3.530925425 | 0.000228789 | 0.000385527 |

| | | | | |
|------------|-------------|--------------|-------------|-------------|
| DEFB4B | 2.472474831 | -3.870851993 | 0.00024631 | 0.000413322 |
| FEV | 2.019942087 | -2.426144327 | 0.000251869 | 0.000422298 |
| DEFB4A | 2.078979763 | -1.234338959 | 0.000253537 | 0.000424898 |
| PAQR9 | 2.949916023 | -1.382058364 | 0.000257056 | 0.000430517 |
| PABPC1L2A | 2.266177766 | -3.910588752 | 0.000291439 | 0.000485098 |
| GP2 | 2.834187099 | 2.806999442 | 0.00033167 | 0.000549136 |
| PRAC1 | 2.805331448 | -3.771091133 | 0.000338154 | 0.000559361 |
| LCN9 | 3.012722436 | -3.210843729 | 0.000340602 | 0.000563154 |
| SPRR2G | 2.848418097 | -1.554429736 | 0.000352007 | 0.000581269 |
| RIPPLY2 | 2.161647998 | -2.539502624 | 0.000367395 | 0.000605465 |
| AC011473.4 | 2.385768302 | -3.840918367 | 0.000396318 | 0.00065094 |
| MC3R | 2.567253663 | -4.037618417 | 0.000455711 | 0.000743236 |
| HTR1E | 2.229267289 | -3.491185865 | 0.000471248 | 0.000767197 |
| MPC1L | 2.355753327 | -3.280154522 | 0.000511296 | 0.000828747 |
| SULT2A1 | 2.044913046 | -3.544944013 | 0.000535562 | 0.000866441 |
| MORC1 | 2.055425407 | -3.311521412 | 0.000584066 | 0.000940975 |
| ZFP42 | 2.01271759 | 1.205174409 | 0.000594815 | 0.000957612 |
| KPRP | 2.759066892 | -3.389314053 | 0.000770674 | 0.001225815 |
| RHOXF2 | 2.557998234 | -3.572406239 | 0.00078998 | 0.00125531 |
| SPRR2E | 2.660339944 | -0.75432663 | 0.000835922 | 0.0013254 |
| HMX1 | 2.107093324 | -3.718968181 | 0.000878863 | 0.001390695 |
| TMIGD1 | 2.162985624 | -3.638328976 | 0.00110251 | 0.001726203 |
| PNMA6E | 2.470332435 | -1.329126277 | 0.001382635 | 0.002141483 |
| CELA3A | 2.268603717 | -3.208968698 | 0.001989242 | 0.003023655 |
| VSTM2B | 2.215774415 | -3.880289424 | 0.001999962 | 0.003039184 |
