

## Significantly activity regulated genes identified on the whole gene level

| TranscriptClusterID | geneSymbol    | logFC.1h          | logFC.4h            | logFC.8h            | Cluster |
|---------------------|---------------|-------------------|---------------------|---------------------|---------|
| 6749557             | Coq10b        | 1.42169837809623  | 0.493482916886033   | 0.495607556717703   | UpUpUp  |
| 6753917             | Ptgs2         | 3.74228577640743  | 2.35806775980061    | 1.35961210106644    | UpUpUp  |
| 6759997             | Scg2          | 1.06804391409659  | 1.14696604980176    | 1.04266948831374    | UpUpUp  |
| 6760680             | Per2          | 0.482300150168029 | 0.823698629335045   | 0.555308286515178   | UpUpUp  |
| 6762784             | Rgs2          | 2.20535376392748  | 1.37233073613769    | 1.29163579973172    | UpUpUp  |
| 6763207             | Ier5          | 0.854278654993525 | 0.786277075381337   | 0.986960511641014   | UpUpUp  |
| 6763991             | Rgs4          | 1.88201896668918  | 1.28589139500837    | 1.15291628256798    | UpUpUp  |
| 6764040             | Fcgr3         | 0.350383082206325 | 0.602909186599103   | 0.476491287672506   | UpUpUp  |
| 6791451             | Stat3         | 0.507943048183926 | 0.737937093805082   | 0.718805743479826   | UpUpUp  |
| 6796121             | Rhoj          | 0.577144325167499 | 1.47506228561493    | 1.10846101957003    | UpUpUp  |
| 6808997             | Homer1        | 1.7294219511319   | 1.29946898042309    | 0.988784464114076   | UpUpUp  |
| 6812375             | Nrn1          | 0.599329996748417 | 0.958681243205121   | 0.772580605375727   | UpUpUp  |
| 6819907             | Stmn4         | 0.603963293211096 | 0.663946340719347   | 0.655910417913513   | UpUpUp  |
| 6830770             | Trib1         | 1.80878890995383  | 0.907780856578623   | 0.893185447383116   | UpUpUp  |
| 6831994             | Atf4          | 0.581605005047555 | 0.499286425668115   | 0.701681649317768   | UpUpUp  |
| 6833308             | Grasp         | 1.01264189569757  | 1.26596359169327    | 1.15749014800945    | UpUpUp  |
| 6834728             | Ankrd33b      | 0.932126289706684 | 1.19397779310975    | 0.711990819478795   | UpUpUp  |
| 6836973             | Myh9          | 0.36085858260556  | 0.550003625765077   | 0.599944532260812   | UpUpUp  |
| 6845569             | Arhgap31      | 0.251455934838516 | 0.610727351555083   | 0.343716085443273   | UpUpUp  |
| 6849595             | Cdkn1a        | 2.17182603595475  | 2.21404464984676    | 1.86219997950169    | UpUpUp  |
| 6857512             | HnrnpII       | 0.727818034677116 | 0.517760528141318   | 0.436756149275574   | UpUpUp  |
| 6872878             | Ppp1r3c       | 0.52655948036106  | 0.740563434690562   | 0.622220374641635   | UpUpUp  |
| 6873066             | Pdlim1        | 0.515825628421489 | 0.676403961312133   | 0.941230755503913   | UpUpUp  |
| 6893558             | Pmepa1        | 0.357083586123384 | 0.90719276466811    | 1.7241706484431     | UpUpUp  |
| 6896519             | Skil          | 0.443992600295827 | 0.853557439610566   | 1.24843595232238    | UpUpUp  |
| 6896584             | 4930429B21Rik | 1.06173475488774  | 0.744947697022431   | 0.541153923466912   | UpUpUp  |
| 6902440             | Eltf1         | 0.470328382328572 | 0.874759057369723   | 0.74317816402568    | UpUpUp  |
| 6908919             | Usp53         | 0.497832993088527 | 0.852404971985453   | 0.426042515715195   | UpUpUp  |
| 6909153             | Larp7         | 0.251567831836794 | 0.581590452082303   | 0.41933955274197    | UpUpUp  |
| 6917129             | Stk40         | 1.28801192034713  | 1.52530349831465    | 1.60374907546727    | UpUpUp  |
| 6919320             | Penk          | 0.555637875655527 | 0.533445142737332   | 0.660640433132151   | UpUpUp  |
| 6935451             | Nptx2         | 2.96446924714572  | 2.49164194312423    | 2.66245020246823    | UpUpUp  |
| 6936759             | Rheb          | 0.786834876150751 | 0.802105825177796   | 0.788010339700024   | UpUpUp  |
| 6946119             | Npy           | 0.2408770548215   | 0.649712217480553   | 1.11648644187272    | UpUpUp  |
| 6950413             | Emp1          | 0.987036441530774 | 1.09987586278476    | 1.10419162193321    | UpUpUp  |
| 6958974             | Pglyrp1       | 0.497991990968815 | 0.902206916194595   | 1.01074829302168    | UpUpUp  |
| 6964365             | Stx4a         | 0.415417038143212 | 0.504159040936233   | 0.270278789799585   | UpUpUp  |
| 6964394             | Tgfb1i1       | 0.585076260394712 | 0.577331592747491   | 0.631606736802552   | UpUpUp  |
| 6974831             | Prosc         | 0.828805920671696 | 0.79367617063422    | 0.553563087790844   | UpUpUp  |
| 6977139             | Tpm4          | 0.585506348053934 | 0.742268173168058   | 0.590485855888126   | UpUpUp  |
| 6990526             | Arpp19        | 0.868685909096877 | 1.00731653103515    | 0.923127185445681   | UpUpUp  |
| 6996448             | Tpm1          | 0.367069424369704 | 0.606384651759922   | 0.710315563719772   | UpUpUp  |
| 6996935             | Mapk6         | 0.350004678058262 | 0.877375355697279   | 0.953779001667346   | UpUpUp  |
| 7005797             | Hmgcs1        | 0.51398514723946  | 0.609165882931209   | 0.26527480734027    | UpUpUp  |
| 7019519             | Gla           | 1.0511634930072   | 0.522838607798437   | 0.275550778187764   | UpUpUp  |
| 766455              | Sgk1          | 1.25464767698923  | 1.09376910621715    | 0.220452091391502   | UpUpNon |
| 6806435             | Gcnt2         | 1.08514596687437  | 0.595824361286433   | 0.137282415117533   | UpUpNon |
| 6830761             | Sqle          | 0.584570486241831 | 0.736844716034895   | 0.042558085883663   | UpUpNon |
| 6915138             | Acer2         | 0.399252772062913 | 0.725576185426681   | -0.0933686639152434 | UpUpNon |
| 6925149             | Mfsd2a        | 0.521209903027831 | 0.599419352048282   | 0.290994763666161   | UpUpNon |
| 6935927             | Cyp51         | 1.01086665895921  | 0.633180335841413   | 0.25431106748876    | UpUpNon |
| 6966610             | Plekha7       | 1.13255045038447  | 0.907133176979458   | 0.129581589979083   | UpUpNon |
| 6978291             | Mt1           | 0.383520173728724 | 0.534203898599953   | 0.308465435795879   | UpUpNon |
| 6982921             | Msmo1         | 0.922078953917961 | 0.789406645207111   | -0.0845770867674952 | UpUpNon |
| 6752884             | R3hdm1        | 0.35062924071     | 0.519633379674984   | 0.456826314991221   | UpNonUp |
| 6753179             | Ppp1r15b      | 0.811122387108086 | 0.398179685812138   | 0.279117517649928   | UpNonUp |
| 6754014             | Ivns1abp      | 0.590419474946065 | 0.428920500662453   | 0.27328209021732    | UpNonUp |
| 6755896             | Dusp10        | 0.506980696073874 | -0.0518917092568279 | 0.43872462899147    | UpNonUp |
| 6760006             | Wdfy1         | 0.588667052407463 | 0.348476839714113   | 0.272160817469134   | UpNonUp |
| 6762132             | Mapkapk2      | 0.356124709619944 | 0.67700684614554    | 0.818321007767504   | UpNonUp |
| 6762345             | Btg2          | 3.62598076970745  | 0.608388975074205   | 0.4307003172754     | UpNonUp |
| 6764342             | Grem2         | 0.426923427899614 | 0.447028639857501   | 0.527092181116005   | UpNonUp |
| 6768094             | Ranbp2        | 1.35251300585187  | 0.897390670985784   | 0.399597316727098   | UpNonUp |
| 6768450             | Jmjd1c        | 0.604422177646877 | 0.799119211218455   | 0.206632121811771   | UpNonUp |
| 6769080             | Cstb          | 0.527103592280498 | 0.422718488482577   | 0.435363619630266   | UpNonUp |
| 6769150             | Ptbp1         | 0.940528723098704 | 0.361054372106115   | 0.533145061152793   | UpNonUp |

|         |          |                   |                   |                   |         |
|---------|----------|-------------------|-------------------|-------------------|---------|
| 6769193 | Midn     | 1.47162566981203  | 0.675879619464125 | 0.776550030335268 | UpNonUp |
| 6769244 | Dot1l    | 0.765763736523053 | 0.918107023881027 | 0.946375401040331 | UpNonUp |
| 6769255 | Gadd45b  | 2.79333454916744  | 2.01385647994827  | 2.10826007699594  | UpNonUp |
| 6775389 | Mknk2    | 0.833814158034124 | 0.432522231145532 | 0.286022410976989 | UpNonUp |
| 6779185 | Spred2   | 0.359111445890137 | 0.636628277252158 | 0.881276629229854 | UpNonUp |
| 6784290 | Arl4d    | 2.95413089553577  | 1.50145468627577  | 1.11697403623341  | UpNonUp |
| 6784412 | Fmn1l    | 0.24206570642645  | 0.830907583381475 | 1.15354545673816  | UpNonUp |
| 6789229 | Ndel1    | 0.541448563700748 | 0.273315426962921 | 0.324333383957264 | UpNonUp |
| 6789325 | Cd68     | 0.587541123266272 | 0.261195340620835 | 0.57681911320401  | UpNonUp |
| 6790317 | Dusp14   | 0.801620467890797 | 0.315743389167338 | 0.944320711543378 | UpNonUp |
| 6792486 | H3f3b    | 0.740573449188949 | 0.473512691226615 | 0.256310275007025 | UpNonUp |
| 6795881 | Frmd6    | 1.95456362674778  | 0.380793583108926 | 0.353717141583894 | UpNonUp |
| 6796691 | Fos      | 4.35552584213965  | 1.83378629711308  | 1.57310215499532  | UpNonUp |
| 6799239 | Kcnf1    | 1.03935852494267  | 0.254313827889259 | 0.420671967783726 | UpNonUp |
| 6800233 | lfrd1    | 2.42777656316412  | 1.54707049214089  | 0.800036830623274 | UpNonUp |
| 6802727 | Dio2     | 0.631759827331871 | 0.708715516267224 | 0.358843952704262 | UpNonUp |
| 6804582 | Klf6     | 1.07368767174763  | 0.115947457804957 | 0.54317261687998  | UpNonUp |
| 6804996 | Inhba    | 2.97907699147859  | 3.07868050378605  | 3.62469477439668  | UpNonUp |
| 6807041 | Gadd45g  | 3.22337957176186  | 1.20256838514694  | 0.71418727278519  | UpNonUp |
| 6808279 | Pcsk1    | 1.88650387616958  | 1.2416349642872   | 1.14587015756142  | UpNonUp |
| 6810166 | Plk2     | 1.58066905159317  | 1.04048021903786  | 0.615176506582269 | UpNonUp |
| 6812652 | Nedd9    | 0.915865471128231 | 1.05520953289491  | 1.18928031687204  | UpNonUp |
| 6813327 | Cltb     | 0.411525797154539 | 0.18685038814222  | 0.736923321405329 | UpNonUp |
| 6819156 | Rem2     | 0.605698034587268 | 0.589304174833894 | 0.799672547836014 | UpNonUp |
| 6820055 | Egr3     | 2.14854083949641  | 1.099760163279    | 1.08154514254664  | UpNonUp |
| 6826292 | Pcdh8    | 2.56130240008902  | 1.82553227402639  | 1.80023178737453  | UpNonUp |
| 6827284 | Spry2    | 1.5293484533209   | 1.12233612487898  | 0.813872792278889 | UpNonUp |
| 6831511 | Bai1     | 0.289426562337256 | 0.470413289524476 | 0.577535909021178 | UpNonUp |
| 6833311 | Nr4a1    | 2.84128139596274  | 1.04782664826532  | 0.52530910659043  | UpNonUp |
| 6834729 | Ankrd33b | 0.922889592879451 | 0.781509094887889 | 0.473068840213978 | UpNonUp |
| 6836691 | Arc      | 2.39525198959531  | 1.59403145722176  | 1.66906466089845  | UpNonUp |
| 6843433 | Ets2     | 0.385554395440538 | 0.490880390947808 | 0.615937741666979 | UpNonUp |
| 6847556 | Adamts1  | 2.15586941863395  | 0.384827866140845 | 0.833095948576637 | UpNonUp |
| 6849626 | Pim1     | 1.9465645179292   | 0.948894039943192 | 0.861397853238215 | UpNonUp |
| 6852144 | Lbh      | 1.02648991707036  | 0.674922807941531 | 0.394782701698723 | UpNonUp |
| 6854487 | Dusp1    | 2.90585456137702  | 0.705265292198502 | 0.720683685192771 | UpNonUp |
| 6854844 | Sik1     | 2.1478879102922   | 1.1202688923685   | 0.983714226172486 | UpNonUp |
| 6855659 | Vegfa    | 0.227019464228212 | 0.53034048684077  | 0.715054797124717 | UpNonUp |
| 6859972 | Egr1     | 1.32007773532245  | 0.657651987692718 | 0.666068597779741 | UpNonUp |
| 6860778 | Dmxl1    | 0.500080711734607 | 0.510258383941068 | 0.315097222521513 | UpNonUp |
| 6862133 | Smad7    | 1.32057216774261  | 0.755190496000195 | 0.483037470311345 | UpNonUp |
| 6867776 | Rela     | 0.576801457864089 | 0.105822100534495 | 0.321792450363856 | UpNonUp |
| 6868650 | Tmem2    | 0.518775976084981 | 1.08848488291903  | 0.931717050436411 | UpNonUp |
| 6869436 | Hectd2   | 0.621237780722674 | 0.984620175495505 | 0.573259459452071 | UpNonUp |
| 6870125 | Ina      | 0.652517173445687 | 0.489438894918888 | 0.490532325620005 | UpNonUp |
| 6875197 | Arl5b    | 2.18839029893283  | 0.384927692177992 | 0.305661372423067 | UpNonUp |
| 6876342 | Hspa5    | 0.456968338061359 | 0.184082241614298 | 0.747357732482284 | UpNonUp |
| 6879925 | Bdnf     | 1.73834489202467  | 1.36409877797807  | 1.34569226099382  | UpNonUp |
| 6881123 | Slc20a1  | 0.37437937895672  | 0.387766391168491 | 0.685338891098576 | UpNonUp |
| 6882264 | Srxn1    | 0.549184485179576 | 1.04370794485686  | 1.2269282791848   | UpNonUp |
| 6885879 | Slc25a25 | 0.84173905245425  | 0.500677787041957 | 0.265490839420825 | UpNonUp |
| 6888937 | Hsd17b12 | 0.347398186643549 | 0.529349548178513 | 0.390025820525303 | UpNonUp |
| 6894278 | Gmeb2    | 0.608474780002999 | 0.664633281548066 | 0.574763793200384 | UpNonUp |
| 6897337 | Ccrn4l   | 0.692715052779827 | 0.600363941103322 | 0.422776689407094 | UpNonUp |
| 6898076 | Tiparp   | 2.46256222021875  | 0.838359866951004 | 0.466613370210529 | UpNonUp |
| 6898873 | Fbxw7    | 0.561576031066016 | 0.610450542628212 | 0.326610542235147 | UpNonUp |
| 6899014 | Etv3     | 0.884983166829991 | 1.22628587955113  | 0.835380486599013 | UpNonUp |
| 6899252 | Pmvk     | 0.757433030369657 | 0.519412187271261 | 0.488494738886521 | UpNonUp |
| 6899694 | Mcl1     | 0.751407838512303 | 0.605061063097965 | 0.627864556028137 | UpNonUp |
| 6899838 | Prkab2   | 0.7084508192993   | 0.389456129713206 | 0.495736679098624 | UpNonUp |
| 6909555 | Tet2     | 0.460349410992817 | 0.663908550047323 | 0.221877467631481 | UpNonUp |
| 6912989 | Dnajb5   | 1.08581094982857  | 1.16454792108541  | 0.964022584042125 | UpNonUp |
| 6916775 | Hivep3   | 0.263510021376117 | 0.27546385773555  | 0.533706493636611 | UpNonUp |
| 6917055 | Epha10   | 0.605189240162275 | 0.510313658618023 | 0.381567757428032 | UpNonUp |
| 6918892 | Errfi1   | 2.10260831684748  | 0.869703505900581 | 0.341355980846353 | UpNonUp |
| 6919163 | Cdk11b   | 1.00085311344036  | 0.43831511658092  | 0.213896498291941 | UpNonUp |
| 6919932 | Osgin2   | 0.423392815285326 | 0.821204235591734 | 0.703054876985366 | UpNonUp |
| 6923411 | Jun      | 1.53216031980266  | 0.816134047978578 | 0.501562602703581 | UpNonUp |

|         |         |                   |                    |                     |          |
|---------|---------|-------------------|--------------------|---------------------|----------|
| 6924832 | Plk3    | 1.34870316266345  | 0.293057727256878  | 0.533437566621575   | UpNonUp  |
| 6925872 | Gpr3    | 1.78054756993363  | 1.71295521012943   | 1.53605421269208    | UpNonUp  |
| 6926498 | Efh2    | 0.520248575956331 | 0.580758353773015  | 0.791701520481404   | UpNonUp  |
| 6926987 | Spsb1   | 0.432310717198897 | 1.20468961325121   | 0.522813042784065   | UpNonUp  |
| 6929644 | Dpysl5  | 0.402089791020334 | 0.745921286921238  | 0.358270219962823   | UpNonUp  |
| 6929719 | Fosl2   | 2.17629033222639  | 0.964912405860251  | 0.595493948002425   | UpNonUp  |
| 6933028 | Aff1    | 0.765144346299941 | 0.589730728198371  | 0.393602686356538   | UpNonUp  |
| 6935502 | Zfp655  | 0.424346389700372 | 0.523179161956068  | 0.324816362490406   | UpNonUp  |
| 6936564 | Ptpn12  | 0.802379985502713 | 0.27948810706673   | 0.4555064316121     | UpNonUp  |
| 6937051 | Cgref1  | 0.429696216296026 | 0.898619724395972  | 1.47436904058574    | UpNonUp  |
| 6946055 | Gpnmb   | 0.316945107209334 | 0.440257341866557  | 0.713784793849019   | UpNonUp  |
| 6955032 | Tet3    | 0.474398702762784 | 1.22876880383096   | 0.642495091277908   | UpNonUp  |
| 6957051 | Slc2a3  | 0.717309835132657 | 0.380639156590657  | 0.385561075929289   | UpNonUp  |
| 6959292 | Numbl   | 0.321810928717894 | 0.344883573858288  | 0.649599808214031   | UpNonUp  |
| 6962876 | Gdpd5   | 0.317426117486759 | 0.665500597694714  | 0.985734803926605   | UpNonUp  |
| 6964424 | Bag3    | 1.02025735727622  | 1.77648197410598   | 1.48670912520013    | UpNonUp  |
| 6967006 | Sult2b1 | 0.540076989179983 | 1.1034590223033    | 1.49248422623405    | UpNonUp  |
| 6968781 | Furin   | 0.210856771945297 | 0.656627760440596  | 0.798920353702452   | UpNonUp  |
| 6969837 | P2ry6   | 0.420786415719492 | 0.319955884755411  | 0.508729726076353   | UpNonUp  |
| 6973247 | Nup98   | 0.588961854717811 | 0.575905758719789  | 0.281322570362949   | UpNonUp  |
| 6974639 | Plat    | 0.686038548937986 | 0.421775042155199  | 0.486723635964197   | UpNonUp  |
| 6975335 | Dusp4   | 1.35448804004311  | 1.14818715645923   | 1.2423896390294     | UpNonUp  |
| 6977027 | Jund    | 1.08528963341104  | 0.212191403745383  | 0.293464564890382   | UpNonUp  |
| 6977676 | Dnajb1  | 1.21413656259451  | 0.114603557295387  | 0.364680391492298   | UpNonUp  |
| 6983894 | Junb    | 2.45540306627708  | 0.761934931259806  | 0.385101398686797   | UpNonUp  |
| 6989534 | Adpgk   | 0.336999545840067 | 0.61960367504859   | 0.507909477355246   | UpNonUp  |
| 6989672 | Tle3    | 0.298666815101474 | 0.424441140748819  | 0.532808706579792   | UpNonUp  |
| 6990131 | C2cd4b  | 1.25271092001144  | 1.12818369845857   | 1.18971361265448    | UpNonUp  |
| 6991027 | Tpbg    | 0.724156204281847 | 0.618699221181937  | 1.32148120869936    | UpNonUp  |
| 6992367 | Prkar2a | 0.321318525754631 | 0.490834688648744  | 0.508260371140374   | UpNonUp  |
| 7011050 | Rab33a  | 0.261918662508596 | 0.677978759453919  | 0.694965970584352   | UpNonUp  |
| 7014815 | Rps6ka3 | 0.399227508655474 | 0.562018182885447  | 0.83831149448983    | UpNonUp  |
| 7014929 | Rbbp7   | 0.624267571128281 | 0.727227036553798  | 0.694343926410364   | UpNonUp  |
| 7019867 | Acsl4   | 0.48993622642025  | 0.575711137220426  | 0.47593054091324    | UpNonUp  |
| 6748620 | Arid5a  | 1.00501864196555  | 0.343363735102909  | 0.252378778118419   | UpNonNon |
| 6753439 | Zfp281  | 0.582843197885419 | 0.109782014106006  | -0.118578077910601  | UpNonNon |
| 6756403 | Slc30a1 | 0.599087565804291 | 0.237577025718776  | -0.108907821240472  | UpNonNon |
| 6764007 | Hsd17b7 | 0.534951857178817 | 0.390991032938587  | 0.0814903667053686  | UpNonNon |
| 6766368 | Map3k5  | 0.475836681205057 | 0.661912063323378  | 0.1701932170378     | UpNonNon |
| 6766586 | Taar7b  | 0.777568855098205 | 0.328090490306169  | -0.270223872364082  | UpNonNon |
| 6768693 | Ipml    | 0.403049531307659 | 0.52449909893824   | 0.143007756306111   | UpNonNon |
| 6769448 | Rfx4    | 0.56737618951562  | 0.533386256448562  | 0.00439067538534775 | UpNonNon |
| 6769928 | Tmcc3   | 0.752675164740962 | 0.262977575688154  | -0.129619384853277  | UpNonNon |
| 6770030 | Btg1    | 0.63896444560618  | 0.184353670486439  | 0.0696259067497923  | UpNonNon |
| 6770160 | Dusp6   | 1.75367340678577  | 0.164754830641548  | 0.278169369642767   | UpNonNon |
| 6770201 | Kitl    | 1.51147980121051  | 0.047035458186678  | -0.0558065651614057 | UpNonNon |
| 6774719 | Arid5b  | 0.605335530344712 | 0.732192380523946  | 0.0158554018176322  | UpNonNon |
| 6775391 | Mob3a   | 0.627133969436605 | 0.109697178736581  | 0.0406663303435478  | UpNonNon |
| 6779264 | Peli1   | 0.929727167985792 | 0.249546095421329  | -0.030277128102303  | UpNonNon |
| 6779787 | Psme4   | 0.564967968040652 | 0.457813332286437  | 0.172860979478933   | UpNonNon |
| 6780544 | Med7    | 0.697494921474215 | 0.590513047591888  | 0.212262407204278   | UpNonNon |
| 6781612 | Pmp22   | 0.679205019291271 | 0.239870484751023  | -0.0904021079325874 | UpNonNon |
| 6781984 | Per1    | 1.66798331957098  | 0.340498002156515  | 0.0539993258271624  | UpNonNon |
| 6783255 | Rnft1   | 1.11958815809176  | 0.60432869660743   | 0.2296740350943     | UpNonNon |
| 6783642 | Tob1    | 0.715587379438882 | -0.398339997224778 | -0.272019654437972  | UpNonNon |
| 6784485 | Arf2    | 0.500608812288603 | 0.622045851632186  | 0.244151274050343   | UpNonNon |
| 6784845 | Kcnj2   | 2.96002360067375  | 0.483871252341312  | 0.113267645136828   | UpNonNon |
| 6791965 | Ddx5    | 0.620312427038819 | 0.194966271293203  | -0.153932084185216  | UpNonNon |
| 6792129 | Abca5   | 0.553253765699094 | 0.371285819808647  | 0.0617737626450418  | UpNonNon |
| 6796696 | Jdp2    | 0.544537269957077 | 0.24647196335568   | -0.115525276601214  | UpNonNon |
| 6797880 | Ccnk    | 0.582557082065049 | 0.201745722647756  | 0.194049955221498   | UpNonNon |
| 6802088 | Zfp361l | 0.676563658373826 | -0.252168704593401 | 0.087453518175139   | UpNonNon |
| 6808308 | Ell2    | 0.721114896213004 | 0.467282912913857  | 0.280674118975223   | UpNonNon |
| 6812250 | Pxdc1   | 0.972995539254229 | 0.108708391996622  | -0.197100602717061  | UpNonNon |
| 6815305 | Hmgcr   | 1.27566691060271  | 0.597011874021302  | 0.12390717226811    | UpNonNon |
| 6815853 | Zswim6  | 0.932596752485986 | 0.461250177373708  | 0.192610579818521   | UpNonNon |
| 6817053 | Atxn7   | 0.643976892039051 | 0.0137802717966311 | -0.0689424270392752 | UpNonNon |
| 6817393 | Vcl     | 1.11852174375131  | 0.379805768419984  | -0.108479046676625  | UpNonNon |

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| 6817900 | Selk     | 0.696737886347955  | 0.350627740948089    | 0.054747999248067   | UpNonNon   |
| 6822729 | Fezf2    | 0.58690172084573   | 0.427294640023259    | 0.250317309056692   | UpNonNon   |
| 6824835 | Tinf2    | 1.41932483515228   | 0.612064693091176    | 0.128671071857413   | UpNonNon   |
| 6827123 | Kctd12   | 0.564280544087105  | -0.0309349292592716  | 0.0578723824082609  | UpNonNon   |
| 6832532 | Pim3     | 0.897483831843902  | 0.423611424375686    | 0.216950560054126   | UpNonNon   |
| 6842552 | Cxadr    | 0.501115843751175  | 0.0420175235450689   | 0.15406739667131    | UpNonNon   |
| 6843928 | Txndc11  | 0.86102352306359   | 0.116416097869738    | 0.194310837069721   | UpNonNon   |
| 6846375 | Nfkbiz   | 0.828245832107666  | 0.209804464482599    | 0.0388581184984012  | UpNonNon   |
| 6849098 | Zfp948   | 1.59503135176016   | 0.789388261144822    | 0.243423054136242   | UpNonNon   |
| 6852750 | Plekhh2  | 0.739959817331766  | 0.108821718560428    | -0.116145116925031  | UpNonNon   |
| 6855067 | Hspa1a   | 0.530618607374022  | 0.191236893465668    | 0.377936389860846   | UpNonNon   |
| 6855706 | Srf      | 1.03429419382628   | 0.0379961196477192   | 0.0686265293008755  | UpNonNon   |
| 6857037 | Myl12a   | 0.69838632783332   | 0.517838117556846    | 0.228283776812592   | UpNonNon   |
| 6857523 | Srsf7    | 0.567927594528678  | 0.089493462340731    | 0.0546620465079134  | UpNonNon   |
| 6857797 | Zfp36l2  | 0.697150669688059  | -0.0464675108616727  | 0.0496571523599857  | UpNonNon   |
| 6864564 | Etf1     | 0.618445380699091  | 0.407850358869876    | 0.194056314667512   | UpNonNon   |
| 6868618 | Zfand5   | 0.702040717322061  | 0.21099704968116     | -0.0319467660888329 | UpNonNon   |
| 6871062 | Npas4    | 5.10828686142042   | 1.6175764538556      | 0.659656959648124   | UpNonNon   |
| 6872888 | Cpeb3    | 0.759056716521239  | -0.0579670204320746  | -0.029892239188     | UpNonNon   |
| 6879087 | Chrm4    | 0.788156988745035  | -0.074267584428967   | -0.0267808521988194 | UpNonNon   |
| 6880393 | Thbs1    | 2.36635202797114   | 0.556297719932486    | 0.0265736933178762  | UpNonNon   |
| 6884352 | Hspa14   | 1.03856883626083   | 0.163370936060749    | 0.0419330077604947  | UpNonNon   |
| 6886678 | Rnd3     | 0.872545556430897  | 0.515971443819899    | 0.345451059379114   | UpNonNon   |
| 6886908 | Nr4a2    | 1.76656359337333   | 0.599126903966101    | -0.0903655203585823 | UpNonNon   |
| 6888307 | Ctnnd1   | 0.66398748380535   | 0.163421951920753    | 0.0622626454099952  | UpNonNon   |
| 6893263 | Dpm1     | 0.537774353216419  | 0.374055240248283    | 0.033596436568357   | UpNonNon   |
| 6900180 | Slc16a1  | 1.56084675950046   | 0.541976591658743    | 0.209033754365675   | UpNonNon   |
| 6905366 | Siah2    | 1.18441566183098   | 0.320439572799626    | 0.155007096939543   | UpNonNon   |
| 6905657 | Ccnl1    | 1.0350724636194    | 0.316724385065498    | 0.0939869777915724  | UpNonNon   |
| 6910611 | Dnajb4   | 0.579136991399068  | 0.100687130765089    | -0.0840030250418933 | UpNonNon   |
| 6916748 | Slc2a1   | 1.13167501287049   | 0.448822963687453    | -0.128647484233575  | UpNonNon   |
| 6917577 | Map3k6   | 0.369671512544013  | 0.590241635368457    | 0.177628483288491   | UpNonNon   |
| 6931682 | Rasl11b  | 0.868309700703332  | 0.426628243790007    | 0.391807062411112   | UpNonNon   |
| 6941856 | Vps37b   | 0.59013036068903   | -0.187568189797928   | 0.116407900239324   | UpNonNon   |
| 6952470 | Lincpint | 1.31611536652502   | 0.538036637817956    | 0.107336809922654   | UpNonNon   |
| 6957654 | Gpr19    | 1.3025201082255    | 0.311718370706892    | 0.140144257878874   | UpNonNon   |
| 6966991 | Ppp1r15a | 1.08530747901503   | 0.174937696605673    | 0.166458725653712   | UpNonNon   |
| 6983698 | Usp38    | 1.03196140845432   | 0.334824602038988    | 0.15342235711022    | UpNonNon   |
| 6984484 | Ciapi1   | 0.500145166146515  | 0.314363378116291    | 0.155718173667185   | UpNonNon   |
| 6985900 | Slc7a5   | 0.345334360744235  | 0.528378577552743    | 0.334969648814257   | UpNonNon   |
| 6988604 | Usp2     | 0.534651536978437  | 0.284945934651638    | -0.136050919198797  | UpNonNon   |
| 6994935 | Sc5d     | 0.571115180317539  | 0.551125845266586    | 0.100860988625787   | UpNonNon   |
| 6995534 | Sik2     | 0.783890614391469  | 0.68219103105171     | 0.158157110343197   | UpNonNon   |
| 6997288 | Htr1b    | 0.740826382095755  | -0.0373180734374242  | -0.0964879957222573 | UpNonNon   |
| 6998708 | Arih2    | 0.718161589305474  | 0.413024117368206    | 0.184864262690702   | UpNonNon   |
| 7011928 | Zfp275   | 0.625954408297171  | -0.00604732014801198 | -0.0493941616334914 | UpNonNon   |
| 7011996 | Emd      | 1.44080013960652   | 0.654378529249093    | 0.212416489527134   | UpNonNon   |
| 7017784 | Prkx     | 0.69206664390086   | 0.167486436106581    | 0.0599619391339862  | UpNonNon   |
| 7023079 | Ddx3y    | 0.706947752792577  | 0.124537086153698    | 0.178792559042294   | UpNonNon   |
| 6788723 | Rasd1    | 0.96094094844244   | 0.376768430402836    | -0.550544749637185  | UpNonDown  |
| 6817700 | Arhgef3  | 0.616866472438489  | 0.223466563257121    | -0.308941774671058  | UpNonDown  |
| 6861260 | Isoc1    | 0.280012365689023  | -0.324512947267095   | -0.645842308506868  | UpNonDown  |
| 6913315 | Nr4a3    | 2.11063628739927   | 0.433889923400391    | -0.467063615060424  | UpNonDown  |
| 6929510 | Insig1   | 0.720473855520623  | 0.146982584137301    | -0.265740667342871  | UpNonDown  |
| 6773020 | Rspo3    | 0.293249141942515  | -0.562634330357525   | -0.891921515423023  | UpDownDown |
| 6878702 | Ypel4    | 0.286992013434755  | -0.710666063397765   | -0.590025450340653  | UpDownDown |
| 6758958 | Fam126b  | 0.104496159370671  | 0.628653120593721    | 0.890919163438907   | NonUpUp    |
| 6784056 | Rara     | 0.0729277768291664 | 0.771345878133637    | 1.11023592996552    | NonUpUp    |
| 6803780 | Cinp     | 0.117981535061507  | 0.467235058678363    | 0.803632787801817   | NonUpUp    |
| 6815259 | Crhbp    | 0.110752076178937  | 0.890518955033906    | 1.07427821030219    | NonUpUp    |
| 6833185 | Gpd1     | 0.100002383462089  | 0.513668703162241    | 0.69810122804955    | NonUpUp    |
| 6869885 | Entpd7   | 0.124863378123653  | 0.83493154584045     | 0.747872071932625   | NonUpUp    |
| 6883533 | Dok5     | 0.123636310871741  | 1.13030476165099     | 1.35881826661682    | NonUpUp    |
| 6899520 | S100a10  | 0.275890421323111  | 0.984748096021257    | 1.12960704805082    | NonUpUp    |
| 6901780 | Tspan5   | 0.0132082820387018 | 0.384526219256861    | 0.520412805142221   | NonUpUp    |
| 6925654 | Serinc2  | 0.168675561268027  | 0.712095692745332    | 1.41364240285942    | NonUpUp    |
| 6961201 | Snrpa1   | -0.188505765057554 | 0.48883786600665     | 0.508492889119358   | NonUpUp    |
| 6963456 | Ampd3    | 0.0360731206524277 | 0.431551312886306    | 0.5841086912172     | NonUpUp    |

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| 6966498 | Dpy19l3   | 0.171879462495491     | 0.76283896298508     | 0.695345116076798 | NonUpUp  |
| 6969207 | Prss23    | 0.119487849407014     | 1.00046780413799     | 0.914544383043268 | NonUpUp  |
| 6974220 | Dlgap2    | -0.0625142115865721   | 0.604814455988252    | 0.823281417188539 | NonUpUp  |
| 7011944 | Slc6a8    | 0.246856851002545     | 0.893985807164599    | 0.912409560845584 | NonUpUp  |
| 6752409 | Nifk      | -0.328025395556704    | 0.758615424134987    | 0.391805470900815 | NonNonUp |
| 6754137 | Rgs8      | -0.0594709607444995   | 0.304727157160814    | 0.676100256758213 | NonNonUp |
| 6754437 | Rfwd2     | 0.123071956429857     | 0.615252555940273    | 0.567575425990701 | NonNonUp |
| 6756637 | Rgs20     | 0.250369302286487     | 0.270175865056997    | 0.5698959889528   | NonNonUp |
| 6757745 | Zfp451    | -0.190298971974881    | 0.530243844242458    | 0.52442113669722  | NonNonUp |
| 6762197 | Cdk18     | 0.184291040783044     | -0.00664537001088092 | 1.01109040038151  | NonNonUp |
| 6764349 | Rgs7      | 0.0702719468761173    | 0.398644810630711    | 1.02293358373449  | NonNonUp |
| 6765504 | Rgs17     | -0.0203211145137509   | 0.352827830048036    | 0.750612790768164 | NonNonUp |
| 6769366 | Chst11    | 0.119085245828709     | 0.566073581783559    | 0.732068673703489 | NonNonUp |
| 6771334 | Ppm1h     | -0.106493869819309    | 0.752193238065512    | 1.00412397283807  | NonNonUp |
| 6772875 | L3mbtl3   | -0.075354973815169    | -0.0435713785474971  | 0.697599642304842 | NonNonUp |
| 6775559 | Slc41a2   | 0.0754400249042903    | 0.161639992799442    | 0.656644103015195 | NonNonUp |
| 6775674 | Cry1      | 0.161257902110965     | 0.440772576910939    | 0.650155898826976 | NonNonUp |
| 6779162 | Spred2    | 0.292940707882061     | 0.722238627616233    | 0.802386678506994 | NonNonUp |
| 6779843 | Sh3pxd2b  | 0.0636489927471287    | 0.507128730780716    | 0.906091164589686 | NonNonUp |
| 6779845 | Ubtd2     | 0.0892634546157517    | 0.450012368229347    | 0.542514818327215 | NonNonUp |
| 6780945 | Fstl4     | -0.0727859641678375   | 0.32856964570365     | 0.883187746345458 | NonNonUp |
| 6782277 | Camkk1    | -0.232045321147055    | 0.358390283669681    | 0.57577836267476  | NonNonUp |
| 6782422 | Rtn4rl1   | 0.13186228252288      | 0.520182074369393    | 0.817089173516345 | NonNonUp |
| 6783784 | Phospho1  | 0.030409370857565     | 0.404708384604254    | 0.601919615350879 | NonNonUp |
| 6787100 | Rhbdf1    | 0.118060013507187     | 0.355357540742222    | 0.801688891069256 | NonNonUp |
| 6788314 | Pdlim4    | 0.156498672685752     | 0.368547421316887    | 0.613883074224025 | NonNonUp |
| 6790947 | Cacna1g   | 0.106901556794143     | 0.154079049655322    | 0.501225260534024 | NonNonUp |
| 6791641 | Gfap      | -0.0423583432755222   | 1.01032561089813     | 1.09605688992652  | NonNonUp |
| 6792314 | Sdk2      | 0.23653703735708      | 0.444933108966963    | 0.539945285885433 | NonNonUp |
| 6792458 | Grb2      | 0.132812633202777     | 0.337976590622264    | 0.565685584346445 | NonNonUp |
| 6792614 | Socs3     | 0.072592062586303     | 0.564375050146604    | 0.952689591816309 | NonNonUp |
| 6796485 | Pcnx      | -0.100397924622478    | 0.537406819833794    | 0.524252238976744 | NonNonUp |
| 6796500 | Rgs6      | 0.213501632514939     | 0.287946291780995    | 0.927248766645037 | NonNonUp |
| 6797476 | Slc24a4   | -0.123675108306092    | 0.506321891428298    | 0.953867110493255 | NonNonUp |
| 6797496 | Chga      | 0.00156722115724504   | 0.434133043763393    | 0.933273985477144 | NonNonUp |
| 6797551 | Ppp4r4    | 0.0404484780916539    | 0.870171870708761    | 0.840714737087926 | NonNonUp |
| 6797579 | Serpina3n | -0.0797737203455612   | 1.16409019511459     | 1.19418233103048  | NonNonUp |
| 6799462 | Id2       | 0.258207747557038     | 0.399435025155315    | 0.51255508322496  | NonNonUp |
| 6799578 | Sox11     | 0.251910198626812     | 0.851834806734944    | 1.33902916561049  | NonNonUp |
| 6801507 | Trim9     | -0.0582062971377721   | 0.441480604115125    | 0.563999194714346 | NonNonUp |
| 6803113 | Gpr68     | -0.173108554868081    | 0.275210966162292    | 0.681203044899602 | NonNonUp |
| 6805158 | Elmo1     | 0.208358523941643     | 0.877331723766509    | 1.01619704415454  | NonNonUp |
| 6817611 | Zmiz1     | 0.0148789103795587    | 0.765961457015762    | 1.35539093857822  | NonNonUp |
| 6818667 | Samd4     | 0.0487133838203922    | 0.721344559100792    | 0.778779478748915 | NonNonUp |
| 6819596 | Sacs      | -0.206269345734961    | 0.567283493326924    | 0.545777494215827 | NonNonUp |
| 6819910 | Adra1a    | 0.224136049268944     | 0.646506345438055    | 0.961120642006864 | NonNonUp |
| 6825853 | Fndc3a    | -0.20014577433471     | 0.236156909134436    | 0.585175832722325 | NonNonUp |
| 6832092 | Mchr1     | 0.39379235514697      | 0.499106601085456    | 0.837142445618439 | NonNonUp |
| 6835089 | Klf10     | 0.0647244785073345    | 0.892188693253708    | 1.44862227888147  | NonNonUp |
| 6836560 | Fam135b   | -0.110532874620995    | 0.703329714035787    | 0.631572219146215 | NonNonUp |
| 6836596 | Ago2      | 0.0708017179056905    | 0.350339703248639    | 0.618055598288849 | NonNonUp |
| 6837144 | Pdgfb     | 0.0778079837727513    | 0.536446864023854    | 0.574126684950701 | NonNonUp |
| 6837455 | Scube1    | 0.0773771532408379    | 0.469918389288704    | 0.872914047656053 | NonNonUp |
| 6838257 | Slc38a2   | 0.200376897617225     | 0.0436933692603989   | 0.624711673523774 | NonNonUp |
| 6838823 | Ppp1r1a   | 0.14503225725026      | 0.123616348513062    | 0.545377249422995 | NonNonUp |
| 6841097 | Naa50     | -0.0737972965575441   | 0.347869771408824    | 0.508182382816088 | NonNonUp |
| 6842940 | Bach1     | 0.123873274558711     | 0.434770412021485    | 0.508815679951173 | NonNonUp |
| 6844291 | Med15     | 0.082692238214967     | 0.146623410802594    | 0.520713383376651 | NonNonUp |
| 6848718 | Airn      | 0.351562830093064     | 1.15893735508185     | 1.47869255508965  | NonNonUp |
| 6850204 | Ppp1r10   | -0.0264675420304571   | 0.348228560298501    | 0.543896765706899 | NonNonUp |
| 6851320 | Trip10    | 0.0957000768890239    | 0.516526084535637    | 0.706025539477977 | NonNonUp |
| 6852034 | Lpin2     | -0.113473370799488    | 0.101892041779676    | 0.655259297663673 | NonNonUp |
| 6857167 | Galnt14   | -0.0408209908675534   | 0.680807946026727    | 1.20548875297382  | NonNonUp |
| 6864680 | Hbegf     | 0.282777258420788     | 0.554615555063962    | 1.11936292800419  | NonNonUp |
| 6866653 | Mapk4     | 0.222857534878858     | 1.1298229387547      | 1.46308864618354  | NonNonUp |
| 6866852 | Slc14a1   | 0.0943674755170115    | 0.500914563455172    | 0.996794826637252 | NonNonUp |
| 6869766 | Ubtd1     | -0.000672105860843046 | 0.0938935911250207   | 0.728040256032794 | NonNonUp |
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| 6871004 | Syt12         | -0.0959858994656948 | 0.374447871592996  | 0.732136554129742 | NonNonUp |
| 6873187 | Crtac1        | 0.0717900335264968  | 0.141838849904584  | 0.513642148800073 | NonNonUp |
| 6874057 | Gfra1         | -0.0871072613188358 | 0.228629301981858  | 0.636190167730267 | NonNonUp |
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| 6878655 | Itgav         | 0.107007134861987   | 0.323920284923141  | 0.701587677279128 | NonNonUp |
| 6879833 | Kcna4         | 0.132029951335421   | 0.682684360683736  | 0.562860034200622 | NonNonUp |
| 6880544 | Tyro3         | 0.20057288964921    | 0.333772355994079  | 0.717813345180601 | NonNonUp |
| 6884709 | Pfkfb3        | 0.195964391195816   | 0.605395191436876  | 0.837888620697289 | NonNonUp |
| 6885039 | Dnajc1        | 0.182064738437745   | 0.612659027299617  | 0.519071392605123 | NonNonUp |
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| 6888334 | Rtn4rl2       | 0.172410874721928   | 0.604473352824025  | 0.767051766269222 | NonNonUp |
| 6890638 | Gabpb1        | 0.0763924431242463  | 0.200958130638091  | 0.625934410128541 | NonNonUp |
| 6890699 | Kcnip3        | 0.144526170727204   | 0.278643587838533  | 0.828719697019331 | NonNonUp |
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| 6897486 | Lhfp          | 0.154404789436059   | 0.242605951428146  | 0.949631667981725 | NonNonUp |
| 6899722 | Anp32e        | 0.102379284067402   | 0.547314640904218  | 0.536889834465796 | NonNonUp |
| 6905208 | Sertm1        | 0.185143318763208   | 0.963582550948675  | 0.61030496802039  | NonNonUp |
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| 6906821 | Efna1         | -0.191166267069144  | 0.238060688168776  | 0.536622580270952 | NonNonUp |
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| 6916095 | Ssbp3         | 0.17016035067053    | 0.203596338441479  | 0.62100131021538  | NonNonUp |
| 6916127 | Ndc1          | 0.0262428110518568  | 0.532737224227893  | 0.730609756415057 | NonNonUp |
| 6916947 | Hpcal4        | 0.0509199895313486  | 0.275783513923531  | 0.569216298875133 | NonNonUp |
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| 6920816 | Lingo2        | 0.0266574020555565  | 0.104455266214785  | 0.766950172883763 | NonNonUp |
| 6922471 | Brinp1        | 0.163684994729074   | 0.775865435943763  | 0.8794211438634   | NonNonUp |
| 6924882 | Ptprf         | 0.0646210732910964  | 0.172995805291356  | 0.597805117913475 | NonNonUp |
| 6925904 | Trnp1         | 0.0937979953725712  | 0.18801070234282   | 0.622721104373226 | NonNonUp |
| 6925917 | Zdhhc18       | 0.0941298511851983  | 0.300208081822447  | 0.789559587664719 | NonNonUp |
| 6926272 | Cda           | -0.0914885650409807 | 1.21754763148171   | 1.78952630518546  | NonNonUp |
| 6928880 | Sema3e        | -0.0938765463542831 | 0.481791257670866  | 0.728071086221858 | NonNonUp |
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| 6935370 | Fscn1         | 0.19378939990622    | 0.1261849621132    | 0.509044055250633 | NonNonUp |
| 6937061 | Slc30a3       | 0.108362453955602   | 0.0671711036979656 | 0.50584675520456  | NonNonUp |
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| 6941932 | Ncor2         | 0.033741765717528   | 0.133469560530337  | 0.535028849637801 | NonNonUp |
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| 6944372 | Cav1          | -0.06531882537829   | 0.139239190142175  | 0.590881461090549 | NonNonUp |
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| 6952766 | Creb3l2       | 0.134404245026509   | 0.185573965828004  | 0.940382777784067 | NonNonUp |
| 6955025 | Mthfd2        | 0.14193521527226    | 0.193558975275879  | 0.534889710783449 | NonNonUp |
| 6955698 | Lrig1         | 0.0751427721478488  | 0.304834730527233  | 0.857484138247162 | NonNonUp |
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| 6956909 | Lrtm2         | -0.0604596539495238 | 0.512333778720711  | 0.77194026783468  | NonNonUp |
| 6956926 | Erc1          | 0.1373306133688     | 0.811958397180993  | 0.295193772120692 | NonNonUp |
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| 6959300 | Blvrb         | 0.266579022459694   | 0.421767515345894  | 0.802771203727227 | NonNonUp |
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| 6965187 | Drd4          | 0.00244675647273815 | 0.481411691640271  | 0.73977384927597  | NonNonUp |
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| 6966164 | Mrps12        | -0.0190555400255943 | 0.35174846231296   | 0.545439902292411 | NonNonUp |
| 6971466 | Mcmbp         | -0.124908403056518  | 0.537673426764976  | 0.376900137531358 | NonNonUp |
| 6971688 | Fam53b        | -0.21801846254436   | 0.301312678949984  | 0.728826956990282 | NonNonUp |
| 6973477 | Oscar         | 0.0606915302332762  | 0.468733888206647  | 0.750323031476108 | NonNonUp |
| 6974039 | Arhgef7       | 0.109700112894297   | 0.462375953355269  | 0.649466977092322 | NonNonUp |
| 6974850 | Eif4ebp1      | 0.163231072695778   | 0.215812129336659  | 0.586283185882322 | NonNonUp |
| 6977058 | Myo9b         | -0.0230771408796643 | 0.411611469116876  | 0.681731467240181 | NonNonUp |
| 6979527 | 6430548M08Rik | 0.00897568231676713 | 0.2277667245643    | 0.596243049139578 | NonNonUp |
| 6979914 | Kcnk1         | 0.144640821901408   | 0.605034951253287  | 0.791427077884336 | NonNonUp |
| 6979919 | Slc35f3       | -0.215397418700667  | 0.281886495143865  | 0.569147640122515 | NonNonUp |
| 6980016 | Nrp1          | 0.108427057480432   | 0.578306183547327  | 0.58989721241446  | NonNonUp |
| 6980364 | Col4a1        | 0.160950657936517   | 0.500573795749316  | 0.480328526738997 | NonNonUp |

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| 6981113 | Plekha2       | -0.508902183168224   | 1.30614559664755   | 1.10369709440672   | NonNonUp   |
| 6983162 | Ncan          | -0.0797454603952385  | 0.42941886518815   | 0.581056851566686  | NonNonUp   |
| 6983168 | Slc25a42      | -0.0487096053977528  | 0.134495127326772  | 0.649438932633407  | NonNonUp   |
| 6985642 | Cdyl2         | -0.0286825728708856  | 0.325465598517188  | 0.875785817649439  | NonNonUp   |
| 6988389 | Clmp          | 0.00237368713513674  | 0.296211616873207  | 0.648026325977731  | NonNonUp   |
| 6995846 | Lingo1        | 0.179032266507256    | 0.291915789918652  | 0.663225651873709  | NonNonUp   |
| 6996223 | Fem1b         | 0.0421502542450992   | 0.49153169093594   | 0.61002278696713   | NonNonUp   |
| 6996379 | Snx1          | 0.121925064561298    | 0.579456086264784  | 0.488438177157199  | NonNonUp   |
| 6998603 | Dock3         | 0.0179999937921601   | 0.246235785395506  | 0.658477488813018  | NonNonUp   |
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| 6748174 | B3gat2        | 0.239759160827296    | -0.520855656708904 | -0.70186450879983  | NonNonDown |
| 6748553 | Arhgef4       | -0.13112831702927    | -0.322736416899443 | -0.535855850910435 | NonNonDown |
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| 6768204 | Tbata         | -0.123469452437341   | -0.49192660729767  | -1.02488131739321  | NonNonDown |
| 6769209 | Apc2          | -0.106933097822169   | -0.523509612484519 | -0.374916168317298 | NonNonDown |
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| 6773080 | Tpd52l1       | -0.260214544203969   | -0.26056316936148  | -0.691907397820821 | NonNonDown |
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| 6781960 | Slc25a35      | -0.105665524030419   | -0.439735794509369 | -0.735940504342788 | NonNonDown |
| 6782034 | Sat2          | -0.153478048561239   | -0.451763249592115 | -0.621709091138539 | NonNonDown |
| 6782656 | Flot2         | -0.106569240539867   | -0.303125617365138 | -0.51321711438712  | NonNonDown |
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| 6785641 | Mtfp1         | -0.0920047442892502  | -0.321829271863609 | -0.641105320496406 | NonNonDown |
| 6786914 | Ccdc85a       | -0.2029924278724     | -0.423861034201495 | -0.801239421240609 | NonNonDown |
| 6786991 | Acyp2         | 0.142562291456835    | -0.291298800836422 | -0.588249019279732 | NonNonDown |
| 6788283 | Sowaha        | -0.325976199872242   | -0.360376092569506 | -0.64065303965321  | NonNonDown |
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| 6792113 | Abca8b        | -0.147330011788136   | -0.458942113925385 | -0.598048159009829 | NonNonDown |
| 6792539 | Cygb          | -0.12942466990917    | -0.590739854784511 | -0.479374491772567 | NonNonDown |
| 6792702 | Sgsh          | 0.0341341494165325   | -0.142022652653979 | -0.506689188767312 | NonNonDown |
| 6794572 | Etv1          | 0.0521438136827828   | -0.298687735515675 | -0.830493662325485 | NonNonDown |
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| 6796060 | Dbpht2        | -0.00312712706524221 | -0.419319838145856 | -0.676479222205941 | NonNonDown |
| 6796403 | Galnt16       | -0.197673726409106   | -0.413495738638726 | -0.608016520736376 | NonNonDown |
| 6800468 | Stxbp6        | -0.259470250364614   | -0.482873030533032 | -0.874590291675134 | NonNonDown |
| 6803102 | Rps6ka5       | -0.0241094727131734  | -0.413593875194813 | -0.624527096147428 | NonNonDown |
| 6805381 | Hist1h1c      | 0.150419234655059    | -0.584720267425847 | -0.81703488994412  | NonNonDown |
| 6807192 | Tspan17       | 0.0329095586912347   | -0.29047550530681  | -0.560677690209843 | NonNonDown |
| 6808339 | Mctp1         | -0.0627675757812224  | -0.253961029039663 | -0.753634259336682 | NonNonDown |
| 6809030 | Arsb          | -0.149929083382201   | -0.178878303757422 | -0.555754340796388 | NonNonDown |
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| 6811769 | Acot13        | 0.00841928444036472  | -0.225934263874071 | -0.596590235941468 | NonNonDown |
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| 6814996 | Atg10         | -0.038349839845046   | -0.263284272011269 | -0.548926486446107 | NonNonDown |
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| 6820083 | Lgi3          | -0.0248121007951151  | -0.35161151840268  | -0.663546864388822 | NonNonDown |
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| 6822959 | Ube2e2        | -0.0895042158337602  | -0.226816343916424 | -0.524778018975544 | NonNonDown |
| 6824507 | 3632451O06Rik | -0.0510485148591029  | -0.223706355801112 | -0.542330695805297 | NonNonDown |
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| 6824942 | Cryl1         | 0.132463835419222    | -0.319764737983806 | -0.751005661106663 | NonNonDown |
| 6830481 | Nov           | 0.176002561718086    | -0.287462178293704 | -0.807101454641443 | NonNonDown |

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| 6834025 | Npr3          | 0.0940794701727515   | -0.380035652901518  | -0.710162095681154 | NonNonDown |
| 6835403 | Tmem74        | 0.176400642267501    | -0.469390275072273  | -0.800595692029801 | NonNonDown |
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| 6878117 | Sp3os         | 0.110901491696064    | -0.331015405936182  | -0.628380693142157 | NonNonDown |
| 6880469 | Ivd           | -0.0787076959280298  | -0.283790949344963  | -0.560585578861742 | NonNonDown |
| 6882538 | Acss2         | -0.0359395742339101  | -0.506607724289196  | -0.498560095310618 | NonNonDown |
| 6885325 | Hnmt          | 0.0047373723629132   | -0.398034990559942  | -0.636591505080776 | NonNonDown |
| 6885522 | Fam163b       | -0.118830303370563   | -0.411760360256135  | -0.898388428601881 | NonNonDown |
| 6887671 | Mettl8        | -0.102212862156132   | -0.493554397162725  | -0.555581870775231 | NonNonDown |
| 6888151 | Frzb          | -0.181564615489484   | -0.918697249720036  | -1.41253947737212  | NonNonDown |
| 6891025 | Adra1d        | -0.163609062053051   | -0.400773856019042  | -0.518457202529185 | NonNonDown |
| 6892032 | Acss1         | 0.0934084228157044   | -0.421523764815699  | -1.04548642515584  | NonNonDown |
| 6897441 | Foxo1         | 0.238957868099135    | -0.293012109906462  | -0.627077451513867 | NonNonDown |
| 6898502 | Fstl5         | -0.021501690918252   | -0.426830373862548  | -0.655028725018225 | NonNonDown |
| 6899111 | Paqr6         | 0.224331857671364    | -0.24673351336067   | -0.715286761497185 | NonNonDown |
| 6902665 | Erich3        | -0.155461358275077   | -0.280052958469789  | -0.548763636173979 | NonNonDown |
| 6903454 | Cyp7b1        | -0.19355477715337    | -0.496771825200813  | -1.04955901111669  | NonNonDown |
| 6904367 | Gm5148        | -0.270455610261913   | -0.40734813136071   | -1.10091591763321  | NonNonDown |
| 6906225 | Tmem144       | -0.0812174322674742  | -0.370982137552328  | -0.548121386732193 | NonNonDown |
| 6908068 | 4933431E20Rik | -0.213285161353378   | -0.371110727484912  | -0.740728239729813 | NonNonDown |
| 6908073 | Gstm7         | -0.0970125220490961  | -0.56378983443734   | -0.80357536321668  | NonNonDown |
| 6908088 | Gstm4         | -0.00850573395277747 | -0.200257151656047  | -0.662940130283414 | NonNonDown |
| 6908219 | Ntng1         | 0.165041747169553    | -0.300616398750737  | -0.707134995464943 | NonNonDown |
| 6908461 | S1pr1         | 0.0626231449271159   | -0.244811915025113  | -0.612426557014152 | NonNonDown |
| 6910642 | Ak5           | -0.103638898037292   | -0.310747772953944  | -0.634665280449723 | NonNonDown |
| 6911914 | Calb1         | 0.0227880938701161   | -0.437955179919697  | -0.893023888615626 | NonNonDown |
| 6913128 | Grhpr         | 0.0190430154734917   | -0.484179237294145  | -0.599214849064146 | NonNonDown |
| 6913371 | E130309F12Rik | 0.0899947614647785   | -0.523261062511209  | -0.74904020363684  | NonNonDown |
| 6916023 | Ppap2b        | 0.0482875519096093   | -0.265077068070265  | -0.548623592227346 | NonNonDown |
| 6916159 | Echdc2        | 0.154459378622661    | -0.474280396436766  | -0.794382676379735 | NonNonDown |
| 6917125 | Oscp1         | -0.11585330136804    | -0.401340434096926  | -0.535944684345955 | NonNonDown |
| 6917277 | Fndc5         | -0.0926939689449218  | -0.330180476848864  | -0.511790898603287 | NonNonDown |
| 6924706 | Cyp4x1        | 0.124862165994106    | -0.110615526476251  | -0.619683231716331 | NonNonDown |
| 6924750 | Faah          | -0.108864138028733   | -0.491912982979189  | -0.804966387398618 | NonNonDown |
| 6926376 | Klhdc7a       | 0.0728417481452886   | 0.113337831463291   | -0.708926098996914 | NonNonDown |
| 6929667 | Atraid        | 0.0046013323209523   | -0.260323225176034  | -0.500847892722316 | NonNonDown |
| 6932704 | Prdm8         | 0.0612343353452386   | -0.38943796515181   | -0.958890488936727 | NonNonDown |
| 6935275 | Chst12        | -0.199634142131547   | -0.926635476263374  | -0.939219997035464 | NonNonDown |
| 6935970 | Cdk14         | -0.227846166855409   | -0.170504523875209  | -0.588452598995054 | NonNonDown |
| 6941637 | Tpcn1         | -0.092471984710948   | -0.31722864422222   | -0.501271714230094 | NonNonDown |
| 6946412 | Adcyap1r1     | -0.153166252654382   | -0.601713240672403  | -0.517882194111892 | NonNonDown |
| 6948328 | Fam19a1       | -0.13144303484715    | -0.231145248546388  | -0.540504131958896 | NonNonDown |
| 6948878 | Lrrn1         | -0.203430591135696   | -0.482283968774219  | -0.671555546070262 | NonNonDown |
| 6955169 | 1700019G17Rik | -0.157301729687765   | -0.651494714177118  | -1.00780384165797  | NonNonDown |
| 6955778 | Frmd4b        | -0.198395939926568   | -0.404221839347725  | -0.617870983260917 | NonNonDown |
| 6957217 | Ntf3          | 0.00513924618404164  | -1.08963835133683   | -1.81470858219496  | NonNonDown |

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| 6957679 | Hebp1         | -0.17879031450983   | -0.346235914593368  | -0.681510314689929 | NonNonDown  |
| 6957844 | Lmo3          | -0.161477449121692  | -0.30074537128089   | -0.638555784940765 | NonNonDown  |
| 6960266 | Syt3          | 0.0414833820482511  | -0.380053722105537  | -0.731964041422948 | NonNonDown  |
| 6960834 | Siglech       | -0.180503127410354  | -0.232898236575495  | -0.503161956029936 | NonNonDown  |
| 6961109 | Mcee          | 0.0610853811152068  | -0.186719293864379  | -0.631616483749249 | NonNonDown  |
| 6961991 | Hddc3         | -0.0371712739030199 | -0.242840835524532  | -0.59866819189968  | NonNonDown  |
| 6966972 | Lin7b         | -0.0739635804593948 | -0.441220514482604  | -0.679982909329651 | NonNonDown  |
| 6969007 | Il16          | -0.306530813608676  | -0.53296691505933   | -0.93365245593618  | NonNonDown  |
| 6969028 | Fah           | 0.13429160033933    | -0.281944969802071  | -0.564353909488115 | NonNonDown  |
| 6969094 | Folh1         | -0.191575025993416  | -0.333994119495715  | -0.755459110987176 | NonNonDown  |
| 6969291 | Tmem126b      | -0.139563896226932  | -0.532276053195776  | -0.44494183518852  | NonNonDown  |
| 6969612 | Thrsp         | 0.146697655890456   | 0.0333312465701507  | -0.60144486662066  | NonNonDown  |
| 6969631 | Aqp11         | 0.0839210372631471  | -0.620167729827908  | -1.29321085469032  | NonNonDown  |
| 6972612 | Ccdc106       | 0.0121114613087004  | -0.362619528288403  | -0.515534867678688 | NonNonDown  |
| 6974783 | Rnf170        | 0.044403297900559   | -0.4854341511120491 | -0.602185235627669 | NonNonDown  |
| 6980952 | Smim19        | -0.0151865788633543 | -0.256402281430397  | -0.600117878306695 | NonNonDown  |
| 6982102 | Tlr3          | -0.128666636105027  | -0.290572252646846  | -0.642319940729008 | NonNonDown  |
| 6982585 | Wdr17         | -0.0857470907049329 | -0.224940263440362  | -0.628537978718333 | NonNonDown  |
| 6983073 | Csgalnact1    | -0.084099197607119  | -0.564150004275538  | -0.463575844904188 | NonNonDown  |
| 6983255 | Abhd8         | -0.0230994895696615 | -0.502296252441056  | -0.408797180418594 | NonNonDown  |
| 6983531 | Ednra         | 0.173252623679091   | -0.329894603483316  | -0.532326138873653 | NonNonDown  |
| 6984684 | Cdh8          | -0.211442089365135  | -0.325682681053704  | -0.65332761098932  | NonNonDown  |
| 6987352 | Icam5         | -0.150175957339547  | -0.331947310276949  | -0.503262582532733 | NonNonDown  |
| 6987638 | Thyn1         | -0.167195237999241  | -0.279056689023291  | -0.522168480328499 | NonNonDown  |
| 6988366 | Scn3b         | -0.259075841219783  | -0.337455539265182  | -0.659215104858847 | NonNonDown  |
| 6990435 | Rab27a        | -0.0748752424637806 | -0.451272260745405  | -0.534770837271042 | NonNonDown  |
| 6991090 | Rwdd2a        | -0.0442405665838424 | -0.298251455408693  | -0.805034627660673 | NonNonDown  |
| 6991368 | Plscr4        | -0.0569536319117575 | -0.387480564174028  | -0.747267580063988 | NonNonDown  |
| 6991760 | Faim          | 0.0687273925666534  | -0.218000714012997  | -0.681731549235498 | NonNonDown  |
| 6993030 | Fam198a       | -0.21520054655539   | -0.0992963699838101 | -0.538798029125826 | NonNonDown  |
| 6995526 | 1110032A03Rik | -0.0961488459928989 | -0.587879520007587  | -0.703464556510197 | NonNonDown  |
| 6996440 | Rab8b         | -0.0943566023774935 | -0.333147693369984  | -0.536982423488025 | NonNonDown  |
| 6998706 | Wdr6          | 0.10709194743132    | -0.452240470291615  | -0.796187677899596 | NonNonDown  |
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| 7010644 | Dock11        | -0.277468862454307  | -0.0307889351951336 | -0.661199455734957 | NonNonDown  |
| 7012080 | Fundc2        | -0.0455953057674697 | -0.120898922123051  | -0.671207545976665 | NonNonDown  |
| 7014030 | Tceal1        | 0.150281833714487   | -0.350446619863786  | -0.716098165830414 | NonNonDown  |
| 7014633 | Rragb         | 0.0524958086665363  | -0.472150115786039  | -0.576849466862554 | NonNonDown  |
| 7015006 | Pir           | 0.0624991196940346  | -0.106071171280608  | -0.65499203613568  | NonNonDown  |
| 7015831 | Maob          | -0.0698881899363035 | -0.334526409128861  | -0.541304385319249 | NonNonDown  |
| 7017585 | Pnck          | 0.165106508611517   | -0.585865237766991  | -0.638843410051564 | NonNonDown  |
| 6757387 | Ogfrl1        | -0.180072544510549  | -0.682615988279019  | -0.559712203216082 | NonDownDown |
| 6759396 | Idh1          | 0.0428673465573386  | -0.509106664718593  | -0.903933869487349 | NonDownDown |
| 6760232 | Slc19a3       | 0.0581033107707658  | -0.40420303451634   | -0.616808853030694 | NonDownDown |
| 6778939 | Vstm2a        | -0.0628804841576246 | -0.474759140490937  | -0.65753956295871  | NonDownDown |
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| 6791529 | Mpp3          | 0.00374263365313279 | -0.436251482835293  | -0.557822037796482 | NonDownDown |
| 6807172 | Arl10         | 0.0486540104101041  | -0.607298507102563  | -0.493294843246073 | NonDownDown |
| 6810592 | Fgf10         | -0.0705181385210283 | -0.495577129473795  | -0.743578513291305 | NonDownDown |
| 6812770 | Tbc1d7        | 0.166077705666119   | -0.584457579065724  | -0.410645133520617 | NonDownDown |
| 6814827 | Rasa1         | -0.254553351903271  | -0.53077244479587   | -0.388082735976577 | NonDownDown |
| 6837143 | Cbx7          | 0.0903067483748675  | -0.52589132159651   | -0.348801104751322 | NonDownDown |
| 6850062 | Prrt1         | 0.106229304364631   | -0.449076013788962  | -0.539375325115968 | NonDownDown |
| 6870489 | Pdcd4         | 0.0245868220642691  | -0.823265900949448  | -0.816525874027534 | NonDownDown |
| 6884750 | Itga8         | -0.073913620521863  | -0.803712218344744  | -0.881454465364385 | NonDownDown |
| 6885425 | Gm996         | -0.0982492833028472 | -0.609511618256741  | -0.728053573356085 | NonDownDown |
| 6887282 | Grb14         | -0.0986538058962612 | -0.555264716091225  | -0.84730789234079  | NonDownDown |
| 6894245 | Nkain4        | 0.167054100426221   | -0.497954280794247  | -0.619630838805139 | NonDownDown |
| 6903549 | Gyg           | -0.0863597028068199 | -0.501905389664319  | -0.459732294794387 | NonDownDown |
| 6906940 | Lor           | -0.0210417496864067 | -0.502900599759448  | -0.523635177428345 | NonDownDown |
| 6933328 | Tmem175       | 0.0473584461515263  | -0.445313067163509  | -0.572980906709277 | NonDownDown |
| 6942841 | Mmd2          | -0.060764482443825  | -0.375369569116775  | -0.515828438448637 | NonDownDown |
| 6947131 | Lrrtm1        | -0.038077374300811  | -0.790069086248993  | -0.606917545763211 | NonDownDown |
| 6957766 | Rerg          | -0.124806781961361  | -0.70077139571134   | -0.667804518854918 | NonDownDown |
| 6964635 | Lhpp          | 0.212779675633573   | -0.519689829460744  | -0.719194588181221 | NonDownDown |
| 6976395 | BC030500      | -0.0162890709146636 | -0.546601715943228  | -0.454982388945753 | NonDownDown |
| 6988672 | Ift46         | -0.0616905417235757 | -0.410438223302858  | -0.549783087823642 | NonDownDown |
| 6992176 | Pcbp4         | 0.131228802234123   | -0.395461043706827  | -0.638425407776667 | NonDownDown |

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| 6992276 | Camkv         | -0.0720127597355068 | -0.429410527980714  | -0.579779388329066   | NonDownDown |
| 6778426 | Rasl10a       | -0.512687491932496  | -0.322590846628258  | 1.02369747137186     | DownNonUp   |
| 6799173 | Trib2         | -0.268287814154865  | -0.0168172621117427 | 1.01423470235277     | DownNonUp   |
| 6836558 | Fam135b       | -0.266595596358485  | 0.578727712829619   | 0.544016479777154    | DownNonUp   |
| 6896609 | Actl6a        | -0.509579662824249  | 0.207094577853012   | 0.566765249560535    | DownNonUp   |
| 6899875 | Zfp697        | -0.317382087193119  | 0.429900258886288   | 0.534808839357053    | DownNonUp   |
| 6925194 | LOC102633765  | -0.684597926874029  | 0.270204440555672   | 0.331893585352553    | DownNonUp   |
| 6926477 | Ddi2          | -0.206651954985569  | 0.226664149368821   | 0.59952144049914     | DownNonUp   |
| 6934308 | Setd8         | -0.269792971756447  | 0.682851248800666   | 1.07811229842126     | DownNonUp   |
| 6973132 | Zfp418        | -0.579610028128231  | -0.0151820975749907 | 0.247504906107733    | DownNonUp   |
| 6748503 | Rab23         | -0.52868728916278   | -0.142891823081924  | -0.017715932056336   | DownNonNon  |
| 6748884 | Il1r1         | -0.997972031987655  | 0.857258506457597   | 0.0897853436186862   | DownNonNon  |
| 6753135 | Rbbp5         | -0.712240984313616  | -0.249715459756183  | -0.0544566714969829  | DownNonNon  |
| 6762016 | Lct           | -0.899709921414516  | -0.83031214670252   | -0.585983723828418   | DownNonNon  |
| 6774947 | Cisd1         | -0.684099915583484  | 0.327425704691956   | 0.0908043123937396   | DownNonNon  |
| 6775288 | 2610008E11Rik | -0.926449025308701  | -0.202092998665781  | 0.0654927761586126   | DownNonNon  |
| 6779790 | Gpr75         | -0.501032921434235  | -0.390066048513791  | -0.138427430821826   | DownNonNon  |
| 6788632 | Zfp39         | -0.826077541509351  | -0.205732697813426  | -0.165816984574187   | DownNonNon  |
| 6790734 | Stxbp4        | -0.37491204663648   | -0.529088003771533  | -0.27617502615008    | DownNonNon  |
| 6791881 | Limd2         | -0.516034039019576  | -0.422304559607009  | -0.387018497271836   | DownNonNon  |
| 6794274 | Ccdc71l       | -0.976313538460719  | -0.722449033991349  | 0.272014856763921    | DownNonNon  |
| 6798388 | Zfp386        | -0.570513284818577  | -0.339111197568327  | 0.132072174174931    | DownNonNon  |
| 6799852 | Dus4l         | -0.600583023196906  | -0.058811954009447  | 0.18550210039618     | DownNonNon  |
| 6799874 | Hbp1          | -0.611811008874082  | -0.317727647586607  | 0.0530208551277423   | DownNonNon  |
| 6801703 | Trmt5         | -0.553666520996673  | -0.36682919420755   | -0.209828739785751   | DownNonNon  |
| 6803525 | A130014H13Rik | -1.09561812782267   | -0.0433050408348568 | 0.0672622696070633   | DownNonNon  |
| 6804898 | Lyst          | -0.523346927381924  | 0.100448972893538   | -0.212114550201124   | DownNonNon  |
| 6807812 | Zfp759        | -0.697432399707504  | -0.0263139348759094 | -0.064446611567032   | DownNonNon  |
| 6809047 | Lhfp12        | -0.325042417036472  | -0.538236759843134  | -0.213913504762992   | DownNonNon  |
| 6811512 | Zkscan8       | -0.522499723786415  | -0.141222576800063  | 0.0511825830556721   | DownNonNon  |
| 6814055 | Zfp87         | -0.614910105280996  | 0.0166934990564096  | 0.110205558578677    | DownNonNon  |
| 6815708 | Ppwd1         | -0.605324377723     | -0.0285375844856391 | 0.118066370989911    | DownNonNon  |
| 6818950 | Apex1         | -0.551249115564953  | -0.226278497520179  | -0.0445890500876955  | DownNonNon  |
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| 6824550 | Ttc5          | -0.596826668991016  | -0.675476560489483  | -0.264577377671262   | DownNonNon  |
| 6825273 | Ints6         | -0.544896845702195  | 0.0696767315455894  | 0.107423280122916    | DownNonNon  |
| 6834560 | Fam105a       | -0.534369168388241  | -0.199831682058598  | -0.148362052286069   | DownNonNon  |
| 6844210 | Fgd4          | -0.503692680440478  | -0.224507095480237  | -0.073737756910491   | DownNonNon  |
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| 6850063 | Fkbpl         | -0.637535279494448  | -0.0359602450108625 | -0.166339960661356   | DownNonNon  |
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| 6878045 | Rapgef4       | -0.371977980942353  | 0.619249210933275   | 0.0980717005773584   | DownNonNon  |
| 6881101 | Zc3h6         | -0.604567730570795  | -0.127929329841351  | -0.149663725222133   | DownNonNon  |
| 6886114 | Zbtb26        | -0.567923895500225  | -0.334589777515947  | 0.0178395308410789   | DownNonNon  |
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| 6912022 | Rmdn1         | -0.664249585559638  | -0.155353570047506  | 0.0439454077247663   | DownNonNon  |
| 6933652 | Pop5          | -0.579825867450201  | -0.216296306281518  | -0.14843776493796    | DownNonNon  |
| 6935145 | A430033K04Rik | -0.717186438237647  | -0.141801853816948  | 0.075323239585184    | DownNonNon  |
| 6946759 | Prdm5         | -0.60355975932522   | -0.343557624566892  | -0.369724637506144   | DownNonNon  |
| 6959101 | Zfp108        | -0.530614270804461  | -0.07725402392438   | -0.0469484038027964  | DownNonNon  |
| 6959323 | Zfp60         | -0.67029837850164   | -0.180691403374151  | 0.161014825858775    | DownNonNon  |
| 6961108 | Mtmt10        | -0.512676939083662  | -0.0125342376031744 | 0.120028449109504    | DownNonNon  |
| 6961979 | Gdpgp1        | -0.507254966427768  | -0.20064881247166   | 0.0345577350008806   | DownNonNon  |
| 6966232 | Zfp74         | -0.683254535028233  | -0.226541640577197  | -0.123920457644978   | DownNonNon  |
| 6966249 | Zfp14         | -0.535268898668135  | -0.31807849857019   | -0.17981237259132    | DownNonNon  |
| 6966255 | Zfp146        | -0.557294302190651  | 0.0393966345802735  | 0.0807574635827669   | DownNonNon  |
| 6977119 | Zfp961        | -0.698449955589069  | -0.407817021991941  | -0.0908355098277246  | DownNonNon  |
| 6981932 | Frg1          | -0.529662498580051  | -0.28108772712182   | 0.204613956032973    | DownNonNon  |
| 6987866 | Zbtb44        | -0.68140078033567   | -0.0541039237174093 | -0.00267452675351082 | DownNonNon  |
| 6988115 | Pus3          | -0.516668267216097  | 0.134948624052797   | 0.137422745931722    | DownNonNon  |
| 6991777 | Cep70         | -0.640016468622018  | -0.495550990527947  | -0.178398313688919   | DownNonNon  |
| 6993872 | Zfp599        | -0.604766539218005  | 0.147502500792448   | 0.159797841341406    | DownNonNon  |
| 6996110 | Senp8         | -0.783719093908614  | -0.224436396980678  | 0.288869253787295    | DownNonNon  |

|         |          |                    |                     |                     |              |
|---------|----------|--------------------|---------------------|---------------------|--------------|
| 6997348 | Phip     | -0.547466756550128 | -0.0869210981124719 | 0.135678671703838   | DownNonNon   |
| 7013294 | Pou3f4   | -0.54756576949124  | -0.74996408481704   | -0.125109254676053  | DownNonNon   |
| 6748546 | Amer3    | -0.649363435739227 | -0.369835115809276  | -0.306432520151858  | DownNonDown  |
| 6755494 | Zbtb18   | -0.584439802492129 | -0.580701614782313  | -0.723668097639342  | DownNonDown  |
| 6767402 | Sesn1    | -0.231727162164044 | -0.438370657781001  | -0.536048499597765  | DownNonDown  |
| 6773147 | Clvs2    | -0.400244251438597 | -0.345340113761706  | -0.531422991040047  | DownNonDown  |
| 6773802 | Grik2    | -0.233651060195854 | -0.281810718470016  | -0.609071738187846  | DownNonDown  |
| 6778284 | Pik3ip1  | -0.373801079989802 | -0.490254303092686  | -0.530616454352718  | DownNonDown  |
| 6800314 | Lrrn3    | -0.297568036107678 | -0.717484007906747  | -0.669053525423712  | DownNonDown  |
| 6800726 | Dtd2     | -0.226657208387623 | -0.340088530005691  | -0.521373794151737  | DownNonDown  |
| 6806707 | Gmpr     | -0.296245701232505 | -0.226232933721819  | -0.504159075038138  | DownNonDown  |
| 6809880 | Htr1a    | -0.441922966257481 | -0.600002067075242  | -0.642650856325648  | DownNonDown  |
| 6815518 | Mccc2    | -0.235425107762201 | -0.385911111339504  | -0.591806277929773  | DownNonDown  |
| 6815539 | Ocln     | -0.639683421917026 | -0.652249443709903  | -0.554981811358279  | DownNonDown  |
| 6819928 | Pnma2    | -0.350642085607862 | -0.605961608287811  | -0.602297138136245  | DownNonDown  |
| 6826611 | Pcdh20   | -0.511327657047168 | -0.284051449861994  | -0.477934314383353  | DownNonDown  |
| 6829591 | Sema5a   | -0.433297779086175 | -0.341021468354885  | -0.783331336523902  | DownNonDown  |
| 6849444 | Neurl1b  | -0.443129546453545 | -0.64449304252675   | -0.652263476311834  | DownNonDown  |
| 6863156 | Arhgap12 | -0.501082165368442 | -0.573973527353272  | -0.674265149673989  | DownNonDown  |
| 6895532 | Pkia     | -0.400417337831637 | -0.500115898157389  | -0.446016288550416  | DownNonDown  |
| 6929550 | Rnf32    | -0.348846879371844 | -0.56283007439116   | -0.489376481310247  | DownNonDown  |
| 6930361 | Cc2d2a   | -0.317542016099405 | -0.433782833748359  | -0.545226549394755  | DownNonDown  |
| 6931243 | Wdr19    | -0.405223890646921 | -0.559192938385005  | -0.492555972849782  | DownNonDown  |
| 6943081 | Gpr12    | -0.253388111832791 | -1.04814767373382   | -1.1592855997906    | DownNonDown  |
| 6947211 | Lrrtm4   | -0.267562184266832 | -0.454189652911433  | -0.875196637567513  | DownNonDown  |
| 6954000 | Fam13a   | -0.416779039044299 | -0.70020771866735   | -0.898153587454309  | DownNonDown  |
| 6958031 | Slco1a4  | -0.496922061349405 | -0.728650948636924  | -0.771787515963389  | DownNonDown  |
| 6967091 | Uevld    | -0.573493266745757 | -0.643644113350937  | -0.57766005915874   | DownNonDown  |
| 6970911 | Eri2     | -0.552548863039047 | -0.403547399161499  | -0.240302579942359  | DownNonDown  |
| 7019652 | Rab9b    | -0.425525657171858 | -0.52080408336248   | -0.496386660774782  | DownNonDown  |
| 6791238 | Fbxl20   | -0.438894011017582 | -0.506440097277672  | -0.0957444878894356 | DownDownNon  |
| 6891690 | Rbbp9    | -0.351491550789141 | -0.52345154380478   | -0.106585571124033  | DownDownNon  |
| 6936575 | Napepld  | -0.653622390322131 | -0.607023668941247  | -0.178566557611582  | DownDownNon  |
| 6945548 | Ttc26    | -0.511788615512201 | -0.631303743171443  | -0.167340741083475  | DownDownNon  |
| 6981314 | Brf2     | -0.510395687117465 | -0.51821926943439   | -0.167755456312431  | DownDownNon  |
| 6755569 | Kif26b   | -0.327596117659787 | -0.59501142028128   | -0.478735471672221  | DownDownDown |
| 6878448 | Itga4    | -0.387203540906313 | -0.698506602194376  | -0.891286350193821  | DownDownDown |
| 6906363 | Npy2r    | -0.671058317368511 | -1.01372150151324   | -1.65168829793275   | DownDownDown |
| 6915818 | Raver2   | -0.305834419711161 | -0.744140317004971  | -0.845930019045143  | DownDownDown |
| 6947570 | Tprkb    | -0.284343623730267 | -0.654053618857625  | -0.889180493281097  | DownDownDown |
| 6964349 | Orai3    | -0.347079806154766 | -0.643064976932225  | -0.833720659468079  | DownDownDown |