| Genes | RMSE | Observed Mean | Observed Stdev | RMSE:Stdev | Calculated R^2 |
|-----------|------|----------------------|----------------|------------|----------------|
| UNCX | 0.68 | -0.305800814 | 0 | -1 | 0 |
| PCDH18 | 0.56 | 0.010162176 | 0.772026239 | 0.72309607 | 0.477132079 |
| UPK2 | 0.54 | -0.050053668 | 0.680016708 | 0.79422477 | 0.369207021 |
| BPI | 1.03 | 0.056281047 | 1.258518922 | 0.81757919 | 0.331564266 |
| ACSM2B | 1.1 | 0.037772005 | 1.341875295 | 0.81788054 | 0.331071416 |
| ENPEP | 0.53 | -0.092068273 | 0.635045279 | 0.82927158 | 0.312308652 |
| RSPO1 | 0.46 | -0.125326465 | 0.548335724 | 0.83156425 | 0.308500895 |
| CA9 | 0.81 | 0.126138959 | 0.964826988 | 0.83994693 | 0.294489162 |
| S100A14 | 0.61 | -0.105905776 | 0.720341693 | 0.84341223 | 0.288655817 |
| ACSM2A | 1.14 | -0.017077619 | 1.334251884 | 0.85579403 | 0.267616577 |
| S100B | 0.74 | 0.03408051 | 0.848600546 | 0.86934256 | 0.244243517 |
| STEAP2 | 0.91 | -0.035618953 | 1.035682459 | 0.88222997 | 0.221670282 |
| MRGPRF | 0.74 | 0.079634228 | 0.841816193 | 0.88254231 | 0.221119075 |
| DPPA3 | 1.36 | 0.21207289 | 1.522728795 | 0.89020715 | 0.20753123 |
| AOC1 | 0.77 | -0.014355308 | 0.861329276 | 0.89351584 | 0.201629445 |
| FCGR3B | 1.1 | 0.022118285 | 1.223347694 | 0.89563783 | 0.197832876 |
| TMEM119 | 0.86 | 0.021408987 | 0.959608955 | 0.90093123 | 0.188322917 |
| CYP11B1 | 1.43 | 0.003715615 | 1.583154377 | 0.90245236 | 0.18557974 |
| HIST1H2BH | 1.21 | 0.308593039 | 1.33114327 | 0.91163732 | 0.1689174 |
| TRPS1 | 0.95 | 0.006932135 | 1.036109875 | 0.9183398 | 0.156652008 |
| PSMB11 | 1.66 | 0.215220859 | 1.798759101 | 0.92345856 | 0.147224286 |
| AZGP1 | 1.02 | -0.044933372 | 1.097573607 | 0.92582945 | 0.142839831 |
| HIST1H1B | 1.15 | 0.171369084 | 1.231821254 | 0.93079334 | 0.133623764 |
| SOX17 | 0.99 | -0.020815833 | 1.062668273 | 0.93257464 | 0.130304533 |
| GYG2 | 1.11 | 0.090912973 | 1.192070999 | 0.93368052 | 0.128240681 |
| EDNRB | 0.88 | 0.063004994 | 0.942125124 | 0.93604139 | 0.123826518 |
| DMBT1 | 1.32 | 0.070066586 | 1.414197228 | 0.9363358 | 0.123275275 |
| INMT | 0.7 | -0.11847797 | 0.742472695 | 0.94078953 | 0.114915064 |
| SERPINA6 | 1.19 | 0.044806862 | 1.258428342 | 0.94266927 | 0.111374644 |
| FCGBP | 1.51 | -0.001765944 | 1.603631703 | 0.94388146 | 0.109087789 |
| CPB2 | 1.08 | 0.032695568 | 1.141727967 | 0.94448812 | 0.107942191 |
| HIST1H4C | 1.2 | 0.169576972 | 1.263788453 | 0.94710082 | 0.103000042 |
| VRTN | 0.93 | -0.064150388 | 0.973561601 | 0.95109519 | 0.095417949 |
| HIST1H4D | 1.56 | 0.372677093 | 1.638659848 | 0.95168978 | 0.094286555 |
| MAB21L2 | 0.8 | 0.044652541 | 0.837052822 | 0.95273363 | 0.092298625 |
| FOXC1 | 0.76 | -0.115707281 | 0.791521127 | 0.95430452 | 0.089302893 |
| C4BPA | 1.37 | 0.043664982 | 1.433908788 | 0.95555911 | 0.086906789 |
| AGXT2 | 1.44 | 0.126497073 | 1.508211965 | 0.95635621 | 0.085382796 |
| SERPINB4 | 0.7 | 0.004308591 | 0.727794438 | 0.95833543 | 0.081593202 |
| CYP11A1 | 0.56 | -0.128223884 | 0.582124518 | 0.95969634 | 0.078982935 |
| MEST | 0.96 | 0.021510896 | 1.003990778 | 0.96055254 | 0.07733881 |
| OMD | 1.05 | 0.106925837 | 1.095289238 | 0.96310807 | 0.072422853 |

| PIGR | 1.3 | 0.027069622 | 1.350121796 | 0.96334913 | 0.071958446 |
|-----------|------|--------------|-------------|------------|-------------|
| HIST1H1E | 1.5 | 0.205935134 | 1.555492259 | 0.96377377 | 0.071140114 |
| HIST1H2AL | 0.98 | 0.116055538 | 1.02059569 | 0.9648206 | 0.069121216 |
| NANOG | 1.97 | 0.253131574 | 2.040149138 | 0.96595326 | 0.066934292 |
| MITF | 1.07 | 0.06796928 | 1.107536174 | 0.96639612 | 0.066078541 |
| FAM101A | 1.73 | 0.474971686 | 1.785054117 | 0.96782462 | 0.063315509 |
| LIN28A | 1.96 | 0.30683271 | 2.022760408 | 0.96792151 | 0.063127943 |
| HIST1H3D | 1.59 | 0.166116784 | 1.646958164 | 0.96810829 | 0.062766339 |
| FCN1 | 0.91 | 0.070822339 | 0.937360693 | 0.97142604 | 0.056331441 |
| HBA1 | 0.85 | -0.051110863 | 0.872667307 | 0.97454082 | 0.050270186 |
| MUC16 | 1.25 | 0.004168635 | 1.283571064 | 0.9749442 | 0.049483799 |
| RAB44 | 0.68 | 0.02447018 | 0.692058902 | 0.97588601 | 0.047646505 |
| CRISP3 | 1.57 | 0.205951788 | 1.605515632 | 0.97668027 | 0.046095648 |
| NTRK2 | 0.75 | -0.062129305 | 0.771492346 | 0.97769712 | 0.044108342 |
| PLG | 0.98 | -0.008329297 | 1.004914593 | 0.97788391 | 0.043743066 |
| SPNS3 | 0.7 | -0.231817462 | 0.717647625 | 0.981331 | 0.036989466 |
| CFTR | 8.0 | -0.121474707 | 0.814376944 | 0.98308056 | 0.033552616 |
| TMEM72 | 1.52 | 0.089092772 | 1.541506845 | 0.98598996 | 0.027823807 |
| PHOSPHO1 | 0.55 | -0.136183888 | 0.558763063 | 0.98617833 | 0.027452297 |
| TMEFF2 | 1.7 | 0.171980744 | 1.72012372 | 0.98618145 | 0.027446154 |
| FAM107A | 1.08 | 0.113722935 | 1.091845201 | 0.98638515 | 0.02704434 |
| GJB1 | 1.53 | 0.199735205 | 1.554904737 | 0.98690223 | 0.026023986 |
| PEG3 | 1.74 | 0.269848076 | 1.75879734 | 0.98694173 | 0.025946018 |
| HIST1H2BO | 1.69 | 0.25120127 | 1.70974394 | 0.98810834 | 0.023641906 |
| HIST1H3F | 1.2 | 0.257218805 | 1.218175212 | 0.98858455 | 0.022700597 |
| CA3 | 1.24 | 0.212993798 | 1.249207734 | 0.98896518 | 0.021947883 |
| PTPRZ1 | 1.03 | 0.091683997 | 1.039330227 | 0.98978576 | 0.020324153 |
| SLC3A1 | 1.56 | 0.029923427 | 1.573513462 | 0.99046413 | 0.018980801 |
| PRDM14 | 2.01 | 0.316419585 | 2.031072026 | 0.99157667 | 0.016775709 |
| HIST1H2BF | 1.62 | 0.230960091 | 1.633249268 | 0.99170095 | 0.01652923 |
| BCAN | 1.69 | 0.235281482 | 1.697312007 | 0.99341103 | 0.013134531 |
| MYBPC1 | 1.8 | 0.261404798 | 1.813132108 | 0.9937727 | 0.012415819 |
| APCS | 0.97 | 0.027986272 | 0.97589803 | 0.99444555 | 0.011078052 |
| CEACAM8 | 1.61 | 0.080804531 | 1.618586272 | 0.99456713 | 0.010836234 |
| HIST1H4L | 1.68 | 0.320320031 | 1.68880111 | 0.99531486 | 0.009348327 |
| GREM1 | 0.66 | -0.031429515 | 0.660810862 | 0.99541363 | 0.009151703 |
| HMP19 | 1.71 | 0.250409773 | 1.714961791 | 0.99676417 | 0.006461183 |
| SOX8 | 1.75 | 0.223514198 | 1.748037661 | 0.99874936 | 0.002499724 |
| TLX2 | 0.93 | -0.159248981 | 0.933653155 | 0.99926476 | 0.001469935 |
| MMP8 | 2.1 | 0.360868945 | 2.098298154 | 0.99973133 | 0.00053726 |
| HIST1H4B | 1.24 | 0.110315504 | 1.240235003 | 0.99973517 | 0.000529586 |
| ELAVL4 | 1.04 | 0.051927736 | 1.041110334 | 0.99976363 | 0.00047269 |
| CHRM1 | 1.81 | 0.26867915 | 1.813558319 | 0.99979998 | 0.0004 |

| HIST1H3J | ATCAV | 1.04 | 0.210440007 | 1 026964055 | 1 00000274 | 0.001000205 |
|--|-----------|------|--------------|-------------|------------|--------------|
| F13B | ATCAY | 1.94 | 0.310440907 | 1.936864055 | 1.00090374 | -0.001808295 |
| TMEM100 1.91 0.364960263 1.905920265 1.00220308 -0.004411 G6PC 2.01 0.409934147 2.005861434 1.00230943 -0.004624 FGF8 1.48 0.156051897 1.479212334 1.00279684 -0.005601 GRIA3 1.61 0.286757921 1.602883109 1.00463767 -0.009296 FAM131B 1.44 0.204885106 1.437498603 1.00464777 -0.009317 PADI4 1.39 0.232413933 1.383376211 1.00473858 -0.009499 SERPINB3 0.89 0.156932514 0.881348285 1.00556366 -0.011339 ATP6V0A4 1.15 0.045882514 1.43141523 1.00568503 -0.011922 DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.0123 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2BB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 | | | | | | |
| G6PC 2.01 0.409934147 2.005861434 1.00230943 -0.004624 FGF8 1.48 0.156051897 1.479212334 1.00279684 -0.005601 GRIA3 1.61 0.286757921 1.602883109 1.00463767 -0.009296 FAM131B 1.44 0.204885106 1.437498603 1.00473858 -0.009317 PADI4 1.39 0.232413933 1.383376211 1.00473858 -0.009499 SERPINB3 0.89 0.156932514 0.881348285 1.00551523 -0.011060 HIST1H2BG 1.7 0.152004862 1.694322449 1.00565366 -0.011339 ATP6V0A4 1.15 0.045882514 1.143141523 1.00568503 -0.01140 CDHR5 1.3 0.140153113 1.296337735 1.00594377 -0.011223 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2BB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 TITIH5 1.37 0.105502099 | | | | | | |
| FGF8 1.48 0.156051897 1.479212334 1.00279684 -0.005601 GRIA3 1.61 0.286757921 1.602883109 1.00463767 -0.009296 FAM131B 1.44 0.204885106 1.437498603 1.00464777 -0.009317 PADI4 1.39 0.232413933 1.383376211 1.00473858 -0.009499 SERPINB3 0.89 0.156932514 0.881348285 1.00551523 -0.011060 HIST1H2BG 1.7 0.152004862 1.694322449 1.00565366 -0.011339 ATP6V0A4 1.15 0.045882514 1.143141523 1.00568503 -0.01140 CDHRS 1.3 0.140153113 1.296337735 1.00594377 -0.011922 DPPA5 1.59 0.207773197 1.584283114 1.00609643 -0.01223 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.011493 HIST1H2AB 1.2 0.11968931 1.188290053 1.0072418 -0.01453 GC1orf61 2.08 0.340345948 | | | | | | -0.004411018 |
| GRIA3 1.61 0.286757921 1.602883109 1.00463767 -0.009296 FAM131B 1.44 0.204885106 1.437498603 1.00464777 -0.009317 PADI4 1.39 0.232413933 1.383376211 1.00473858 -0.009499 SERPINB3 0.89 0.156932514 0.881348285 1.00551523 -0.011060 HIST1H2BG 1.7 0.152004862 1.694322449 1.00565366 -0.011339 ATP6V0A4 1.15 0.045882514 1.143141523 1.00568503 -0.01140 CDHRS 1.3 0.140153113 1.296337735 1.00594377 -0.011922 DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.01223 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2BB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 ITIH5 1.37 0.105502099 | | | | | | -0.004624195 |
| FAM131B 1.44 0.204885106 1.437498603 1.00464777 -0.009317 PADI4 1.39 0.232413933 1.383376211 1.00473858 -0.009499 SERPINB3 0.89 0.156932514 0.881348285 1.00551523 -0.011060 HIST1H2BG 1.7 0.152004862 1.694322449 1.00565366 -0.011390 ATP6V0A4 1.15 0.045882514 1.143141523 1.00568503 -0.01140 CDHRS 1.3 0.140153113 1.296337735 1.00594377 -0.011922 DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.01223 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 Clorf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.0242460 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.023589 PEBP4 1.70 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025993 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.032066 CARTPT 1.37 0.161611809 1.346579064 1.01587698 -0.032066 CARTPT 1.37 0.161611809 1.346579064 1.01587698 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.034936 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.034936 CCL24 1.93 0.2664875589 1.89131204 1.01958452 -0.0349412 CCL24 1.93 0.2664875589 1.89131204 1.01958452 -0.0349412 CCL24 1.93 0.2664875589 1.89131204 1.01958452 -0.0349412 CCL24 1.99 0.23513685 1.867937759 1.02002025 -0.0404411 | | | | | | -0.005601508 |
| PADI4 1.39 0.232413933 1.383376211 1.00473858 -0.0094999 SERPINB3 0.89 0.156932514 0.881348285 1.00551523 -0.011060 HIST1H2BG 1.7 0.152004862 1.694322449 1.00565366 -0.011339 ATP6V0A4 1.15 0.045882514 1.143141523 1.00568503 -0.01140 CDHR5 1.3 0.140153113 1.296337735 1.00594377 -0.011922 DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.01233 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.01663 C1orf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 | GRIA3 | 1.61 | 0.286757921 | 1.602883109 | 1.00463767 | -0.009296848 |
| SERPINB3 0.89 0.156932514 0.881348285 1.00551523 -0.011060 HIST1H2BG 1.7 0.152004862 1.694322449 1.00565366 -0.011339 ATP6V0A4 1.15 0.045882514 1.143141523 1.00568503 -0.01140 CDHR5 1.3 0.140153113 1.296337735 1.00594377 -0.011922 DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.01232 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 C1orf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.03603057 1.24982173 1.0093898 -0.018866 HIST1H2BL 1.3 0.12279606 | FAM131B | 1.44 | 0.204885106 | 1.437498603 | 1.00464777 | -0.009317146 |
| HIST1H2BG | PADI4 | 1.39 | 0.232413933 | 1.383376211 | 1.00473858 | -0.009499618 |
| ATP6V0A4 1.15 0.045882514 1.143141523 1.00568503 -0.01140 CDHR5 1.3 0.140153113 1.296337735 1.00594377 -0.011922 DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.01223 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.014387 HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 Clorf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 < | SERPINB3 | 0.89 | 0.156932514 | 0.881348285 | 1.00551523 | -0.011060876 |
| CDHR5 1.3 0.140153113 1.296337735 1.00594377 -0.011922 DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.01223 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 C1orf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.023088 BBOX1 1.59 0.14069859 1.574035207 1.01177624 -0.023088 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024524 SPINK1 1.77 0.289114987 | HIST1H2BG | 1.7 | 0.152004862 | 1.694322449 | 1.00565366 | -0.011339292 |
| DPPA5 1.59 0.207723197 1.584283114 1.00609643 -0.012231 LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 C1orf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024224 SPINK1 1.77 0.289114987 < | ATP6V0A4 | 1.15 | 0.045882514 | 1.143141523 | 1.00568503 | -0.01140237 |
| LRRC15 0.84 0.029273811 0.837562907 1.0065724 -0.013187 HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 C1orf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01220576 -0.024224 SPINK1 1.77 0.28914987 1.749968897 1.01220576 -0.024743 AMPD1 1.88 0.252620653 <t< td=""><td>CDHR5</td><td>1.3</td><td>0.140153113</td><td>1.296337735</td><td>1.00594377</td><td>-0.011922858</td></t<> | CDHR5 | 1.3 | 0.140153113 | 1.296337735 | 1.00594377 | -0.011922858 |
| HIST1H2AB 1.2 0.119868913 1.188290053 1.0072418 -0.01453 ITIH5 1.37 0.105502099 1.355070865 1.00804922 -0.016163 C1orf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024264 SPINK1 1.77 0.28914987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.88 0.252620653 1.856363383 1.01246926 -0.02593 ADCYAP1R1 2.07 0.38039619 | DPPA5 | 1.59 | 0.207723197 | 1.584283114 | 1.00609643 | -0.01223003 |
| ITIH5 | LRRC15 | 0.84 | 0.029273811 | 0.837562907 | 1.0065724 | -0.013187992 |
| C1orf61 2.08 0.340345948 2.064279799 1.00823986 -0.016547 PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024249 SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025983 LZTS1 0.78 -0.06108803 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 | HIST1H2AB | 1.2 | 0.119868913 | 1.188290053 | 1.0072418 | -0.01453605 |
| PLP1 2.05 0.383801336 2.034196452 1.00886755 -0.017813 TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024224 SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024560 PPP1R1A 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 | ITIH5 | 1.37 | 0.105502099 | 1.355070865 | 1.00804922 | -0.016163226 |
| TPSAB1 1.26 0.036030557 1.24982173 1.00938908 -0.018866 HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024224 SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 | C1orf61 | 2.08 | 0.340345948 | 2.064279799 | 1.00823986 | -0.016547605 |
| HIST1H2BL 1.13 0.122792606 1.123177866 1.0097161 -0.019526 HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024224 SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.0301266 AGT 1.64 0.322048161 | PLP1 | 2.05 | 0.383801336 | 2.034196452 | 1.00886755 | -0.017813727 |
| HEPACAM 1.9 0.345613053 1.87575872 1.01147836 -0.023088 BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024224 SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 <t< td=""><td>TPSAB1</td><td>1.26</td><td>0.036030557</td><td>1.24982173</td><td>1.00938908</td><td>-0.018866315</td></t<> | TPSAB1 | 1.26 | 0.036030557 | 1.24982173 | 1.00938908 | -0.018866315 |
| BBOX1 1.59 0.114069859 1.574035207 1.01172624 -0.023589 PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024224 SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.0301260 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.0320060 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 | HIST1H2BL | 1.13 | 0.122792606 | 1.123177866 | 1.0097161 | -0.019526609 |
| PEBP4 1.72 0.270596846 1.69959957 1.01203999 -0.024224 SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.034412 KRT17 0.75 -0.013696614 | HEPACAM | 1.9 | 0.345613053 | 1.87575872 | 1.01147836 | -0.023088471 |
| SPINK1 1.77 0.289114987 1.749968897 1.01220576 -0.024560 PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.034412 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 | BBOX1 | 1.59 | 0.114069859 | 1.574035207 | 1.01172624 | -0.023589981 |
| PPP1R1A 1.89 0.289989916 1.869084677 1.01229614 -0.024743 AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.025093 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.034412 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.037501 STC2 1.12 0.003299941 1. | PEBP4 | 1.72 | 0.270596846 | 1.69959957 | 1.01203999 | -0.024224941 |
| AMPD1 1.88 0.252620653 1.856363383 1.01246926 -0.0250933 ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.0272244 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.0320060 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.0344120 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.0349360 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.0375010 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.038190 MB 1.52 0.286677928 1.496115645 1.01911578 -0.0385960 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.039550 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.0404410 CXCL8 1.91 0.2 | SPINK1 | 1.77 | 0.289114987 | 1.749968897 | 1.01220576 | -0.024560501 |
| ADCYAP1R1 2.07 0.380399619 2.040462464 1.01290826 -0.025983 LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.034412 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.037501 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03955 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | PPP1R1A | 1.89 | 0.289989916 | 1.869084677 | 1.01229614 | -0.024743465 |
| LZTS1 0.78 -0.061088003 0.767815716 1.01352061 -0.027224 BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.034412 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.037501 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204< | AMPD1 | 1.88 | 0.252620653 | 1.856363383 | 1.01246926 | -0.025093994 |
| BHMT2 0.76 0.061718329 0.751787465 1.0144559 -0.029120 HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.034412 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.037501 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03955 CXCL8 1.91 0.23513685 1.867937759 <td>ADCYAP1R1</td> <td>2.07</td> <td>0.380399619</td> <td>2.040462464</td> <td>1.01290826</td> <td>-0.025983137</td> | ADCYAP1R1 | 2.07 | 0.380399619 | 2.040462464 | 1.01290826 | -0.025983137 |
| HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.0344126 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.037501 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03956 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | LZTS1 | 0.78 | -0.061088003 | 0.767815716 | 1.01352061 | -0.027224023 |
| HNF1B 1.49 0.162280748 1.466110969 1.01495128 -0.030126 AGT 1.64 0.322048161 1.61286578 1.01587698 -0.032006 CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.032559 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.0344126 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.037501 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03956 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | BHMT2 | 0.76 | 0.061718329 | 0.751787465 | 1.0144559 | -0.029120763 |
| CARTPT 1.37 0.161611809 1.346579064 1.01614921 -0.0325593 HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.0344126 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.0349363 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.0375014 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.038193 MB 1.52 0.286677928 1.496115645 1.01911578 -0.0385963 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03953 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.0404413 | HNF1B | 1.49 | 0.162280748 | 1.466110969 | 1.01495128 | -0.030126099 |
| HSD3B2 1.04 -0.093039528 1.027127071 1.0170608 -0.0344124 KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.034936 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.037501 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.0395 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | AGT | 1.64 | 0.322048161 | 1.61286578 | 1.01587698 | -0.032006036 |
| KRT17 0.75 -0.013696614 0.73630993 1.0173185 -0.0349369 CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.0375014 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.038194 MB 1.52 0.286677928 1.496115645 1.01911578 -0.0385964 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03954 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.0404415 | CARTPT | 1.37 | 0.161611809 | 1.346579064 | 1.01614921 | -0.032559219 |
| CALB2 2 0.328086765 1.963744848 1.01847994 -0.03730 PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.0375016 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.0395 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | HSD3B2 | 1.04 | -0.093039528 | 1.027127071 | 1.0170608 | -0.034412665 |
| PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.0375014 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.038194 MB 1.52 0.286677928 1.496115645 1.01911578 -0.0385964 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03954 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.0404413 | KRT17 | 0.75 | -0.013696614 | 0.73630993 | 1.0173185 | -0.034936937 |
| PLA2G1B 1.4 -0.001803106 1.373841744 1.01857816 -0.0375014 STC2 1.12 0.003299941 1.097433771 1.01891862 -0.038194 MB 1.52 0.286677928 1.496115645 1.01911578 -0.0385964 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03954 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.0404413 | CALB2 | 2 | 0.328086765 | 1.963744848 | 1.01847994 | -0.03730138 |
| STC2 1.12 0.003299941 1.097433771 1.01891862 -0.03819 MB 1.52 0.286677928 1.496115645 1.01911578 -0.038596 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.0395 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | | 1.4 | -0.001803106 | | 1.01857816 | -0.037501472 |
| MB 1.52 0.286677928 1.496115645 1.01911578 -0.0385968 CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.03958 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.0404418 | | | | | | -0.03819515 |
| CCL24 1.93 0.264875589 1.89131204 1.01958452 -0.0395 CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | | | | | | -0.038596977 |
| CXCL8 1.91 0.23513685 1.867937759 1.02002025 -0.040441 | | | | | | -0.0395526 |
| | | | | | | -0.040441314 |
| 1./0 1./0 1./2 1./21313308 1.UZUU8196 -0.U4U56 | HSPB6 | 1.76 | 0.301248611 | 1.721315568 | 1.02008196 | -0.040567209 |
| | | | | | | -0.041727586 |

| HIST1H3B | 1.2 | 0.162067683 | 1.172008635 | 1.02079657 | -0.042025631 |
|-----------|------|--------------|-------------|------------|--------------|
| DAAM2 | 0.63 | -0.19115537 | 0.617343526 | 1.0210022 | -0.042445488 |
| ALDH1L2 | 0.83 | 0.065121038 | 0.809229134 | 1.02158042 | -0.043626561 |
| EMR3 | 0.96 | 0.010085457 | 0.94321334 | 1.02160374 | -0.043674208 |
| SMTNL2 | 2.12 | 0.318538912 | 2.072209342 | 1.02176069 | -0.04399491 |
| VTN | 1.6 | 0.224029336 | 1.563773313 | 1.02223368 | -0.044961692 |
| GPM6A | 2.2 | 0.387012429 | 2.149234136 | 1.02227276 | -0.045041588 |
| ASB11 | 1.69 | 0.264643656 | 1.651648868 | 1.02232945 | -0.045157504 |
| CTNND2 | 2 | 0.313786419 | 1.958322721 | 1.02236447 | -0.045229103 |
| KRT20 | 2.11 | 0.379365437 | 2.061119124 | 1.02276182 | -0.04604174 |
| AQP4 | 2.17 | 0.346143962 | 2.123390957 | 1.02309476 | -0.04672289 |
| NCAN | 2.2 | 0.373244721 | 2.150264029 | 1.02315206 | -0.046840136 |
| FAM43B | 1.52 | 0.145821635 | 1.485614128 | 1.02344357 | -0.047436743 |
| VPREB1 | 0.57 | -0.066722991 | 0.556267117 | 1.02400129 | -0.048578634 |
| CMTM2 | 1.36 | 0.210168742 | 1.326799282 | 1.02404228 | -0.048662597 |
| OLIG2 | 2.2 | 0.384979841 | 2.15035523 | 1.02429761 | -0.049185586 |
| OLIG1 | 2.2 | 0.385979829 | 2.15111783 | 1.02463043 | -0.049867522 |
| TCN1 | 0.85 | -0.052140444 | 0.833822402 | 1.02495848 | -0.050539888 |
| LHFPL3 | 2 | 0.29528626 | 1.946592232 | 1.02522804 | -0.051092538 |
| TNR | 2.2 | 0.395515677 | 2.144201201 | 1.02540154 | -0.051448322 |
| UGT2B4 | 1.8 | 0.448106308 | 1.752370064 | 1.02612875 | -0.052940205 |
| HIST1H3G | 1.93 | 0.304314947 | 1.880487951 | 1.02654716 | -0.053799061 |
| SERPINB13 | 1.34 | 0.212574032 | 1.304734504 | 1.02690697 | -0.054537921 |
| RNF186 | 1.75 | 0.272337932 | 1.702757219 | 1.02720684 | -0.055153894 |
| GFAP | 2.1 | 0.419129718 | 2.047019171 | 1.0276063 | -0.055974714 |
| SNAP91 | 1.46 | 0.17038349 | 1.416165683 | 1.02780469 | -0.056382473 |
| GPRC5B | 0.78 | -0.020220032 | 0.756499879 | 1.02788262 | -0.056542683 |
| AXIN2 | 0.79 | -0.112617925 | 0.771727564 | 1.02789522 | -0.056568579 |
| C18orf42 | 2.16 | 0.376810089 | 2.102851971 | 1.02868317 | -0.058189072 |
| NXPH1 | 2.2 | 0.345019777 | 2.139112931 | 1.03011539 | -0.061137711 |
| MLC1 | 1.52 | 0.108031967 | 1.478870156 | 1.0301524 | -0.061213975 |
| DUSP26 | 1.91 | 0.411284731 | 1.849996819 | 1.03032576 | -0.061571178 |
| KNG1 | 1.8 | 0.330524781 | 1.746007687 | 1.03039441 | -0.06171264 |
| FGL1 | 1.06 | 0.119188534 | 1.029217996 | 1.0306659 | -0.062272197 |
| CELF3 | 1.92 | 0.270469307 | 1.862094444 | 1.03160528 | -0.064209448 |
| MYH11 | 2.09 | 0.286073464 | 2.025144954 | 1.03226706 | -0.065575283 |
| ALPL | 0.93 | -0.015456366 | 0.895576136 | 1.03356053 | -0.068247377 |
| DCX | 2.07 | 0.281967372 | 1.998537873 | 1.0337034 | -0.068542723 |
| SCRG1 | 2.17 | 0.420205601 | 2.102251922 | 1.03392721 | -0.069005482 |
| HIST1H4E | 2.02 | 0.324213449 | 1.95758493 | 1.03407818 | -0.069317684 |
| HBB | 1.17 | 0.132449007 | 1.129434876 | 1.03415589 | -0.069478413 |
| HIST1H2BI | 1.68 | 0.315157188 | 1.62474672 | 1.03426941 | -0.069713221 |
| ELAVL3 | 2.09 | 0.433538984 | 2.023937048 | 1.03464774 | -0.070495944 |
| | | | | | |

| GLYAT | 1.48 | 0.115296462 | 1.4272812 | 1.03465067 | -0.070502013 |
|------------|------|--------------|-------------|------------|--------------|
| DLK1 | 2.13 | 0.309125961 | 2.055214179 | 1.03471164 | -0.070628186 |
| TM4SF4 | 1.59 | 0.223669012 | 1.53142687 | 1.03508484 | -0.071400628 |
| ERP27 | 0.74 | -0.173596108 | 0.71740447 | 1.03510117 | -0.071434424 |
| COMP | 1.29 | 0.15007229 | 1.249494361 | 1.03535375 | -0.07195739 |
| PHOX2B | 1.01 | 0.132950815 | 0.970380619 | 1.03595412 | -0.073200933 |
| PF4 | 1.32 | 0.109047487 | 1.276128147 | 1.03693451 | -0.075233182 |
| AMBP | 1.36 | 0.141167615 | 1.307280241 | 1.03704649 | -0.075465422 |
| CAPN3 | 1.97 | 0.239623694 | 1.902200765 | 1.03755059 | -0.076511223 |
| AC234582.1 | 1.06 | -0.196930967 | 1.015983746 | 1.03860131 | -0.078692679 |
| POU3F3 | 1.63 | 0.213058246 | 1.570575218 | 1.03893452 | -0.079384941 |
| DKK1 | 2.03 | 0.380360795 | 1.954139478 | 1.03993432 | -0.079596557 |
| BPIFB1 | 1.42 | 0.380300793 | 1.36524346 | 1.03905050 | -0.079864161 |
| AMER2 | 2.21 | 0.364480958 | 2.1283517 | 1.03910313 | -0.079883051 |
| | | | | | |
| SERPIND1 | 1.43 | 0.138032914 | 1.376460861 | 1.03964243 | -0.080856376 |
| CNGB1 | 1.39 | 0.181551201 | 1.33493363 | 1.03975479 | -0.081090015 |
| RNASE3 | 0.92 | -0.119308028 | 0.882786155 | 1.03992019 | -0.081434002 |
| HIST1H2BB | 1.47 | 0.023324608 | 1.412545996 | 1.04033277 | -0.082292276 |
| APOA2 | 1.67 | 0.226344159 | 1.608155105 | 1.04057844 | -0.082803486 |
| MAL | 2.07 | 0.353116367 | 1.988195249 | 1.04063216 | -0.082915292 |
| KCNQ2 | 1.26 | 0.068384419 | 1.213560552 | 1.04149076 | -0.084703009 |
| HSPA2 | 1.09 | 0.073930995 | 1.044952448 | 1.04234544 | -0.086484012 |
| KLK3 | 1.9 | 0.286397458 | 1.823112678 | 1.0427157 | -0.087256035 |
| KRTDAP | 0.94 | 0.007122819 | 0.90113505 | 1.04274812 | -0.08732364 |
| CDH17 | 1.33 | 0.021830655 | 1.27365123 | 1.04302319 | -0.087897371 |
| KHDC3L | 1.64 | 0.268194939 | 1.571317894 | 1.04311169 | -0.088082004 |
| PRLHR | 1.56 | 0.294553337 | 1.497421904 | 1.04341903 | -0.088723264 |
| SLC7A4 | 1.55 | 0.101144112 | 1.484959552 | 1.04355508 | -0.089007207 |
| KLK8 | 1.06 | 0.0297047 | 1.018385277 | 1.04361464 | -0.089131508 |
| RFX4 | 1.93 | 0.364738144 | 1.85278185 | 1.04422326 | -0.090402206 |
| MTRNR2L8 | 0.77 | -0.147005834 | 0.733245994 | 1.04506028 | -0.092150983 |
| VSTM2A | 2.21 | 0.454490411 | 2.115501522 | 1.04534795 | -0.092752339 |
| CLRN3 | 1.09 | 0.499707037 | 1.045741647 | 1.04536785 | -0.092793948 |
| PGLYRP1 | 1.47 | 0.19433703 | 1.410601535 | 1.04540025 | -0.092861691 |
| RAB3B | 1.33 | 0.151192627 | 1.272142306 | 1.0454156 | -0.092893785 |
| GPM6B | 1.2 | 0.047708751 | 1.146723196 | 1.04543426 | -0.092932782 |
| GC | 1.74 | 0.226785671 | 1.665908697 | 1.04649605 | -0.095153985 |
| SLC28A1 | 1.42 | -0.061955471 | 1.359399001 | 1.04709322 | -0.096404201 |
| FAIM2 | 1.33 | 0.081713868 | 1.270583523 | 1.04751242 | -0.097282278 |
| NROB1 | 1.73 | 0.336505691 | 1.648840093 | 1.04762484 | -0.097517805 |
| GATA6 | 0.82 | -0.040164287 | 0.786926555 | 1.04831846 | -0.098971587 |
| TBX3 | 0.98 | -0.065481418 | 0.936578831 | 1.04850291 | -0.099358359 |
| UPK3B | 1.25 | 0.082469854 | 1.191559763 | 1.04880639 | -0.099994835 |

| C8B | 0.89 | -0.000850232 | 0.848909659 | 1.04970658 | -0.101883902 |
|----------|------|--------------|-------------|------------|--------------|
| DMGDH | 1.41 | 0.07159332 | 1.344302033 | 1.05072428 | -0.104021513 |
| ATP6V0D2 | 2.15 | 0.300386284 | 2.044484896 | 1.05109092 | -0.104792128 |
| ALB | 1.68 | 0.213137251 | 1.593992465 | 1.05109898 | -0.104809064 |
| SLC1A2 | 2.13 | 0.487394911 | 2.03090268 | 1.05111869 | -0.104850503 |
| STAR | 1.43 | 0.109198562 | 1.357527676 | 1.05116776 | -0.104953668 |
| PDIA2 | 1.26 | 0.195023333 | 1.194934749 | 1.05130967 | -0.105252012 |
| CYP4F3 | 1.33 | 0.19234658 | 1.26905128 | 1.05131739 | -0.105268257 |
| DCSTAMP | 2.01 | 0.235865794 | 1.907185092 | 1.05141542 | -0.105474379 |
| APOBEC2 | 1.7 | 0.435009509 | 1.616561694 | 1.05163918 | -0.105944973 |
| SPOCK3 | 0.99 | 0.261687215 | 0.939008622 | 1.05208238 | -0.106877328 |
| ВМР6 | 0.84 | -0.087940205 | 0.797049826 | 1.05400465 | -0.110925806 |
| C1QL1 | 1.95 | 0.411214064 | 1.846869167 | 1.05400959 | -0.110936212 |
| PMP2 | 2.2 | 0.544127545 | 2.084118464 | 1.05442866 | -0.111819799 |
| MMP25 | 0.96 | -0.177912855 | 0.909868777 | 1.05448548 | -0.111939625 |
| TF | 0.87 | 0.034889726 | 0.822095023 | 1.05550375 | -0.114088175 |
| NEFL | 1.57 | 0.263078224 | 1.486376406 | 1.0555947 | -0.114280166 |
| CRYGN | 1.09 | 0.014704088 | 1.027855027 | 1.05582997 | -0.114776926 |
| HFE2 | 1.84 | 0.459164886 | 1.738185529 | 1.0560364 | -0.115212884 |
| CITED1 | 1.1 | 0.043568891 | 1.041288804 | 1.05618478 | -0.115526279 |
| EYA1 | 1.44 | 0.23077959 | 1.36387407 | 1.05642076 | -0.116024831 |
| FOXH1 | 0.8 | 0.04428773 | 0.756972131 | 1.05710182 | -0.117464252 |
| CRP | 1.94 | 0.350005606 | 1.83401945 | 1.05786196 | -0.119071922 |
| NDUFA4L2 | 1.13 | 0.173832889 | 1.071668572 | 1.05898086 | -0.12144047 |
| CXCR2 | 1.09 | 0.126870654 | 1.024412688 | 1.05923536 | -0.121979546 |
| RAG2 | 1.45 | 0.116991086 | 1.367295026 | 1.06015869 | -0.123936446 |
| PKNOX2 | 1.54 | 0.305369498 | 1.450335506 | 1.06049947 | -0.12465913 |
| SLC38A3 | 1.45 | 0.072664583 | 1.362364601 | 1.06076029 | -0.125212395 |
| MSMB | 1.13 | 0.000940915 | 1.061205286 | 1.06152544 | -0.126836266 |
| TNNT1 | 1.18 | 0.241321346 | 1.111055079 | 1.06182304 | -0.12746817 |
| FGF18 | 1.41 | 0.177191417 | 1.330836104 | 1.06277293 | -0.129486296 |
| NCAM1 | 2 | 0.467086289 | 1.88588422 | 1.06291795 | -0.12979456 |
| DCT | 1.97 | 0.231506747 | 1.851053028 | 1.06306342 | -0.130103826 |
| NOX1 | 0.79 | -0.116560354 | 0.745312809 | 1.0636908 | -0.131438116 |
| CAPN8 | 1.21 | -0.013615974 | 1.132602185 | 1.06431515 | -0.132766745 |
| FOXA2 | 1.74 | 0.332788759 | 1.632513831 | 1.06536762 | -0.135008155 |
| APOA1 | 1.34 | 0.155300299 | 1.254596193 | 1.0656101 | -0.135524885 |
| AGRP | 1.7 | 0.107774698 | 1.594471008 | 1.06619581 | -0.136773503 |
| AHSG | 1.95 | 0.437590774 | 1.82922619 | 1.06627179 | -0.136935524 |
| LTF | 0.56 | -0.123050708 | 0.520816093 | 1.06633256 | -0.137065135 |
| TTYH1 | 2 | 0.359899015 | 1.874691268 | 1.06642503 | -0.137262338 |
| MOG | 1.86 | 0.349305154 | 1.746026112 | 1.06648971 | -0.137400297 |
| APOC3 | 1.77 | 0.354233032 | 1.655605708 | 1.06736225 | -0.139262179 |

| GDF3 | DGKK | 1.52 | 0.300988894 | 1.424839876 | 1.06764339 | -0.13986241 |
|---|---------|------|--------------|-------------|------------|--------------|
| MSX1 | | - | | | | |
| PHYHIPL | | - | | | | |
| CHGB 2 0.362640034 1.872347215 1.06842196 -0.14152547 CPB1 0.97 0.058491009 0.908059597 1.06852909 -0.1417544 CDH16 1.03 0.100271979 0.96162813 1.0683465 -0.14264665 RRAD 1.29 0.147934232 1.203603348 1.06934578 -0.143747684 KIF26A 1.13 0.184970202 1.055526948 1.06945678 -0.14373779 FGA 1.53 0.108501547 1.433321995 1.06952333 -0.1438801 BNC1 1.09 0.237193288 1.016437075 1.069966164 -0.144126602 ALDH1A3 1.32 0.076540224 1.229339084 1.06977397 -0.14426662 ARPD11 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07114777 -0.14735854 NDP 1.31 -0.021761485 <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> | | 1 | | | | |
| CPB1 0.97 0.058491009 0.908059597 1.06852909 -0.1417544 CDH16 1.03 0.100271979 0.96162813 1.0689465 -0.14264662 RRAD 1.29 0.147934232 1.203603348 1.06933477 -0.143476846 KIF26A 1.13 0.184970202 1.055626948 1.06945678 -0.14373779 FGA 1.53 0.108501547 1.433321995 1.06952333 -0.14373779 FGA 1.53 0.108501547 1.433321995 1.0696164 -0.1447602 ALDH1A3 1.32 0.076540224 1.229339084 1.06970402 -0.14426662 ALDH1A3 2.05 0.525548638 1.913551416 1.06977397 -0.14421633 POUSF1 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07153281 -0.14818256 COL2A1 1.82 0.34219783 | | - | | | | |
| CDH16 1.03 0.100271979 0.96162813 1.0689465 -0.14264662 RRAD 1.29 0.147934232 1.203603348 1.06933477 -0.14347684 KIFZ6A 1.13 0.184970202 1.0555626948 1.0694338 -0.14368864 SPON1 1.14 0.26701006 1.062314496 1.06945678 -0.14373775 FGA 1.53 0.108501547 1.433321995 1.06966164 -0.14417602 BNC1 1.09 0.237193288 1.016437075 1.06966164 -0.14417602 ALDH1A3 1.32 0.076540224 1.229339084 1.06970402 -0.1441663 POUSF1 1.85 0.112785056 1.727718105 1.071114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.147785754 ARPP21 1.95 0.556449742 1.82324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.69802191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 | | 1 | | | | |
| RRAD 1.29 0.147934232 1.203603348 1.06933477 -0.14347684 KIF26A 1.13 0.184970202 1.055626948 1.0694338 -0.14368864 SPON1 1.14 0.26701006 1.062314496 1.06945678 -0.14373779 FGA 1.53 0.108501547 1.433321995 1.06952333 -0.1438801 BNC1 1.09 0.237193288 1.016437075 1.06966164 -0.14417602 ALDH1A3 1.32 0.076540224 1.229339084 1.06970402 -0.14426669 TRIM63 2.05 0.525548638 1.913551416 1.06977397 -0.14441633 POUSF1 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.147708505 ITLN2 1.71 0.237339325 1.597620421 1.07153281 -0.14818256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15003604 STK32A 1.63 0.447728849 1.636126686 1.07263383 -0.15005404 STMAB21L1 1.21 0.146399694 1.1284196 1.07263383 -0.150055404 STMAD 1.76 0.447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323383 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.1593826 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.0758966 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07569944 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07569944 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.082964 -0.15738281 FARS 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796213 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250676 -0.17181639 FROC 1.05 0.151632404 0.973643892 1.08256664 -0.17418648 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.174187635 TYR 2.04 0.26003366 1.38075903 1.08387608 -0.17417262 USDS 0.44 -0.170350826 0.370812797 1.08885057 -0.18559555 | | | | | | |
| KIF26A 1.13 0.184970202 1.055626948 1.0694338 -0.14368864 SPON1 1.14 0.26701006 1.062314496 1.06945678 -0.14373779 FGA 1.53 0.108501547 1.433321995 1.06952333 -0.1437801 BNC1 1.09 0.237193288 1.016437075 1.06966164 -0.14416602 ALDH1A3 1.32 0.076540224 1.229339084 1.06970402 -0.14426664 TRIM63 2.05 0.525548638 1.913551416 1.06977397 -0.14441633 POU5F1 1.85 0.112785056 1.727718105 1.07114777 -0.144735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.2373339325 1.597620421 1.07153281 -0.14818256 NDP 1.33 -0.021761485 1.2324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.19168453 | | _ | | | | |
| SPON1 1.14 0.26701006 1.062314496 1.06945678 -0.14373779 FGA 1.53 0.108501547 1.433321995 1.06952333 -0.1438801 BNC1 1.09 0.237193288 1.016437075 1.06966164 -0.14417602 ALDHIA3 1.32 0.076540224 1.229339084 1.06977397 -0.14416665 TRIM63 2.05 0.525548638 1.913551416 1.06977397 -0.14417602 POUSF1 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.2373339325 1.597620421 1.0716938 -0.14818256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15003604 STW32A 1.63 0.194684536 1.51617152 1.07240478 -0.15005500 MAB21L1 1.21 0.14639969 | | 1 | | | | |
| FGA 1.53 0.108501547 1.433321995 1.06952333 -0.1438801 BNC1 1.09 0.237193288 1.016437075 1.06966164 -0.14417602 ALDH1A3 1.32 0.076540224 1.229339084 1.06970402 -0.14426665 TRIM63 2.05 0.525548638 1.913551416 1.06977397 -0.14441633 POU5F1 1.85 0.112785056 1.727718105 1.07114777 -0.14737554 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.237339325 1.597620421 1.07153281 -0.14818256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07233833 -0.15005200 VAT1L 0.85 0.061884942 | | - | | | | |
| BNC1 1.09 0.237193288 1.016437075 1.06966164 -0.14417602 ALDH1A3 1.32 0.076540224 1.229339084 1.06970402 -0.14426669 TRIM63 2.05 0.525548638 1.913551416 1.06977397 -0.1441633 POU5F1 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.237339325 1.597620421 1.07153281 -0.1481256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.15055404 SFTA2 1.76 0.310914834 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 | | 1 | | | | |
| ALDH1A3 1.32 0.076540224 1.229339084 1.06970402 -0.14426669 TRIM63 2.05 0.525548638 1.913551416 1.06977397 -0.14441633 POU5F1 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.237339325 1.597620421 1.07153281 -0.14818256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.1482576 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07239383 -0.1509786 STA2A 1.76 0.447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.3109148 | | - | | | | |
| TRIM63 2.05 0.525548638 1.913551416 1.06977397 -0.14441633 POUSF1 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.2373339325 1.597620421 1.07153281 -0.14818256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.15005200 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.1519786 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.1084024 | | _ | | | | |
| POUSF1 1.85 0.112785056 1.727718105 1.07114777 -0.14735754 ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.2373339325 1.597620421 1.07153281 -0.14818256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.15005200 VAT1L 0.85 0.0447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15793828 FAM3D 0.74 -0.1084024 | | - | | | | |
| ARPP21 1.95 0.556449742 1.823675323 1.07131158 -0.14770850 ITLN2 1.71 0.237339325 1.597620421 1.07153281 -0.14818256 NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.1509580 S100A1 1.76 0.447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738261 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698< | | _ | | | | |
| ITLN2 | | - | | | | |
| NDP 1.33 -0.021761485 1.24324937 1.0716938 -0.1485276 COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.1509580 S100A1 1.76 0.447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15783252 CTSG 1.87 0.419106879 <td></td> <td>1.95</td> <td></td> <td></td> <td></td> <td>-0.147708501</td> | | 1.95 | | | | -0.147708501 |
| COL2A1 1.82 0.342197833 1.698002191 1.07239734 -0.15003604 STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.15095800 S100A1 1.76 0.447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16715590 CTSG 1.87 0.419106879 | ITLN2 | 1.71 | 0.237339325 | 1.597620421 | 1.07153281 | -0.148182561 |
| STK32A 1.63 0.191684536 1.51617152 1.07240478 -0.15005200 MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.15055404 \$100A1 1.76 0.447728849 1.636126866 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738261 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15738261 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.1581271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 <td>NDP</td> <td>1.33</td> <td></td> <td>1.24324937</td> <td>1.0716938</td> <td>-0.14852761</td> | NDP | 1.33 | | 1.24324937 | 1.0716938 | -0.14852761 |
| MAB21L1 1.21 0.146399694 1.1284196 1.07263883 -0.15055404 \$100A1 1.76 0.447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 <td>COL2A1</td> <td>1.82</td> <td>0.342197833</td> <td>1.698002191</td> <td>1.07239734</td> <td>-0.150036046</td> | COL2A1 | 1.82 | 0.342197833 | 1.698002191 | 1.07239734 | -0.150036046 |
| S100A1 1.76 0.447728849 1.636126686 1.07283675 -0.1509786 VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 <td>STK32A</td> <td>1.63</td> <td>0.191684536</td> <td>1.51617152</td> <td>1.07240478</td> <td>-0.150052001</td> | STK32A | 1.63 | 0.191684536 | 1.51617152 | 1.07240478 | -0.150052001 |
| VAT1L 0.85 0.061884942 0.794183749 1.07323838 -0.15184062 SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17181039 PROC 1.05 0.151632404 0.973643892 1.08250192 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | MAB21L1 | 1.21 | 0.146399694 | 1.1284196 | 1.07263883 | -0.150554049 |
| SFTA2 1.76 0.310914834 1.636645989 1.07466787 -0.15491102 SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 <td>S100A1</td> <td>1.76</td> <td>0.447728849</td> <td>1.636126686</td> <td>1.07283675</td> <td>-0.15097869</td> | S100A1 | 1.76 | 0.447728849 | 1.636126686 | 1.07283675 | -0.15097869 |
| SCG5 1.04 0.201768068 0.966881254 1.07581728 -0.15738281 FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 <td>VAT1L</td> <td>0.85</td> <td>0.061884942</td> <td>0.794183749</td> <td>1.07323838</td> <td>-0.151840627</td> | VAT1L | 0.85 | 0.061884942 | 0.794183749 | 1.07323838 | -0.151840627 |
| FAM3D 0.74 -0.108402491 0.684383832 1.07588966 -0.15753856 KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 </td <td>SFTA2</td> <td>1.76</td> <td>0.310914834</td> <td>1.636645989</td> <td>1.07466787</td> <td>-0.154911029</td> | SFTA2 | 1.76 | 0.310914834 | 1.636645989 | 1.07466787 | -0.154911029 |
| KRT13 1.75 0.188231698 1.626398495 1.07619809 -0.15820231 PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 | SCG5 | 1.04 | 0.201768068 | 0.966881254 | 1.07581728 | -0.157382813 |
| PIP 0.87 -0.111871731 0.809307642 1.07648164 -0.15881271 ANXA13 0.94 0.166122668 0.8692183 1.07756944 -0.16115590 CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17181039 PROC 1.05 0.151632404 0.973643892 1.08252676 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 | FAM3D | 0.74 | -0.108402491 | 0.684383832 | 1.07588966 | -0.157538563 |
| ANXA13 | KRT13 | 1.75 | 0.188231698 | 1.626398495 | 1.07619809 | -0.158202318 |
| CTSG 1.87 0.419106879 1.730743532 1.0802964 -0.16704031 DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17181039 PROC 1.05 0.151632404 0.973643892 1.08252676 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.177752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 <td>PIP</td> <td>0.87</td> <td>-0.111871731</td> <td>0.809307642</td> <td>1.07648164</td> <td>-0.158812717</td> | PIP | 0.87 | -0.111871731 | 0.809307642 | 1.07648164 | -0.158812717 |
| DPCR1 1.95 0.430384818 1.801251204 1.080723 -0.16796219 ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17181039 PROC 1.05 0.151632404 0.973643892 1.08252676 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08885057 -0.18559555 | ANXA13 | 0.94 | 0.166122668 | 0.8692183 | 1.07756944 | -0.161155907 |
| ASIC4 1.43 0.161603366 1.318806157 1.08177944 -0.17024676 DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17181039 PROC 1.05 0.151632404 0.973643892 1.08252676 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | CTSG | 1.87 | 0.419106879 | 1.730743532 | 1.0802964 | -0.167040312 |
| DUSP5 0.86 -0.167274321 0.798062532 1.08250192 -0.17181039 PROC 1.05 0.151632404 0.973643892 1.08252676 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | DPCR1 | 1.95 | 0.430384818 | 1.801251204 | 1.080723 | -0.167962194 |
| PROC 1.05 0.151632404 0.973643892 1.08252676 -0.17186418 SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | ASIC4 | 1.43 | 0.161603366 | 1.318806157 | 1.08177944 | -0.170246761 |
| SFRP2 1.09 0.099827141 1.007402006 1.08266042 -0.17215358 ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | DUSP5 | 0.86 | -0.167274321 | 0.798062532 | 1.08250192 | -0.171810398 |
| ANO7 1.02 -0.178562521 0.939423238 1.08344811 -0.17385980 CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | PROC | 1.05 | 0.151632404 | 0.973643892 | 1.08252676 | -0.171864186 |
| CYS1 0.98 0.156608618 0.905394189 1.08359246 -0.17417262 LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | SFRP2 | 1.09 | 0.099827141 | 1.007402006 | 1.08266042 | -0.172153583 |
| LGALS7B 1.55 0.21184562 1.434067892 1.08387608 -0.17478735 TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | ANO7 | 1.02 | -0.178562521 | 0.939423238 | 1.08344811 | -0.173859807 |
| TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | CYS1 | 0.98 | 0.156608618 | 0.905394189 | 1.08359246 | -0.174172628 |
| TYR 2.04 0.26003366 1.880759033 1.08513868 -0.17752595 ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | LGALS7B | 1.55 | 0.21184562 | 1.434067892 | 1.08387608 | -0.174787359 |
| ITIH2 1.46 0.219428056 1.341656882 1.08662218 -0.18074775 INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | | | 0.26003366 | | | -0.177525959 |
| INSM2 2.07 0.544751721 1.908547409 1.08703286 -0.18164044 SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | | | | | | -0.180747758 |
| SNCG 0.4 -0.170350826 0.370812797 1.08885057 -0.18559555 | | 1 | | | | -0.181640443 |
| | | 1 | | | | -0.185595555 |
| OR51E1 0.73 -0.160444199 0.667472692 1.08942511 -0.18684706 | | 1 | | | | -0.186847062 |

| SULT2A1 | 1.46 | 0.116079063 | 1.335984732 | 1.08968818 | -0.187420334 |
|-----------|------|--------------|-------------|------------|--------------|
| CXCL6 | 1.35 | 0.160359007 | 1.237468775 | 1.08969852 | -0.18744286 |
| STMN4 | 2.16 | 0.343140052 | 1.978351793 | 1.09157005 | -0.191525181 |
| DES | 1.85 | 0.465810703 | 1.695215558 | 1.0927524 | -0.194107816 |
| UGT2A3 | 0.97 | -0.060873307 | 0.890117406 | 1.09391644 | -0.196653176 |
| ITIH1 | 1.37 | 0.177174359 | 1.252230226 | 1.09477853 | -0.198540023 |
| POSTN | 0.85 | 0.031980047 | 0.780389757 | 1.09485915 | -0.198716552 |
| GAP43 | 0.91 | -0.030214491 | 0.833145788 | 1.09546269 | -0.200038507 |
| WT1 | 1.92 | 0.470907314 | 1.754607521 | 1.09640861 | -0.202111844 |
| KRT14 | 0.97 | 0.085028591 | 0.881499485 | 1.09663275 | -0.202603386 |
| APOB | 1.72 | 0.121221547 | 1.56165858 | 1.09892228 | -0.207630166 |
| DSG1 | 1.34 | 0.239084195 | 1.221008017 | 1.09896457 | -0.20772312 |
| VWA5B2 | 1.18 | 0.086165759 | 1.076759473 | 1.09908774 | -0.207993856 |
| EEF1A2 | 1.33 | 0.264115185 | 1.207961587 | 1.09912015 | -0.208065098 |
| FGG | 1.43 | 0.061400328 | 1.300765766 | 1.09930872 | -0.208479651 |
| LRMP | 1.51 | 0.036145468 | 1.375514658 | 1.09974007 | -0.209428215 |
| FAT2 | 1.32 | 0.094429028 | 1.197717236 | 1.09986421 | -0.209701289 |
| FAM83A | 1.2 | 0.05038495 | 1.087266438 | 1.10011342 | -0.210249528 |
| ATP13A4 | 1.34 | 0.071909252 | 1.214620021 | 1.10063779 | -0.211403549 |
| AMHR2 | 1.9 | 0.372641645 | 1.722552738 | 1.10083753 | -0.211843265 |
| CHAD | 1.17 | -0.030640963 | 1.064917287 | 1.10297141 | -0.216545925 |
| FABP1 | 1.37 | 0.158709818 | 1.244716666 | 1.10315142 | -0.216943058 |
| GPR143 | 1.02 | -0.08824866 | 0.924772703 | 1.10327781 | -0.217221924 |
| MMP9 | 1.73 | 0.322515173 | 1.568861597 | 1.10333686 | -0.217352224 |
| NKX3-1 | 1.43 | -0.121248628 | 1.299782726 | 1.10338739 | -0.217463739 |
| LRRC26 | 0.79 | -0.162377565 | 0.71184429 | 1.10375349 | -0.21827176 |
| PKP1 | 1.12 | 0.169024586 | 1.012645055 | 1.10544018 | -0.221997996 |
| ABCC11 | 1.57 | 0.225970732 | 1.42222255 | 1.10548343 | -0.222093603 |
| MGP | 0.87 | -0.10821988 | 0.788826988 | 1.10552167 | -0.222178169 |
| RAB38 | 0.98 | 0.064089628 | 0.888641895 | 1.10587057 | -0.222949718 |
| HIST1H2AJ | 0.77 | 0.028564047 | 0.693394752 | 1.10592686 | -0.223074209 |
| SIX2 | 1.59 | 0.222829276 | 1.438236358 | 1.10668709 | -0.224756311 |
| GPR37L1 | 0.74 | -0.026662105 | 0.665422885 | 1.10769659 | -0.226991729 |
| UGT1A9 | 1.25 | 0.144198478 | 1.130521889 | 1.10774883 | -0.227107477 |
| SLC34A2 | 0.77 | -0.168925717 | 0.691646279 | 1.10829995 | -0.228328768 |
| TRIM71 | 1.23 | 0.083252483 | 1.108696947 | 1.10975828 | -0.231563433 |
| CACNG7 | 0.86 | 0.062190465 | 0.770855676 | 1.10987278 | -0.231817586 |
| PTGER3 | 1.15 | 0.096678056 | 1.030588696 | 1.11171072 | -0.235900732 |
| PGC | 1.03 | 0.122099981 | 0.925059306 | 1.11227679 | -0.23715966 |
| GSTA3 | 1.38 | 0.145571836 | 1.239156914 | 1.11250492 | -0.237667193 |
| GPR97 | 0.78 | -0.115530008 | 0.703486419 | 1.11325357 | -0.239333502 |
| HR | 1.19 | 0.012977541 | 1.069883161 | 1.11456417 | -0.242253298 |
| TYRP1 | 1.35 | 0.046282605 | 1.207114811 | 1.11485916 | -0.242910942 |

| EVEL4 | 4 00 | 0.045634460 | 0.04.405.0703 | 4.44554666 | 0.244277400 |
|-----------|------|--------------|---------------|------------|--------------|
| EXTL1 | 1.02 | 0.045621169 | 0.914958792 | 1.11551666 | -0.244377408 |
| MFAP5 | 0.55 | -0.160771937 | 0.490719884 | 1.11641858 | -0.246390435 |
| SLC4A4 | 1.3 | 0.106559959 | 1.165729337 | 1.11673898 | -0.247105947 |
| CEACAM3 | 0.86 | -0.286061439 | 0.766984004 | 1.11674281 | -0.247114513 |
| KCNK15 | 0.87 | -0.156209929 | 0.781297814 | 1.11781197 | -0.249503591 |
| CLDN2 | 1.16 | 0.050319373 | 1.040602866 | 1.11840701 | -0.250834233 |
| NNAT | 2.04 | 0.509719158 | 1.82617415 | 1.11913786 | -0.252469552 |
| SPINK4 | 1.16 | 0.159819902 | 1.03628533 | 1.11946195 | -0.253195053 |
| IRX5 | 1.17 | 0.077033787 | 1.041303875 | 1.11964884 | -0.25361352 |
| MXRA8 | 0.77 | -0.077410208 | 0.6884106 | 1.12063377 | -0.255820035 |
| HIST1H1D | 1 | -0.028346279 | 0.888370189 | 1.12159386 | -0.257972794 |
| HIST1H2AI | 0.96 | 0.049528064 | 0.858528177 | 1.12301171 | -0.261155296 |
| CHRNA3 | 1.4 | 0.318010167 | 1.244260202 | 1.12337773 | -0.261977522 |
| KRT16 | 1.23 | 0.237277398 | 1.097164614 | 1.12456432 | -0.264644914 |
| FAM19A3 | 1.05 | -0.016781565 | 0.938082333 | 1.12461827 | -0.264766258 |
| UPK1B | 0.59 | -0.034052927 | 0.524539012 | 1.12553417 | -0.266827175 |
| CILP | 0.86 | -0.02748715 | 0.76021693 | 1.12647711 | -0.268950668 |
| SNCA | 0.91 | 0.015452477 | 0.804731799 | 1.1277098 | -0.271729402 |
| GATA4 | 1.21 | 0.178733544 | 1.074710547 | 1.12836536 | -0.273208392 |
| PEG10 | 1.03 | 0.006335976 | 0.909885824 | 1.12879063 | -0.274168286 |
| NRSN1 | 0.94 | 0.058256766 | 0.833993829 | 1.12966543 | -0.276143984 |
| PDE8B | 0.72 | -0.189116199 | 0.634570835 | 1.13014556 | -0.277228991 |
| SALL1 | 1.49 | 0.423595941 | 1.31804477 | 1.13088438 | -0.278899479 |
| HIST1H2AM | 1.63 | 0.189647462 | 1.439339167 | 1.13100579 | -0.279174102 |
| CCL13 | 1.5 | 0.083987342 | 1.323058879 | 1.13366152 | -0.285188435 |
| PNMAL2 | 0.76 | -0.121325566 | 0.67374209 | 1.13432703 | -0.28669782 |
| TMPRSS11D | 1.36 | 0.083794605 | 1.198343138 | 1.13527304 | -0.28884488 |
| SLC17A3 | 0.69 | -0.101518066 | 0.604112588 | 1.13836508 | -0.295875044 |
| AGXT | 0.96 | -0.006530929 | 0.845268209 | 1.13847959 | -0.296135779 |
| CBFA2T3 | 0.77 | -0.281872339 | 0.675953364 | 1.14032749 | -0.300346782 |
| KRT5 | 1.17 | 0.049631474 | 1.024777672 | 1.14179197 | -0.303688894 |
| C8orf46 | 1.49 | 0.220175584 | 1.304320926 | 1.14356408 | -0.307738812 |
| APOH | 1.12 | 0.11089551 | 0.979204395 | 1.14407738 | -0.308913051 |
| DOK5 | 1.27 | 0.351907179 | 1.106748013 | 1.14408995 | -0.308941807 |
| SLC22A31 | 0.67 | -0.021745071 | 0.587478847 | 1.1455427 | -0.312268082 |
| HSD11B2 | 1.14 | 0.1145849 | 0.996630362 | 1.1467254 | -0.314979136 |
| SST | 1.06 | 0.00256701 | 0.924293457 | 1.14880197 | -0.319745964 |
| TRIB1 | 1.18 | -0.008624502 | 1.02624952 | 1.14916213 | -0.320573608 |
| GLT1D1 | 0.73 | -0.009415029 | 0.63095861 | 1.14935358 | -0.32101364 |
| POF1B | 0.79 | -0.296550099 | 0.686285345 | 1.14968176 | -0.32176814 |
| GPA33 | 0.88 | -0.129950553 | 0.763479169 | 1.14977877 | -0.32199122 |
| CLDN16 | 0.93 | -0.038051248 | 0.807780406 | 1.15193467 | -0.326953486 |
| GATA2 | 1.12 | 0.160425801 | 0.971284004 | 1.15269244 | -0.328699857 |
| GATA2 | 1.12 | 0.160425801 | 0.971284004 | 1.15269244 | -0.32869985 |

| NPTX2 | 1.15 | 0.025637336 | 1.000823771 | 1.15355427 | -0.330687449 |
|----------|------|--------------|-------------|------------|--------------|
| DMRT2 | 1.15 | 0.223165033 | 0.997157822 | 1.15470299 | -0.333338993 |
| TIMP4 | 1.64 | 0.412624081 | 1.422223727 | 1.15503419 | -0.334103989 |
| LYPD6B | 0.93 | -0.100938392 | 0.8064157 | 1.15531792 | -0.334759492 |
| NR5A1 | 0.74 | -0.131068004 | 0.638066033 | 1.15562039 | -0.335458477 |
| CWH43 | 1.24 | 0.161687174 | 1.072157082 | 1.15668296 | -0.337915465 |
| SPRR3 | 1.03 | -0.031398153 | 0.89062153 | 1.15837434 | -0.341831121 |
| TRABD2B | 1.49 | 0.34326642 | 1.286011533 | 1.15974604 | -0.345010884 |
| MGARP | 1.31 | 0.126264548 | 1.128300061 | 1.15981154 | -0.345162804 |
| NPW | 1.02 | -0.146798309 | 0.880255278 | 1.16020723 | -0.346080824 |
| TXNDC5 | 0.51 | -0.215535469 | 0.441719373 | 1.1602921 | -0.346277753 |
| GAPDHS | 0.76 | 0.112198338 | 0.657402412 | 1.16035094 | -0.346414304 |
| AKR1C4 | 1.48 | 0.195266994 | 1.274422396 | 1.16144788 | -0.348961178 |
| HRG | 1.33 | 0.341650413 | 1.146959705 | 1.16162149 | -0.349364495 |
| LPAR3 | 1.18 | 0.160229344 | 1.014692647 | 1.16199693 | -0.350236865 |
| UTF1 | 0.88 | -0.175761642 | 0.755503169 | 1.16205724 | -0.350377034 |
| NR1H4 | 0.91 | -0.036034728 | 0.781439682 | 1.16268549 | -0.351837549 |
| SLC6A3 | 1.43 | 0.163589781 | 1.226015183 | 1.16392721 | -0.354726548 |
| FABP7 | 0.81 | -0.023810548 | 0.692802869 | 1.16401879 | -0.354939734 |
| CEACAM6 | 0.79 | -0.036890161 | 0.679405666 | 1.1653451 | -0.358029202 |
| HOXA11 | 1.29 | 0.059463283 | 1.107599441 | 1.16541401 | -0.358189815 |
| CD70 | 1.42 | 0.115328976 | 1.216399887 | 1.16615256 | -0.359911798 |
| CRABP1 | 0.9 | 0.001618329 | 0.769063511 | 1.16769203 | -0.363504675 |
| KLK5 | 0.92 | -0.109016396 | 0.785385303 | 1.16912045 | -0.366842636 |
| CCNA1 | 1.73 | 0.482556285 | 1.47460847 | 1.17010474 | -0.369145103 |
| TRPM1 | 1.55 | 0.339930823 | 1.325181636 | 1.17017576 | -0.369311319 |
| ABCB5 | 0.86 | 0.016534651 | 0.733646649 | 1.17136539 | -0.372096868 |
| DAPL1 | 1.34 | -0.00931706 | 1.143549582 | 1.17260592 | -0.375004651 |
| TMEM27 | 0.86 | -0.053402472 | 0.734850432 | 1.1727811 | -0.375415499 |
| PNCK | 0.79 | -0.096361369 | 0.671387602 | 1.17367403 | -0.377510738 |
| SCGB3A2 | 0.93 | -0.072747099 | 0.788597727 | 1.17373823 | -0.377661428 |
| CD1A | 0.94 | -0.023360154 | 0.798473679 | 1.17432089 | -0.379029541 |
| HIST1H3C | 0.97 | 0.025726047 | 0.821290925 | 1.17558722 | -0.382005319 |
| TPO | 0.96 | 0.103120294 | 0.814374174 | 1.17672812 | -0.384689073 |
| HOXD8 | 0.88 | 0.176556562 | 0.749422531 | 1.1768688 | -0.385020179 |
| CES1 | 1.18 | 0.152186656 | 1.000996863 | 1.17689045 | -0.385071138 |
| GFRA1 | 0.67 | -0.152334549 | 0.565725557 | 1.17776949 | -0.387140974 |
| HOXB8 | 0.75 | -0.195820439 | 0.639910264 | 1.17815339 | -0.388045406 |
| PLA2G2A | 0.95 | 0.091599845 | 0.803424918 | 1.17817782 | -0.388102978 |
| APOD | 0.57 | -0.109063976 | 0.486295131 | 1.17821936 | -0.388200856 |
| ITIH3 | 0.93 | -0.038503891 | 0.788626258 | 1.1804596 | -0.393484855 |
| CCR9 | 0.86 | -0.11937632 | 0.732035351 | 1.18047874 | -0.393530065 |
| SERPINC1 | 0.92 | -0.167604827 | 0.782409045 | 1.18106509 | -0.394914752 |
| · | • | | | | |

| CLDN8 | 1.07 | 0.049142669 | 0.907279469 | 1.18113052 | -0.395069293 |
|------------|------|--------------|-------------|------------|--------------|
| KRT6A | 1.04 | 0.233419569 | 0.878975823 | 1.18249876 | -0.398303308 |
| PMEL | 1.74 | 0.122117079 | 1.46860486 | 1.18341207 | -0.400464132 |
| RGS20 | 1.27 | 0.092943796 | 1.071450627 | 1.18568182 | -0.405841369 |
| ARHGAP36 | 1.29 | 0.289034672 | 1.087568399 | 1.18637247 | -0.407479645 |
| ТТС9В | 1.09 | -0.11070858 | 0.915163459 | 1.18647577 | -0.407724741 |
| ST6GAL2 | 0.7 | -0.066000788 | 0.587878715 | 1.18905029 | -0.413840585 |
| ASGR2 | 1.32 | 0.115196126 | 1.109440741 | 1.18980409 | -0.415633777 |
| TFPI2 | 1.25 | 0.05098218 | 1.050219698 | 1.19071455 | -0.41780113 |
| KRT6B | 1.17 | 0.12272597 | 0.9852782 | 1.19085393 | -0.418133087 |
| KLK6 | 1.25 | -0.043131181 | 1.048641943 | 1.19153397 | -0.419753206 |
| TH | 1.21 | -0.044379234 | 1.017719052 | 1.19246995 | -0.421984589 |
| HOXC10 | 1.03 | 0.021110366 | 0.860544232 | 1.19409945 | -0.425873506 |
| SCG2 | 1.04 | 0.069153349 | 0.873373945 | 1.19420054 | -0.42611492 |
| KRT6C | 1.41 | 0.198396743 | 1.181721984 | 1.19506826 | -0.428188146 |
| NDNF | 1.15 | 0.153842784 | 0.957661385 | 1.19584418 | -0.430043293 |
| IL36RN | 1 | -0.057506864 | 0.839495445 | 1.19671379 | -0.4321239 |
| SLC7A8 | 1.25 | 0.395206854 | 1.044336991 | 1.19692841 | -0.432637616 |
| F2 | 0.94 | 0.086142394 | 0.784980116 | 1.19708535 | -0.433013342 |
| TUBB4A | 0.77 | 0.027697661 | 0.644106048 | 1.19962783 | -0.439106926 |
| GPRC5D | 1.01 | 0.108372529 | 0.842424012 | 1.19972158 | -0.439331865 |
| LRRC14B | 1.7 | 0.544087108 | 1.409463358 | 1.20316797 | -0.447613152 |
| ST6GALNAC1 | 1.1 | -0.105378043 | 0.915091053 | 1.20327723 | -0.447876085 |
| TTR | 1.44 | 0.241600639 | 1.193855601 | 1.20370924 | -0.448915925 |
| TP63 | 1.22 | 0.233838821 | 1.01164764 | 1.2037706 | -0.449063655 |
| GBP6 | 1.05 | 0.088081355 | 0.870651694 | 1.20566128 | -0.453619115 |
| HIST1H4A | 0.58 | 0.049436377 | 0.484453767 | 1.20622489 | -0.45497849 |
| CFHR1 | 1.55 | 0.165806203 | 1.285626543 | 1.20730566 | -0.457586961 |
| KCNJ16 | 1.2 | 0.045941969 | 0.989813754 | 1.20791431 | -0.459056975 |
| NFE2 | 0.7 | -0.056057633 | 0.58286253 | 1.20816752 | -0.459668761 |
| CYSLTR1 | 0.98 | -0.075327431 | 0.806743448 | 1.20884237 | -0.461299866 |
| PRAM1 | 1.06 | -0.100592047 | 0.875370009 | 1.21099069 | -0.466498459 |
| ELANE | 1.07 | 0.055757385 | 0.883753654 | 1.21230686 | -0.46968793 |
| RASGRP3 | 0.76 | -0.202782429 | 0.622960777 | 1.21257984 | -0.470349876 |
| LGI3 | 0.63 | -0.161113877 | 0.518266488 | 1.21267093 | -0.470570792 |
| P2RX1 | 0.43 | -0.278468811 | 0.354533299 | 1.21487672 | -0.475925433 |
| KLK4 | 0.72 | -0.021471023 | 0.591810971 | 1.21525535 | -0.476845561 |
| GABBR2 | 0.86 | -0.057585755 | 0.704871736 | 1.21644964 | -0.479749727 |
| SLC24A2 | 0.7 | -0.06806204 | 0.575494376 | 1.21773119 | -0.482869258 |
| FGF9 | 1 | 0.242479986 | 0.824434574 | 1.21806438 | -0.483680841 |
| CRYAB | 0.96 | 0.156800836 | 0.789970911 | 1.21910889 | -0.486226481 |
| APLP1 | 0.81 | -0.099510543 | 0.660057761 | 1.21981634 | -0.487951896 |
| DSC3 | 1.27 | 0.395627706 | 1.035960508 | 1.22271971 | -0.495043499 |

| SLC45A2 | 1.03 | 0.175045316 | 0.920201527 | 1 22220762 | 0.406401530 |
|------------|------|------------------------------|-------------|------------|--------------|
| | | -0.175945216 -0.020120091 | 0.839391537 | 1.22330762 | -0.496481528 |
| HIST2H2AB | 1.37 | | 1.120365527 | 1.22413113 | -0.498497031 |
| C16orf89 | 0.63 | -0.170462109 | 0.513302823 | 1.22414442 | -0.498529556 |
| DLX3 | 1.3 | 0.057515642 | 1.058046624 | 1.22625735 | -0.503707088 |
| CADM3 | 0.87 | 0.004637816 | 0.705367061 | 1.22866132 | -0.509608637 |
| DACH1 | 0.79 | -0.035607112 | 0.646173864 | 1.22876196 | -0.509855949 |
| MSLN | 0.88 | -0.126626933 | 0.718124421 | 1.22928785 | -0.511148606 |
| KLK7 | 1.12 | -0.008086579 | 0.910424563 | 1.22963213 | -0.511995185 |
| KCNJ15 | 0.96 | 0.358006971 | 0.780654097 | 1.23026739 | -0.513557856 |
| D4S234E | 1.12 | 0.074818606 | 0.909238105 | 1.23448418 | -0.523951181 |
| CD1C | 0.9 | 0.046271829 | 0.731204586 | 1.23514705 | -0.52558824 |
| MT3 | 0.83 | -0.042745395 | 0.668589894 | 1.23667262 | -0.529359174 |
| CDH15 | 1.74 | 0.428558881 | 1.405535436 | 1.23725076 | -0.530789451 |
| BAALC | 1.52 | 0.311917392 | 1.229539348 | 1.23732541 | -0.530974175 |
| WASF3 | 1.49 | 0.177094453 | 1.203324243 | 1.23740042 | -0.531159787 |
| HOGA1 | 0.89 | 0.164366562 | 0.720051252 | 1.23973853 | -0.53695163 |
| S100A9 | 1.02 | -0.227325698 | 0.82270755 | 1.24001443 | -0.537635789 |
| BCHE | 1.38 | 0.235504866 | 1.110022311 | 1.24285329 | -0.544684288 |
| HOXA9 | 0.84 | -0.105840295 | 0.676883171 | 1.24419035 | -0.548009634 |
| SFTPC | 0.77 | -0.061777447 | 0.61802963 | 1.2446491 | -0.549151382 |
| CUBN | 0.61 | -0.322606731 | 0.489226283 | 1.24503435 | -0.550110538 |
| BAAT | 1.02 | -0.087484062 | 0.818426563 | 1.24522249 | -0.550579057 |
| NANOGP8 | 0.82 | -0.266103323 | 0.658714446 | 1.24624815 | -0.553134461 |
| LYG1 | 1.04 | -0.250703789 | 0.832744879 | 1.24683442 | -0.554596061 |
| SLC17A1 | 0.66 | -0.219939672 | 0.530496192 | 1.24693738 | -0.55485283 |
| HSPB2 | 1.31 | 0.244339498 | 1.052432474 | 1.24808625 | -0.55771928 |
| SCTR | 1.15 | 0.015694953 | 0.917999934 | 1.24878581 | -0.559465999 |
| WNT10A | 1.05 | -0.174799426 | 0.842200192 | 1.24890661 | -0.559767728 |
| FGFBP1 | 0.8 | 0.040365328 | 0.641788674 | 1.25232041 | -0.568306419 |
| EGFL6 | 0.96 | -0.06198195 | 0.76887674 | 1.25340928 | -0.571034831 |
| DNER | 0.48 | -0.151289073 | 0.386414988 | 1.25463718 | -0.574114451 |
| ANXA8 | 1.11 | -0.098454087 | 0.878796862 | 1.25783241 | -0.582142369 |
| SPRR1B | 0.8 | -0.045004221 | 0.633631178 | 1.25858488 | -0.584035898 |
| PNMT | 1.19 | 0.143737605 | 0.943477772 | 1.25869039 | -0.584301498 |
| LBP | 0.71 | -0.080033753 | 0.566263052 | 1.25881587 | -0.584617384 |
| FGB | 1.03 | 0.000505264 | 0.820971598 | 1.25888846 | -0.584800165 |
| NPY | 0.75 | 0.037995241 | 0.592711941 | 1.25974999 | -0.586970037 |
| HIST1H3I | 1.11 | 0.112446683 | 0.880340453 | 1.2613358 | -0.590967993 |
| SLC26A3 | 0.87 | -0.060607832 | 0.690990873 | 1.26397543 | -0.59763389 |
| TRIML2 | 0.87 | 0.042540003 | 0.685250823 | 1.26487954 | -0.599920241 |
| PRSS3 | 1.41 | 0.078776231 | 1.114582611 | 1.26525565 | -0.600871847 |
| ADRA2C | 0.79 | 0.077908845 | 0.623794463 | 1.26528296 | -0.600940976 |
| FAM163B | 0.79 | -0.216635207 | 0.30543791 | 1.26561486 | -0.601780971 |
| I AIVITOSB | 0.39 | -0.21003520/ | 0.50545791 | 1.20301486 | -0.001/803/1 |

| INHA | 0.62 | -0.07720674 | 0.490833959 | 1.26607284 | -0.602940444 |
|-----------|------|--------------|-------------|------------|--------------|
| WFDC2 | 0.74 | -0.17004659 | 0.585999331 | 1.26623477 | -0.603350495 |
| LAMP5 | 0.62 | -0.12136226 | 0.48796225 | 1.26626935 | -0.603438059 |
| HEPHL1 | 0.95 | -0.148696586 | 0.7478513 | 1.26753936 | -0.606656037 |
| MLANA | 0.69 | -0.012475885 | 0.543835728 | 1.2684409 | -0.608942304 |
| TCF21 | 1.11 | 0.050275973 | 0.877578824 | 1.26925996 | -0.611020856 |
| RHCG | 1.09 | 0.024803293 | 0.858443311 | 1.26938448 | -0.611336953 |
| TFF3 | 0.87 | -0.066858464 | 0.68109074 | 1.27152795 | -0.616783335 |
| SERPINE2 | 1.1 | -0.001690021 | 0.866919992 | 1.27198135 | -0.617936557 |
| C10orf99 | 1.42 | 0.143241835 | 1.115972585 | 1.27415485 | -0.623470587 |
| IGJ | 0.6 | -0.301981787 | 0.467501576 | 1.27618079 | -0.628637396 |
| TMEM238 | 0.79 | -0.299503063 | 0.62072958 | 1.27620296 | -0.628694005 |
| CDKN2A | 0.82 | -0.126266135 | 0.644422544 | 1.27774952 | -0.632643844 |
| DSG3 | 1.41 | 0.269973195 | 1.10315307 | 1.27804091 | -0.633388557 |
| LRRN4CL | 1.01 | 0.236462129 | 0.791347291 | 1.27971508 | -0.637670694 |
| GPX2 | 1.03 | 0.051142986 | 0.806934373 | 1.2803541 | -0.639306621 |
| SIX1 | 1.17 | 0.084048382 | 0.916337442 | 1.28118608 | -0.641437764 |
| FOLH1 | 1.08 | -0.013236013 | 0.839864003 | 1.28222484 | -0.644100533 |
| ZBED2 | 1.31 | 0.074662008 | 1.018570981 | 1.28347621 | -0.647311182 |
| SPDEF | 0.74 | -0.232448948 | 0.576618232 | 1.28371593 | -0.647926589 |
| RXRG | 1.04 | 0.00927579 | 0.806467257 | 1.28698196 | -0.656322563 |
| MIXL1 | 0.88 | -0.373810355 | 0.681376826 | 1.288213 | -0.65949272 |
| TMEM252 | 0.79 | -0.18893631 | 0.613372721 | 1.29181517 | -0.668786436 |
| RNASE2 | 0.65 | -0.240254492 | 0.499361712 | 1.29312056 | -0.672160793 |
| HOXA5 | 0.97 | 0.098642625 | 0.749969326 | 1.29440419 | -0.675482199 |
| BHMT | 1.21 | -0.034449021 | 0.932588325 | 1.29562945 | -0.678655659 |
| DTX1 | 0.82 | -0.307632987 | 0.627822091 | 1.29837845 | -0.685786602 |
| DNTT | 0.72 | -0.182127202 | 0.552110106 | 1.2985202 | -0.686154705 |
| MEOX1 | 0.8 | -0.070048906 | 0.612524839 | 1.29900107 | -0.687403767 |
| C14orf105 | 0.8 | -0.078060921 | 0.611465591 | 1.3001755 | -0.690456341 |
| MUC15 | 1.15 | -0.09194301 | 0.881434388 | 1.30146142 | -0.69380182 |
| CPA4 | 0.98 | -0.042106041 | 0.752858314 | 1.30291951 | -0.69759925 |
| BTK | 0.96 | -0.216643791 | 0.733577268 | 1.30705053 | -0.708381091 |
| HIST1H2BE | 0.94 | -0.093197225 | 0.715104679 | 1.30760764 | -0.709837735 |
| PAX3 | 1.05 | 0.082251133 | 0.80453019 | 1.30903323 | -0.713567995 |
| CALML3 | 0.92 | -0.079201289 | 0.701698873 | 1.30924999 | -0.714135536 |
| GDNF | 0.99 | -0.110958419 | 0.752754683 | 1.31139373 | -0.71975352 |
| HPX | 1.18 | -0.154131761 | 0.895253499 | 1.31361616 | -0.725587411 |
| BEX1 | 0.8 | 0.077886404 | 0.60361801 | 1.31822135 | -0.737707514 |
| MLPH | 0.69 | -0.180132745 | 0.520350609 | 1.31826392 | -0.73781975 |
| MIOX | 0.78 | -0.104148278 | 0.593373593 | 1.32022317 | -0.742989208 |
| SPRR1A | 0.9 | -0.036724009 | 0.68345875 | 1.32044808 | -0.743583129 |
| LIM2 | 0.58 | -0.074381031 | 0.439098009 | 1.32068776 | -0.744216146 |

| SPI1 | 0.99 | -0.18128238 | 0.751173339 | 1.32068852 | -0.744218154 |
|----------|------|--------------|-------------|------------|--------------|
| S100A7 | 0.86 | -0.18128238 | 0.652397346 | 1.3210257 | -0.7451089 |
| CUX2 | 1.12 | 0.019701572 | 0.844794297 | 1.3210237 | -0.749644687 |
| CLIC6 | 0.87 | -0.125183726 | 0.659065037 | 1.32297195 | -0.750254767 |
| VENTX | 1.04 | 0.038444066 | 0.7821819 | 1.32327133 | -0.751047015 |
| INPP5J | 0.98 | -0.166290679 | 0.737446315 | 1.3240893 | -0.753212469 |
| NAPSA | 0.87 | -0.100290079 | 0.656699994 | 1.32467795 | -0.754771674 |
| AZU1 | 0.82 | -0.123382209 | 0.617539851 | 1.32475774 | -0.754983059 |
| CDC42EP5 | 0.82 | -0.123382209 | 0.701081698 | 1.32832118 | -0.764437163 |
| SCGB3A1 | 0.68 | -0.109975395 | 0.5092852 | 1.33026547 | -0.769606231 |
| SLC30A2 | 1.07 | 0.240976297 | 0.802799177 | 1.33495617 | -0.782107962 |
| HOXD11 | | | 0.694416491 | 1.33621727 | -0.78547659 |
| | 0.93 | -0.014211646 | | | |
| S100A8 | 0.72 | -0.238032456 | 0.540662185 | 1.3369494 | -0.787433706 |
| P2RX3 | 1.1 | -0.012520781 | 0.822221554 | 1.33866993 | -0.792037187 |
| ACMSD | 1.22 | -0.104821773 | 0.913916034 | 1.33937105 | -0.793914815 |
| FUT3 | 0.58 | -0.289642024 | 0.430923267 | 1.33982496 | -0.795130913 |
| CYP2E1 | 1.1 | -0.039375351 | 0.822812729 | 1.34224295 | -0.801616137 |
| KREMEN2 | 0.8 | -0.11946482 | 0.595059494 | 1.34231657 | -0.801813761 |
| IVL | 0.95 | -0.094957964 | 0.699713123 | 1.35276983 | -0.829986218 |
| SOX1 | 0.81 | -0.039554827 | 0.596810317 | 1.35554794 | -0.837510226 |
| SPX | 0.88 | 0.10858783 | 0.651058591 | 1.35784457 | -0.843741871 |
| BRINP1 | 1.42 | 0.285542739 | 1.048121749 | 1.35790478 | -0.843905381 |
| P2RX5 | 0.94 | -0.222683101 | 0.692002053 | 1.35864879 | -0.845926543 |
| GUCY2C | 0.95 | 0.049775043 | 0.700109784 | 1.35993505 | -0.849423343 |
| COL26A1 | 0.83 | -0.153662562 | 0.608078561 | 1.36007832 | -0.849813034 |
| AIM2 | 0.84 | -0.323717788 | 0.618618298 | 1.36219774 | -0.855582672 |
| MARCO | 1.42 | -0.064455942 | 1.04130633 | 1.36252177 | -0.856465576 |
| COL17A1 | 1.06 | -0.093537036 | 0.779949105 | 1.36438862 | -0.861556309 |
| PRAME | 0.95 | -0.064224596 | 0.699258355 | 1.36458167 | -0.862083142 |
| TGM1 | 1.19 | 0.123088068 | 0.870731648 | 1.36489816 | -0.86294699 |
| DDC | 1.01 | -0.008737611 | 0.739114898 | 1.3691312 | -0.874520237 |
| KLHDC8A | 0.51 | -0.076995702 | 0.369907077 | 1.38138999 | -0.908238293 |
| TFF1 | 0.72 | -0.249919989 | 0.524230636 | 1.38258241 | -0.911534123 |
| CA12 | 0.99 | 0.239467788 | 0.711718601 | 1.38763163 | -0.925521549 |
| RTN1 | 0.99 | -0.038303097 | 0.715921409 | 1.38800866 | -0.92656804 |
| KLK1 | 1.03 | -0.034506716 | 0.740693394 | 1.38945523 | -0.930585847 |
| CDX2 | 1 | -0.040626931 | 0.714634173 | 1.39248066 | -0.939002391 |
| TAGLN3 | 0.58 | -0.119763738 | 0.414269528 | 1.39479817 | -0.945461943 |
| TRABD2A | 0.77 | -0.061498747 | 0.550293943 | 1.39569833 | -0.947973823 |
| SPRR2A | 0.95 | -0.149359973 | 0.683173633 | 1.39581947 | -0.948311984 |
| MMP17 | 0.84 | -0.179963901 | 0.601477813 | 1.39610149 | -0.949099373 |
| PGLYRP2 | 1.09 | -0.113875584 | 0.782203614 | 1.39804595 | -0.954532467 |
| C2orf88 | 0.69 | -0.218033756 | 0.493740397 | 1.40161145 | -0.964514643 |

| IVD | 0.00 | 0.474644000 | 0.636540036 | 4 40545242 | 0.074455304 |
|-----------|------|--------------|-------------|------------|--------------|
| IYD | 0.89 | -0.174614833 | 0.636549926 | 1.40515312 | -0.974455291 |
| L1TD1 | 0.48 | -0.069207009 | 0.340873264 | 1.40557246 | -0.975633943 |
| CD1E | 0.92 | -0.053072064 | 0.654036098 | 1.41245798 | -0.995037557 |
| BLK | 0.84 | -0.115774576 | 0.594422277 | 1.41258202 | -0.995387958 |
| HIST1H4F | 1.14 | 0.050452889 | 0.809137867 | 1.41375803 | -0.998711762 |
| MEF2B | 0.74 | -0.460988796 | 0.522378136 | 1.41640732 | -1.006209707 |
| GDAP1L1 | 0.73 | 0.005363667 | 0.511804674 | 1.42042596 | -1.017609896 |
| FOXN1 | 1.04 | -0.109063083 | 0.729573254 | 1.42146645 | -1.020566871 |
| MMP3 | 0.93 | 0.015061132 | 0.657622349 | 1.42161806 | -1.020997903 |
| CALML5 | 0.94 | -0.101006621 | 0.661280531 | 1.42346144 | -1.026242471 |
| SFTPA1 | 0.74 | -0.097406403 | 0.514800617 | 1.43105344 | -1.04791396 |
| NAT8 | 0.85 | -0.252149564 | 0.594920581 | 1.43150924 | -1.049218716 |
| SEMA5B | 0.77 | -0.12706395 | 0.533807198 | 1.43337898 | -1.054575297 |
| SLC4A1 | 0.66 | 0.005308196 | 0.460118511 | 1.43676331 | -1.064288809 |
| CCL18 | 1.4 | -0.038594637 | 0.974424841 | 1.43768516 | -1.066938605 |
| SLC44A4 | 0.7 | -0.198218556 | 0.484000809 | 1.44100932 | -1.076507869 |
| GNG3 | 1.12 | -0.009382065 | 0.776459181 | 1.44169905 | -1.078496151 |
| HNF4A | 1.19 | 0.009066633 | 0.82792736 | 1.44188137 | -1.079021894 |
| HAS1 | 0.51 | -0.106631832 | 0.354832123 | 1.44339024 | -1.083375388 |
| ITGA10 | 1.1 | 0.091139275 | 0.762236695 | 1.44658086 | -1.092596187 |
| C1orf186 | 0.81 | -0.232783433 | 0.556956971 | 1.44806036 | -1.096878798 |
| SLC6A17 | 0.83 | -0.072504836 | 0.570436842 | 1.45030451 | -1.103383183 |
| FOXE1 | 0.94 | -0.186437722 | 0.65025748 | 1.45124998 | -1.106126504 |
| REEP6 | 0.85 | -0.107410676 | 0.585030282 | 1.45392732 | -1.113904637 |
| SCGB1A1 | 0.65 | -0.102234419 | 0.443839927 | 1.45469964 | -1.116151031 |
| C2orf40 | 0.52 | -0.058807677 | 0.360540612 | 1.45592128 | -1.119706759 |
| HAND2 | 0.85 | -0.04101636 | 0.58543822 | 1.45743099 | -1.124105094 |
| TMEM52B | 0.52 | -0.03338748 | 0.357118512 | 1.46070323 | -1.133653935 |
| PENK | 0.75 | 0.009513552 | 0.512642137 | 1.46262582 | -1.139274301 |
| IBSP | 1.03 | -0.118765597 | 0.700391914 | 1.4671386 | -1.152495666 |
| SPRR2E | 0.93 | -0.196303068 | 0.631940043 | 1.47027362 | -1.161704506 |
| TUBB2B | 0.87 | -0.099148656 | 0.587766815 | 1.47245211 | -1.168115216 |
| COL11A1 | 1 | -0.039696261 | 0.681093189 | 1.47484276 | -1.175161164 |
| BSND | 0.89 | -0.122590288 | 0.600163758 | 1.47789433 | -1.18417166 |
| SLC26A4 | 0.56 | -0.181445822 | 0.379369791 | 1.47801408 | -1.184525615 |
| RAG1 | 0.53 | -0.216336183 | 0.357271642 | 1.48159309 | -1.195118078 |
| PTHLH | 0.91 | 0.070906339 | 0.611563009 | 1.48162312 | -1.195207061 |
| ACSM1 | 0.67 | -0.270470196 | 0.450694094 | 1.48254164 | -1.19792972 |
| CHRNA2 | 0.93 | -0.187813917 | 0.623120524 | 1.48709944 | -1.21146475 |
| TSPAN8 | 0.76 | -0.169766987 | 0.513915323 | 1.48836936 | -1.21524334 |
| KIAA0226L | 0.95 | -0.209345228 | 0.634459642 | 1.49151008 | -1.22460231 |
| CEACAM7 | 0.7 | -0.076054439 | 0.466100208 | 1.491792 | -1.225443374 |
| CXCL5 | 0.63 | -0.064278349 | 0.419562194 | 1.49293414 | -1.228852343 |

| SCARF2 | 0.83 | 0.027220774 | 0.554240021 | 1 40424426 | 1 22206477 |
|----------|------|--------------|-------------|------------|--------------|
| | 1 | -0.027320774 | 0.554349021 | 1.49434426 | -1.23306477 |
| TSPAN32 | 1.19 | -0.18538935 | 0.792715951 | 1.49569573 | -1.237105708 |
| EPHX3 | 1.02 | -0.226390648 | 0.678658604 | 1.50146379 | -1.254393513 |
| SFTPA2 | 0.68 | -0.099222296 | 0.449712329 | 1.50178417 | -1.255355696 |
| SLC7A3 | 1.25 | -0.13036366 | 0.831973007 | 1.50436829 | -1.263123964 |
| SPRR2D | 0.91 | -0.236592032 | 0.603403438 | 1.50604159 | -1.268161259 |
| CCR2 | 0.56 | -0.259216766 | 0.369399625 | 1.50975855 | -1.279370885 |
| MAT1A | 0.47 | -0.194842724 | 0.308174997 | 1.51695804 | -1.301161689 |
| FOSB | 0.65 | -0.202070882 | 0.428756448 | 1.52185606 | -1.316045864 |
| C1orf228 | 0.8 | -0.23914373 | 0.522060205 | 1.52701687 | -1.331780533 |
| SLC45A3 | 0.74 | -0.053534526 | 0.48719984 | 1.52741861 | -1.333007604 |
| RPRM | 0.7 | -0.246041233 | 0.454810739 | 1.53298052 | -1.350029287 |
| DEFB1 | 0.92 | -0.12928616 | 0.600693059 | 1.53691159 | -1.362097239 |
| CTSV | 0.56 | -0.058699559 | 0.360826624 | 1.53975171 | -1.370835332 |
| MS4A3 | 0.92 | -0.006705901 | 0.596599254 | 1.54626961 | -1.390949704 |
| IL36G | 0.75 | -0.314118853 | 0.483671567 | 1.55014073 | -1.402936289 |
| LYPD1 | 0.9 | -0.243220634 | 0.579955694 | 1.55519004 | -1.418616061 |
| REG4 | 0.67 | -0.058923238 | 0.429638994 | 1.55802568 | -1.427444023 |
| GCG | 0.79 | -0.144192996 | 0.508519488 | 1.55975068 | -1.432822174 |
| ADRB1 | 0.66 | -0.202959439 | 0.42080038 | 1.56108976 | -1.437001236 |
| ADH1A | 0.83 | -0.323035595 | 0.530253875 | 1.56183666 | -1.439333743 |
| BHLHA15 | 0.48 | -0.371191182 | 0.308717214 | 1.56563796 | -1.451222222 |
| PTH1R | 0.85 | 0.008943574 | 0.54042887 | 1.56577227 | -1.451642808 |
| NEFH | 0.74 | -0.15839088 | 0.47209489 | 1.56812782 | -1.45902486 |
| RNF43 | 0.83 | -0.261810211 | 0.531659122 | 1.5696268 | -1.463728301 |
| PTCRA | 0.82 | -0.135396927 | 0.519510413 | 1.57080164 | -1.46741778 |
| RHBG | 0.91 | -0.166836888 | 0.576279322 | 1.57308153 | -1.474585491 |
| IGSF1 | 1.02 | -0.22321779 | 0.647649225 | 1.57749657 | -1.488495432 |
| SCGB2A2 | 0.79 | -0.198223381 | 0.498321875 | 1.58067088 | -1.498520415 |
| VTCN1 | 0.4 | -0.154498277 | 0.252581012 | 1.58212439 | -1.503117576 |
| SDR16C5 | 1.21 | -0.273223425 | 0.763682431 | 1.59036384 | -1.52925714 |
| PANX3 | 1.04 | 0.004338531 | 0.649525523 | 1.59565892 | -1.546127376 |
| СР | 1.02 | -0.117414518 | 0.637253387 | 1.59613206 | -1.547637543 |
| PDZK1 | 0.88 | -0.069994334 | 0.549350183 | 1.60248888 | -1.567970598 |
| PRSS16 | 1.04 | -0.0391903 | 0.646071767 | 1.60652726 | -1.580929821 |
| SYT4 | 0.69 | -0.020389731 | 0.426650272 | 1.61085881 | -1.594866109 |
| FOLR1 | 0.45 | -0.126202936 | 0.278362259 | 1.61231684 | -1.599565602 |
| CST1 | 0.65 | -0.121501565 | 0.401276647 | 1.61726163 | -1.61553517 |
| FOXD1 | 1.24 | -0.095333521 | 0.763113458 | 1.62253778 | -1.632628835 |
| CYP17A1 | 0.38 | -0.107526694 | 0.231714139 | 1.62361599 | -1.636128876 |
| TWIST1 | 1.11 | -0.170267765 | 0.679758795 | 1.63118291 | -1.660757686 |
| CCL20 | 0.88 | -0.252021841 | 0.539555934 | 1.63462968 | -1.672014191 |
| IGF2 | 0.69 | -0.16060489 | 0.419138127 | 1.63850199 | -1.684688781 |
| 101 2 | 0.03 | -0.10000403 | 0.413130127 | 1.03030133 | -1.004000/01 |

| KIAA1324 | 0.99 | -0.171736626 | 0.60269659 | 1.63951981 | -1.688025204 |
|-------------|------|--------------|-------------|------------|----------------------|
| SCG3 | 0.69 | -0.171730020 | 0.422437564 | 1.63999486 | |
| | | | | | -1.689583147 |
| CORO2B | 0.47 | -0.173259489 | 0.284084225 | 1.6420775 | -1.6964185 |
| PRLR | 0.77 | -0.071464639 | 0.469126648 | 1.64500022 | -1.706025724 |
| ASCL2 | 0.71 | -0.27070457 | 0.433562354 | 1.64765215 | -1.714757591 |
| CXCL17 | 0.75 | -0.222933983 | 0.453330642 | 1.65057577 | -1.724400369 |
| PRSS35 | 0.89 | 0.043835961 | 0.536263509 | 1.65197462 | -1.729020139 |
| RAB3C | 0.65 | -0.055395492 | 0.392159723 | 1.65245401 | -1.730604258 |
| HDGFL1 | 0.84 | -0.114759517 | 0.509094432 | 1.65680433 | -1.745000601 |
| GATA3 | 0.9 | -0.134636317 | 0.542338948 | 1.65814482 | -1.749444234 |
| VSIG2 | 0.59 | -0.153406587 | 0.355842248 | 1.66125938 | -1.759782721 |
| PAX2 | 0.82 | -0.257759439 | 0.489617659 | 1.66627429 | -1.776470016 |
| TFR2 | 1.02 | -0.12998453 | 0.609325082 | 1.67072909 | -1.791335679 |
| ASRGL1 | 0.77 | -0.211432744 | 0.459294919 | 1.67180634 | -1.794936432 |
| CD8B | 0.58 | -0.357977487 | 0.343578298 | 1.67955947 | -1.82092002 |
| CDO1 | 0.63 | -0.096639353 | 0.37233249 | 1.68888362 | -1.852327879 |
| SYT1 | 1.05 | -0.28653353 | 0.622127136 | 1.68971268 | -1.855128948 |
| GIP | 0.66 | -0.069618128 | 0.389674609 | 1.70059091 | -1.892009447 |
| FLT3 | 0.66 | -0.228198999 | 0.390072095 | 1.70369573 | -1.902579154 |
| SAA1 | 0.91 | -0.152322004 | 0.531822941 | 1.70397348 | -1.903525621 |
| MEP1A | 0.72 | -0.198020147 | 0.422525789 | 1.70784039 | -1.916718811 |
| SLC18A1 | 0.85 | -0.365748862 | 0.49551682 | 1.71096133 | -1.927388673 |
| CH507-42P11 | 0.97 | -0.218698097 | 0.565742074 | 1.71118132 | -1.928141496 |
| SNX22 | 0.81 | -0.288080928 | 0.474352961 | 1.71649101 | -1.946341381 |
| GALNT9 | 0.89 | -0.277576483 | 0.518963249 | 1.72275455 | -1.967883233 |
| PAX9 | 0.8 | -0.245794344 | 0.464891146 | 1.72556613 | -1.977578455 |
| MGAM | 0.46 | -0.115100123 | 0.264427394 | 1.73335926 | -2.004534338 |
| BMPER | 1.06 | -0.035465543 | 0.608870026 | 1.73423508 | -2.007571316 |
| PNOC | 0.62 | -0.394684162 | 0.355044637 | 1.73750929 | -2.018938533 |
| ICAM3 | 0.53 | -0.37127445 | 0.305629743 | 1.74372425 | -2.04057426 |
| SLC22A11 | 0.47 | -0.148865527 | 0.270498519 | 1.74694159 | -2.051804905 |
| ZG16B | 0.68 | -0.213785386 | 0.388253036 | 1.75715694 | -2.087600519 |
| SHISA2 | 0.58 | -0.076859101 | 0.332055404 | 1.76099387 | -2.101099424 |
| SPINK2 | 0.79 | -0.126769057 | 0.444341007 | 1.76938943 | -2.130738948 |
| LEFTY1 | 0.73 | -0.194839909 | 0.407773149 | 1.77907073 | -2.165092648 |
| FOXA3 | 0.6 | -0.125001155 | 0.33400167 | 1.78626679 | -2.190749052 |
| SFTA3 | 0.33 | -0.095964384 | 0.18546286 | 1.79576052 | -2.224755834 |
| ENPP3 | 0.54 | -0.241639945 | 0.301065634 | 1.79590079 | -2.225259651 |
| RBP4 | 1.43 | 0.037557999 | 0.79627831 | 1.79808581 | -2.233112591 |
| GAPT | 0.65 | -0.24238012 | 0.359536557 | 1.79816969 | -2.233414238 |
| PHGR1 | 0.87 | -0.235667528 | 0.482653971 | 1.81237124 | -2.284689493 |
| SLC16A12 | 0.62 | -0.154773686 | 0.340235929 | 1.82088902 | -2.315636834 |
| 1 | | | | | : : : : : . . |

| IGFBP1 | 0.75 | -0.119325259 | 0.409547063 | 1.82145024 | -2.31768097 |
|-----------|------|--------------|-------------|------------|--------------|
| MAG | 0.61 | -0.054974148 | 0.335248909 | 1.82245725 | -2.321350424 |
| ZCCHC12 | 0.71 | -0.174280696 | 0.390558616 | 1.82559798 | -2.332807977 |
| COL11A2 | 1.05 | -0.148570454 | 0.57234905 | 1.82730114 | -2.339029467 |
| SERPINA1 | 0.28 | -0.149586894 | 0.150392004 | 1.83333979 | -2.361134793 |
| FGF21 | 0.69 | -0.146614615 | 0.375042197 | 1.84240126 | -2.394442384 |
| DPYS | 1.1 | -0.133143644 | 0.596356057 | 1.84634266 | -2.408981214 |
| SLC22A2 | 0.95 | -0.117866523 | 0.514726964 | 1.84940744 | -2.420307861 |
| CA14 | 0.86 | -0.285303978 | 0.46440459 | 1.86026129 | -2.460572078 |
| ZFP42 | 0.82 | -0.091489341 | 0.440766909 | 1.86046509 | -2.461330359 |
| MMP1 | 0.87 | -0.139143815 | 0.465037083 | 1.86592603 | -2.481679953 |
| SOX18 | 0.96 | -0.323791468 | 0.516971353 | 1.86645836 | -2.483666802 |
| HLA-DOB | 0.72 | -0.490038798 | 0.38753304 | 1.86778008 | -2.48860242 |
| ATP6V1B1 | 0.95 | -0.190866158 | 0.509433851 | 1.87289655 | -2.507741472 |
| SLC27A6 | 0.76 | -0.105803952 | 0.406107402 | 1.87456202 | -2.513982763 |
| TBATA | 0.89 | -0.227296582 | 0.47034756 | 1.88567417 | -2.555767068 |
| FAM19A4 | 0.57 | -0.057706188 | 0.302583229 | 1.8884322 | -2.566176185 |
| TNF | 0.75 | -0.214056818 | 0.397170952 | 1.89095192 | -2.575699149 |
| UPK3A | 0.58 | -0.270145055 | 0.303049889 | 1.90296364 | -2.6212706 |
| HP | 0.82 | -0.177318483 | 0.431528453 | 1.90567687 | -2.631604348 |
| VSTM1 | 0.55 | -0.114282098 | 0.288232899 | 1.90864963 | -2.642943406 |
| LRRN1 | 0.66 | -0.130441567 | 0.345633546 | 1.91321066 | -2.66037501 |
| HIST2H2AC | 0.95 | -0.150986075 | 0.494637969 | 1.91386409 | -2.662875736 |
| HBD | 0.58 | -0.479775891 | 0.297763289 | 1.93431601 | -2.741578442 |
| PAX5 | 0.78 | -0.197264132 | 0.402744299 | 1.93752241 | -2.753993078 |
| SCNN1B | 0.86 | -0.273378659 | 0.441720271 | 1.94495211 | -2.78283871 |
| LMX1B | 0.85 | -0.086290302 | 0.43271824 | 1.95337002 | -2.815654435 |
| NLRP7 | 0.64 | -0.177377201 | 0.325255039 | 1.95976779 | -2.840689771 |
| TRPM8 | 0.77 | -0.097382612 | 0.394707167 | 1.96109195 | -2.845881629 |
| MMP12 | 0.9 | -0.14475122 | 0.4533946 | 1.97870629 | -2.915278598 |
| SCUBE2 | 0.59 | -0.220575276 | 0.298477516 | 1.99124806 | -2.965068852 |
| PRSS57 | 0.64 | -0.077280651 | 0.320004132 | 2.00585524 | -3.023455236 |
| DLX5 | 0.8 | -0.043904361 | 0.396556053 | 2.00644657 | -3.025827854 |
| KIT | 0.55 | -0.158235693 | 0.27274532 | 2.01137717 | -3.04563812 |
| AHSP | 0.75 | -0.230042552 | 0.372260058 | 2.0141733 | -3.056894062 |
| TCEAL7 | 0.71 | -0.054638494 | 0.352205384 | 2.01489605 | -3.059806084 |
| RUNDC3A | 0.78 | -0.111089986 | 0.384991229 | 2.02472867 | -3.099526199 |
| CPNE5 | 0.56 | -0.471541043 | 0.276622046 | 2.02593908 | -3.104429136 |
| FOXJ1 | 0.67 | -0.29319561 | 0.331937522 | 2.02677251 | -3.107806819 |
| BRINP2 | 0.78 | -0.026277345 | 0.380272085 | 2.04026244 | -3.162670828 |
| НОХВ6 | 0.96 | -0.132135654 | 0.469634224 | 2.04964566 | -3.201047348 |
| CYP4B1 | 0.66 | -0.170694992 | 0.321105819 | 2.05342894 | -3.21657042 |
| HAS2 | 0.88 | -0.124244253 | 0.427726381 | 2.06632609 | -3.269703527 |

| ZBP1 | 0.76 | -0.526619809 | 0.366146923 | 2.07248754 | -3.295204599 |
|----------|------|--------------|-------------|------------|--------------|
| LGALS4 | 0.6 | -0.098859297 | 0.284891583 | 2.10479491 | -3.43016163 |
| CLEC17A | 0.71 | -0.15479284 | 0.336012151 | 2.10632619 | -3.436610019 |
| RGL4 | 0.81 | -0.399641907 | 0.384814461 | 2.10757619 | -3.441877376 |
| MYRF | 0.69 | -0.178998513 | 0.325623483 | 2.12279921 | -3.506276477 |
| AGR3 | 0.62 | -0.157855465 | 0.286913906 | 2.15146331 | -3.628794391 |
| C11orf21 | 1.02 | -0.317902187 | 0.472309897 | 2.1535239 | -3.637665192 |
| HOXB5 | 1.03 | -0.220397479 | 0.47792472 | 2.15476069 | -3.642993631 |
| PVALB | 1.09 | -0.002415211 | 0.50219199 | 2.16062216 | -3.668288101 |
| CD3D | 0.78 | -0.413679075 | 0.361026154 | 2.17000748 | -3.708932463 |
| CRTAC1 | 0.87 | -0.059054005 | 0.399959587 | 2.17604145 | -3.735156392 |
| MUC3A | 0.71 | -0.305113662 | 0.326660441 | 2.18868197 | -3.790328783 |
| SCGB1D2 | 0.69 | -0.21562267 | 0.311493329 | 2.227005 | -3.959551274 |
| PRPH | 0.57 | -0.027235256 | 0.251257484 | 2.24970277 | -4.061162558 |
| TRIM50 | 0.74 | -0.082315241 | 0.329567581 | 2.24993393 | -4.062202694 |
| GNG7 | 0.65 | -0.295079346 | 0.288637634 | 2.25655861 | -4.092056778 |
| CCL25 | 0.67 | -0.278756772 | 0.297097624 | 2.25784058 | -4.097844103 |
| UGT2B7 | 0.59 | -0.092746603 | 0.261055121 | 2.26840665 | -4.145668721 |
| PRAC2 | 0.64 | -0.160534714 | 0.279594515 | 2.3027186 | -4.302512965 |
| CAPS | 0.55 | -0.220421868 | 0.240117175 | 2.3043059 | -4.309825676 |
| STMN2 | 0.88 | -0.045418771 | 0.378867671 | 2.31220844 | -4.346307879 |
| PRG4 | 0.49 | -0.145389984 | 0.210201724 | 2.32761034 | -4.417769876 |
| GZMK | 0.59 | -0.389225158 | 0.253225956 | 2.33724282 | -4.462703976 |
| НОХВ9 | 0.68 | -0.246412057 | 0.290082542 | 2.35319863 | -4.537543811 |
| FAM166B | 0.63 | -0.063613987 | 0.268229839 | 2.35849093 | -4.562479457 |
| SH2D1A | 0.58 | -0.338689494 | 0.246767919 | 2.36172465 | -4.577743327 |
| INS | 0.78 | -0.159270641 | 0.326187895 | 2.37695737 | -4.649926358 |
| INSC | 0.44 | -0.141967872 | 0.183789125 | 2.40216628 | -4.770402832 |
| NTS | 0.72 | -0.132418446 | 0.29940521 | 2.40471974 | -4.782677023 |
| SHISA3 | 0.81 | -0.19592553 | 0.336124969 | 2.41079179 | -4.811917074 |
| AICDA | 0.66 | -0.167395392 | 0.27233082 | 2.43060822 | -4.907856329 |
| FOXC2 | 0.86 | -0.20154353 | 0.353305683 | 2.43414571 | -4.925065338 |
| FAM129C | 0.61 | -0.192066807 | 0.243952861 | 2.48930852 | -5.196656898 |
| CLECL1 | 0.76 | -0.338075056 | 0.306030995 | 2.49376256 | -5.218851696 |
| DCDC2 | 0.71 | -0.289651693 | 0.28226642 | 2.51175944 | -5.308935474 |
| MECOM | 0.92 | -0.221646485 | 0.363764976 | 2.52390755 | -5.370109321 |
| KLHL14 | 0.53 | -0.325455137 | 0.208895485 | 2.52953616 | -5.398553165 |
| IL18RAP | 1.06 | -0.359418754 | 0.416693159 | 2.53873213 | -5.445160828 |
| TRPV6 | 0.69 | -0.327544072 | 0.270084099 | 2.54440033 | -5.473973055 |
| SP7 | 0.53 | -0.113436264 | 0.208658138 | 2.55233761 | -5.51442725 |
| EFHD1 | 0.53 | -0.160060297 | 0.207290218 | 2.55648722 | -5.535626911 |
| MMP10 | 0.6 | -0.202380062 | 0.235272509 | 2.56034069 | -5.555344434 |
| SFTPB | 0.61 | -0.126899411 | 0.237083501 | 2.56459608 | -5.577153054 |

| CD1B | 1.2 | -0.067081233 | 0.464456758 | 2.5847136 | -5.680744379 |
|-----------|------|--------------|-------------|------------|--------------|
| SCGB2A1 | 0.64 | -0.184827688 | 0.247811129 | 2.58585643 | -5.686653487 |
| SLC35D3 | 0.71 | -0.241906474 | 0.269338638 | 2.62472746 | -5.889194224 |
| MUC6 | 0.82 | -0.151899173 | 0.311535102 | 2.62494178 | -5.890319348 |
| ATP1A3 | 0.6 | -0.111136323 | 0.230046976 | 2.62906513 | -5.911983463 |
| IRF4 | 0.66 | -0.385343948 | 0.249921047 | 2.6325936 | -5.930549073 |
| MPO | 0.85 | -0.058792172 | 0.320947272 | 2.64782769 | -6.010991465 |
| S100A12 | 0.52 | -0.304276292 | 0.193854548 | 2.67460667 | -6.153520839 |
| HMX1 | 0.67 | -0.163488091 | 0.251240514 | 2.67663777 | -6.164389757 |
| TMEM200C | 0.59 | -0.253889193 | 0.22027407 | 2.68686932 | -6.219266748 |
| IFITM5 | 0.61 | -0.151349767 | 0.224097097 | 2.73227281 | -6.465314719 |
| REG1A | 0.77 | -0.134891733 | 0.281490427 | 2.73393211 | -6.474384793 |
| RAB37 | 0.6 | -0.351311985 | 0.215960515 | 2.76472923 | -6.643727737 |
| CDX1 | 0.93 | -0.256220034 | 0.334624238 | 2.78232922 | -6.741355905 |
| ORM1 | 0.69 | -0.113350863 | 0.244060104 | 2.84576497 | -7.098378236 |
| STAP1 | 0.8 | -0.286318929 | 0.278729812 | 2.86126142 | -7.186816936 |
| ARG1 | 0.55 | -0.108069181 | 0.190423592 | 2.86488635 | -7.207573821 |
| PRTN3 | 0.72 | -0.075279819 | 0.250701689 | 2.87031521 | -7.238709399 |
| SLAMF7 | 0.78 | -0.389301052 | 0.270798644 | 2.88355302 | -7.314878008 |
| IL21R | 0.83 | -0.352616239 | 0.28655348 | 2.90516297 | -7.439971871 |
| LTB | 0.78 | -0.310476352 | 0.268832035 | 2.90953709 | -7.465406061 |
| PTGDS | 0.76 | -0.241683102 | 0.259418039 | 2.91757459 | -7.512241459 |
| CYP21A2 | 0.96 | -0.455215507 | 0.330210945 | 2.92059127 | -7.529853361 |
| SYP | 0.63 | -0.092420141 | 0.216025508 | 2.92872206 | -7.577412905 |
| TMEM151A | 0.66 | -0.1086962 | 0.223478624 | 2.94042529 | -7.646100886 |
| DERL3 | 0.69 | -0.523476975 | 0.232756992 | 2.94511062 | -7.673676588 |
| POU2F2 | 0.73 | -0.362691473 | 0.24784352 | 2.95446936 | -7.728889211 |
| SHISA8 | 0.75 | -0.283698683 | 0.250906815 | 2.9764243 | -7.859101631 |
| ANXA10 | 1.2 | -0.033750138 | 0.402092506 | 2.98607067 | -7.916618022 |
| ORM2 | 0.72 | -0.235973344 | 0.240155819 | 2.99477704 | -7.968689531 |
| RBP5 | 0.69 | -0.235965515 | 0.23000926 | 3.01563035 | -8.094026378 |
| S100P | 0.76 | -0.310622393 | 0.253390632 | 3.01617321 | -8.097300809 |
| SLC6A13 | 0.44 | -0.087481371 | 0.144905733 | 3.01661152 | -8.099945032 |
| CNTFR | 1.07 | -0.100570103 | 0.351377361 | 3.03153978 | -8.190233462 |
| DBH | 0.7 | -0.305617204 | 0.230366491 | 3.03697413 | -8.223211842 |
| MTRNR2L12 | 0.37 | -0.092786017 | 0.123410964 | 3.03856589 | -8.232882662 |
| OCA2 | 0.72 | -0.306051707 | 0.235139058 | 3.062459 | -8.378655108 |
| FCRL5 | 0.59 | -0.455409111 | 0.193753504 | 3.06662111 | -8.404165057 |
| PLAC8 | 0.74 | -0.278490611 | 0.240640461 | 3.0893606 | -8.544148911 |
| KCNK3 | 0.67 | -0.049264326 | 0.215375954 | 3.09222991 | -8.561885804 |
| FCRL3 | 0.69 | -0.307567814 | 0.221908655 | 3.09477157 | -8.57761107 |
| DPEP1 | 0.58 | -0.384775898 | 0.186371281 | 3.10366676 | -8.632747357 |
| FAIM3 | 0.7 | -0.264234226 | 0.223620462 | 3.11803131 | -8.722119263 |
| | | | | | |

| CLDNG | 0.40 | 0.129009296 | 0.156942679 | 2 14206715 | 0 072505056 |
|-----------|------|--------------|-------------|------------|--------------|
| CLDN6 | 0.49 | -0.138008386 | 0.156843678 | 3.14206715 | -8.872585956 |
| TNFRSF17 | 0.61 | -0.468437056 | 0.192073013 | 3.19901409 | -9.233691167 |
| CCL19 | 0.69 | -0.237752921 | 0.214873498 | 3.21085278 | -9.309575601 |
| BEND5 | 0.82 | -0.312003005 | 0.253752383 | 3.2138325 | -9.328719364 |
| MIA | 0.45 | -0.138691475 | 0.138841286 | 3.22654511 | -9.410593347 |
| TCERG1L | 0.75 | -0.191042839 | 0.231549154 | 3.25016947 | -9.563601603 |
| MUC13 | 0.45 | -0.183990916 | 0.137647767 | 3.30527571 | -9.924847539 |
| NEFM | 1.06 | -0.204141312 | 0.320919227 | 3.31035602 | -9.958456992 |
| CD177 | 0.62 | -0.266578385 | 0.183182159 | 3.38687384 | -10.47091441 |
| GCGR | 0.72 | -0.141529322 | 0.211963583 | 3.39542071 | -10.52888179 |
| KRT15 | 0.8 | -0.317737371 | 0.235086264 | 3.41218201 | -10.64298609 |
| MYCN | 0.68 | -0.272355866 | 0.197017301 | 3.42977936 | -10.76338649 |
| TNFRSF13C | 0.82 | -0.338050343 | 0.237638823 | 3.45517113 | -10.93820756 |
| FOXA1 | 0.8 | -0.36611243 | 0.232050787 | 3.45698198 | -10.9507244 |
| GSTA1 | 0.49 | -0.1577591 | 0.140600043 | 3.4858356 | -11.15104984 |
| OR51E2 | 0.62 | -0.256706053 | 0.159924308 | 3.86167119 | -13.91250434 |
| OLFM4 | 0.6 | -0.135502272 | 0.154135962 | 3.886514 | -14.1049911 |
| MZB1 | 0.61 | -0.485747939 | 0.152692676 | 3.9654156 | -14.72452085 |
| RGS13 | 0.77 | -0.200325526 | 0.191507983 | 3.99908375 | -14.99267082 |
| CLC | 0.74 | -0.124123562 | 0.183922143 | 4.00293534 | -15.02349135 |
| ISL1 | 0.68 | -0.275511262 | 0.166535845 | 4.07743509 | -15.62547694 |
| UPK1A | 0.62 | -0.102132945 | 0.149989733 | 4.13086644 | -16.06405753 |
| LMO3 | 0.54 | -0.110288759 | 0.130737636 | 4.16107919 | -16.31458005 |
| ALPPL2 | 0.65 | -0.15263629 | 0.15623024 | 4.17946587 | -16.46793493 |
| ALX1 | 1.02 | -0.336100589 | 0.243273913 | 4.18523418 | -16.51618511 |
| SFTPD | 1.16 | -0.107652993 | 0.274116541 | 4.240597 | -16.98266292 |
| FCRL2 | 0.65 | -0.366408299 | 0.150089723 | 4.30240783 | -17.51071311 |
| PCSK2 | 0.57 | -0.097881088 | 0.12998698 | 4.36800372 | -18.07945647 |
| PLA2G2D | 0.6 | -0.233232849 | 0.135645446 | 4.38689811 | -18.24487502 |
| SLC17A7 | 0.71 | -0.208229002 | 0.157116804 | 4.49096612 | -19.16877666 |
| LGR5 | 0.72 | -0.125469821 | 0.161087729 | 4.4978296 | -19.23047108 |
| HOXB13 | 0.69 | -0.240747818 | 0.15231084 | 4.52085532 | -19.43813279 |
| CLCNKB | 0.52 | -0.165925237 | 0.113420786 | 4.56326969 | -19.82343024 |
| TRIM15 | 0.84 | -0.250370174 | 0.181231999 | 4.61813876 | -20.32720556 |
| GFRA3 | 0.73 | -0.22483334 | 0.155663279 | 4.6646192 | -20.7586723 |
| ACTG2 | 0.42 | -0.100784961 | 0.090145238 | 4.66991323 | -20.8080896 |
| C8G | 0.65 | -0.194883422 | 0.1392457 | 4.69077356 | -21.00335654 |
| PRAC1 | 0.51 | -0.137727434 | 0.109461089 | 4.70393703 | -21.12702354 |
| CPNE4 | 0.69 | -0.109118126 | 0.144703243 | 4.75428907 | -21.60326455 |
| DRD2 | 0.69 | -0.093892296 | 0.138521959 | 4.95469659 | -23.54901833 |
| POU2AF1 | 0.66 | -0.307590032 | 0.131298492 | 5.04098995 | -24.41157965 |
| CDK5R2 | 0.66 | -0.081414807 | 0.129892445 | 5.05292733 | -24.53207464 |
| | | | | | , |

| SERPINB10 | 0.92 | -0.106232161 | 0.176300471 | 5.19720266 | -26.01091547 |
|---------------------------------------|------|--------------|-------------|------------|--------------|
| HAND1 | 0.92 | -0.186739693 | 0.116690558 | 5.21618578 | -26.20859412 |
| · · · · · · · · · · · · · · · · · · · | | | | | |
| LRP2 | 0.48 | -0.134405012 | 0.091790677 | 5.22689996 | -26.32048318 |
| PRSS1 | 0.57 | -0.141434555 | 0.107189821 | 5.33786826 | -27.49283752 |
| MUC5AC | 0.52 | -0.12532837 | 0.096980509 | 5.38994328 | -28.05148855 |
| TCL1A | 0.74 | -0.268589444 | 0.130974085 | 5.61353435 | -30.51176788 |
| SFRP5 | 0.7 | -0.148539789 | 0.123284178 | 5.71347939 | -31.64384679 |
| TFF2 | 0.74 | -0.127836125 | 0.125453609 | 5.86828518 | -33.43677094 |
| BIRC7 | 0.85 | -0.20175597 | 0.143899629 | 5.93825919 | -34.26292222 |
| AR | 0.62 | -0.184674149 | 0.104151138 | 5.96238795 | -34.55007004 |
| ACTL6B | 0.64 | -0.069271515 | 0.10646293 | 5.98091423 | -34.77133499 |
| TG | 0.61 | -0.17352034 | 0.099436159 | 6.13705074 | -36.66339176 |
| C1QTNF4 | 0.35 | -0.227434566 | 0.056729907 | 6.24042566 | -37.94291243 |
| TNFRSF13B | 0.7 | -0.323949678 | 0.112575589 | 6.24342475 | -37.98035256 |
| PTPRN | 0.63 | -0.112394524 | 0.09563351 | 6.60643389 | -42.64496872 |
| CHST4 | 0.54 | -0.125248943 | 0.080712306 | 6.6946706 | -43.8186144 |
| FEV | 0.67 | -0.140832762 | 0.097238164 | 6.88276282 | -46.37242405 |
| CD22 | 0.72 | -0.276321882 | 0.100364388 | 7.15477404 | -50.19079158 |
| NKX2-1 | 0.36 | -0.155390072 | 0.048276004 | 7.41956648 | -54.04996671 |
| GPR64 | 0.7 | -0.207314741 | 0.093831217 | 7.42418387 | -54.11850619 |
| FCRLA | 0.79 | -0.354612524 | 0.106007288 | 7.44915923 | -54.48997317 |
| CD79B | 0.77 | -0.318571594 | 0.102498746 | 7.46950063 | -54.79343972 |
| VIL1 | 0.44 | -0.161269369 | 0.058750089 | 7.50115672 | -55.26735206 |
| LCN12 | 0.5 | -0.197285157 | 0.066652239 | 7.53531056 | -55.78090519 |
| NTRK1 | 0.86 | -0.160279228 | 0.111890575 | 7.64844713 | -57.49874347 |
| TLR10 | 0.68 | -0.246409078 | 0.088202497 | 7.74549541 | -58.99269912 |
| 11-Mar | 0.87 | -0.099823394 | 0.106391756 | 8.13626176 | -65.19875536 |
| HEPACAM2 | 0.52 | -0.142385497 | 0.063395169 | 8.20640114 | -66.34501965 |
| CD19 | 0.73 | -0.311299176 | 0.08776301 | 8.27025358 | -67.39709433 |
| CPLX2 | 0.65 | -0.082991202 | 0.075514824 | 8.6290487 | -73.4604814 |
| PHOX2A | 0.57 | -0.140039486 | 0.065481136 | 8.76739369 | -75.86719203 |
| ESR1 | 0.76 | -0.315982431 | 0.082705018 | 9.206843 | -83.76595801 |
| CLDN10 | 0.71 | -0.2260038 | 0.076280846 | 9.29610148 | -85.41750267 |
| CTSE | 0.7 | -0.206444674 | 0.074118001 | 9.466885 | -88.62191158 |
| CHGA | 0.62 | -0.175895962 | 0.063745338 | 9.79781786 | -94.99723474 |
| INSM1 | 0.64 | -0.228349926 | 0.064038834 | 9.9759845 | -98.52026672 |
| IGLL1 | 0.39 | -0.180262556 | 0.036307997 | 10.6984157 | -113.4560976 |
| F7 | 0.61 | -0.155776119 | 0.057077235 | 10.7247842 | -114.0209964 |
| MS4A1 | 0.75 | -0.278609333 | 0.069907823 | 10.7558913 | -114.6891979 |
| GSTA2 | 0.47 | -0.15015496 | 0.043624908 | 10.790026 | -115.4246617 |
| PAX1 | 0.62 | -0.262787412 | 0.057606735 | 10.7962023 | -115.5579843 |
| TRIM31 | 0.56 | -0.177869645 | 0.051763269 | 10.8658295 | -117.0662514 |
| FOXI1 | 0.4 | -0.148740939 | 0.03632897 | 10.8737222 | -117.2378349 |
| I OVIT | 0.4 | -0.146/40939 | 0.03032697 | 10.0/3/222 | -11/.25/6349 |

| SERPINA5 | 0.38 | -0.17494317 | 0.031535103 | 11.9957064 | -142.8969718 |
|----------|------|--------------|-------------|------------|--------------|
| C7 | 0.63 | -0.185919761 | 0.051251331 | 12.3857008 | -152.4055841 |
| DEFA4 | 0.67 | -0.122578585 | 0.05319522 | 12.5765907 | -157.1706334 |
| FXYD2 | 0.53 | -0.112391376 | 0.041047994 | 12.8242736 | -163.4619923 |
| KL | 0.81 | -0.190070548 | 0.062868812 | 12.9439219 | -166.5451144 |
| DEFA3 | 0.68 | -0.13113199 | 0.051137837 | 13.3831416 | -178.1084791 |
| DPPA4 | 0.41 | -0.097597851 | 0.027958781 | 14.5559474 | -210.8756041 |
| DHRS2 | 0.56 | -0.161382293 | 0.032469529 | 17.189545 | -294.4804559 |
| FAM163A | 0.68 | -0.145900012 | 0.031507273 | 21.6876616 | -469.3546674 |
| ITLN1 | 0.27 | -0.100631048 | 0.01013329 | 26.5727416 | -705.1105956 |
| SLC26A7 | 0.79 | -0.100555931 | 0.026992307 | 29.2422365 | -854.1083979 |
| TSHR | 0.77 | -0.138573239 | 0.024700668 | 31.3004958 | -978.721038 |
| SPIB | 0.73 | -0.187065922 | 0.015223268 | 48.2240915 | -2324.563 |
| DRGX | 0.7 | -0.18547269 | 0.008075249 | 86.8290527 | -7538.284395 |