

Table S10. The list of the 100 top-predicted genes of the Single-SNP model in the Mixed-Pop cross-validation scheme

| Entrez ID | Mean Test R ² | Gene Symbol | Gene Description |
|-----------|--------------------------|---------------|---|
| 3117 | 0.75 | HLA-DQA | major histocompatibility complex, class II, DQ alpha 1 |
| 91612 | 0.72 | Myo15 | churchill domain containing 1 |
| 27004 | 0.71 | TNG2 | T-cell leukemia/lymphoma 6 |
| 158160 | 0.70 | MGC88684 | hydroxysteroid (17-beta) dehydrogenase 7 pseudogene 2 |
| 84833 | 0.69 | USMG5 | upregulated during skeletal muscle growth 5 homolog (mouse) |
| 7311 | 0.64 | UBA52 | ubiquitin A-52 residue ribosomal protein fusion product 1 |
| 93035 | 0.63 | PKHD1L | polycystic kidney and hepatic disease 1 (autosomal recessive)-like 1 |
| 282991 | 0.63 | RP11-316M21.4 | biogenesis of lysosome-related organelles complex-1, subunit 2 |
| 6168 | 0.61 | RPL37A | ribosomal protein L37a |
| 83543 | 0.60 | MGC29466 | chromosome 9 open reading frame 58 |
| 25902 | 0.59 | MTHFD1L | methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like |
| 439921 | 0.56 | TMAP1 | matrix-remodelling associated 7 |
| 4731 | 0.56 | NDUFV3 | NADH dehydrogenase (ubiquinone) flavoprotein 3, 10kDa |
| 94101 | 0.55 | ORMDL1 | ORM1-like 1 (<i>S. cerevisiae</i>) |
| 84288 | 0.55 | RP11-290P14.1 | EF-hand calcium binding domain 2 |
| 84641 | 0.54 | MGC117350 | hippocampus abundant transcript-like 1 |
| 10494 | 0.54 | YSK1 | serine/threonine kinase 25 (STE20 homolog, yeast) |
| 9623 | 0.53 | TML1 | T-cell leukemia/lymphoma 1B |
| 84680 | 0.53 | PHACS | 1-aminocyclopropane-1-carboxylate synthase |
| 858 | 0.52 | MGC12294 | caveolin 2 |
| 6231 | 0.51 | RPS26 | ribosomal protein S26 |
| 91687 | 0.51 | RP3-383J4.1 | centromere protein L |
| 829 | 0.51 | CAZ1 | capping protein (actin filament) muscle Z-line, alpha 1 |
| 3663 | 0.50 | IRF5 | interferon regulatory factor 5 |
| 255403 | 0.49 | ZNF718 | zinc finger protein 718 |
| 55755 | 0.48 | MCPH3 | CDK5 regulatory subunit associated protein 2 |
| 348094 | 0.47 | MGC120307 | ankyrin repeat and death domain containing 1A |
| 6199 | 0.47 | STK14B | ribosomal protein S6 kinase, 70kDa, polypeptide 2 |
| 219927 | 0.45 | MRPL21 | mitochondrial ribosomal protein L21 |
| 87769 | 0.45 | RP11-151A6.2 | hypothetical protein BC004360 |
| 133383 | 0.45 | MGC33648 | hypothetical protein MGC33648 |
| 8312 | 0.45 | MGC52315 | axin 1 |
| 155368 | 0.44 | WBSCR27 | Williams Beuren syndrome chromosome region 27 |
| 3105 | 0.44 | HLA-A | major histocompatibility complex, class I, A |
| 7773 | 0.44 | ZNF230 | zinc finger protein 230 |
| 2635 | 0.44 | GBP3 | guanylate binding protein 3 |
| 2944 | 0.44 | MU | glutathione S-transferase M1 |
| 55228 | 0.43 | FLJ10781 | hypothetical protein FLJ10781 |
| 80008 | 0.43 | TMEM156 | transmembrane protein 156 |
| 7536 | 0.42 | ZNF162 | splicing factor 1 |
| 27068 | 0.42 | SID6-306 | pyrophosphatase (inorganic) 2 |
| 3118 | 0.42 | HLA-DXA | major histocompatibility complex, class II, DQ alpha 2 |
| 131076 | 0.42 | FLJ33273 | coiled-coil domain containing 58 |
| 151246 | 0.42 | TRIPIN | shugoshin-like 2 (<i>S. pombe</i>) |
| 9045 | 0.42 | RPL14 | ribosomal protein L14 |
| 115024 | 0.41 | NT5C3L | 5'-nucleotidase, cytosolic III-like |
| 283726 | 0.41 | DKFZp666G057 | hypothetical protein DKFZp666G057 |
| 4725 | 0.41 | NDUFS5 | NADH dehydrogenase (ubiquinone) Fe-S protein 5, 15kDa (NADH-coenzyme Q reductase) |
| 80817 | 0.41 | PS1TP3 | KIAA1712 |
| 7639 | 0.41 | ZNF85 | zinc finger protein 85 |
| 10953 | 0.40 | TOMM34 | translocase of outer mitochondrial membrane 34 |
| 11118 | 0.40 | BTN3A2 | butyrophilin, subfamily 3, member A2 |
| 197322 | 0.40 | LOC197322 | hypothetical protein LOC197322 |
| 349565 | 0.40 | PNAT3 | nicotinamide nucleotide adenyllyltransferase 3 |
| 11147 | 0.39 | HHLA3 | HERV-H LTR-associating 3 |
| 10694 | 0.39 | KIAA0002 | chaperonin containing TCP1, subunit 8 (theta) |
| 91647 | 0.39 | MGC29736 | ATP synthase mitochondrial F1 complex assembly factor 2 |
| 10905 | 0.38 | MAN1B | mannosidase, alpha, class 1A, member 2 |
| 26519 | 0.37 | TIMM10 | translocase of inner mitochondrial membrane 10 homolog (yeast) |

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| 8904 | 0.37 | MGC1142 | copine I |
| 55556 | 0.37 | TYMSAS | enolase superfamily member 1 |
| 10320 | 0.37 | ZNFN1A1 | zinc finger protein, subfamily 1A, 1 (Ikaros) |
| 93100 | 0.37 | PP3856 | nicotinate phosphoribosyltransferase domain containing 1 |
| 80221 | 0.37 | FLJ20920 | hypothetical protein FLJ20920 |
| 8878 | 0.37 | ZIP3 | sequestosome 1 |
| 55871 | 0.36 | CBWD1 | COBW domain containing 1 |
| 84676 | 0.35 | TRIM63 | tripartite motif-containing 63 |
| 10412 | 0.35 | YR-29 | TGF beta-inducible nuclear protein 1 |
| 10233 | 0.35 | LRRC23 | leucine rich repeat containing 23 |
| 64858 | 0.35 | SNM1B | DNA cross-link repair 1B (PSO2 homolog, <i>S. cerevisiae</i>) |
| 9172 | 0.34 | TTNAP | myomesin (M-protein) 2, 165kDa |
| 3123 | 0.34 | HLA-DRB1 | major histocompatibility complex, class II, DR beta 1 |
| 11116 | 0.34 | FOP | FGFR1 oncogene partner |
| 389362 | 0.34 | RP11-506K6.3 | hypothetical LOC389362 |
| 6434 | 0.33 | TRA2B | splicing factor, arginine/serine-rich 10 (transformer 2 homolog, <i>Drosophila</i>) |
| 54465 | 0.33 | FLJ22647 | ETAA16 |
| 130502 | 0.33 | LOC130502 | similar to CG14894-PA |
| 147138 | 0.33 | TMC8 | transmembrane channel-like 8 |
| 1965 | 0.33 | EIF2S1 | eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa |
| 10267 | 0.32 | RAMP1 | receptor (calcitonin) activity modifying protein 1 |
| 220 | 0.32 | RALDH3 | aldehyde dehydrogenase 1 family, member A3 |
| 54535 | 0.32 | SBP | coiled-coil alpha-helical rod protein 1 |
| 51101 | 0.32 | CGI-62 | chromosome 8 open reading frame 70 |
| 127428 | 0.32 | RP4-758J24.3 | chromosome 1 open reading frame 83 |
| 81889 | 0.31 | YISKL | fumarylacetoacetate hydrolase domain containing 1 |
| 1497 | 0.31 | PQLC4 | cystinosis, nephropathic |
| 3652 | 0.31 | IPP | intracisternal A particle-promoted polypeptide |
| 55278 | 0.31 | QRSL1 | glutamyl-tRNA synthase (glutamine-hydrolyzing)-like 1 |
| 93349 | 0.31 | MGC132667 | hypothetical protein BC004921 |
| 51122 | 0.31 | MGC57611 | COMM domain containing 2 |
| 145173 | 0.31 | Gal-T | beta 1,3-galactosyltransferase-like |
| 80315 | 0.31 | KIAA1673 | cytoplasmic polyadenylation element binding protein 4 |
| 51097 | 0.30 | SCCPDH | saccharopine dehydrogenase (putative) |
| 22900 | 0.30 | TUCAN | caspase recruitment domain family, member 8 |
| 51144 | 0.30 | KAR | hydroxysteroid (17-beta) dehydrogenase 12 |
| 55588 | 0.30 | MED29 | intersex-like (<i>Drosophila</i>) |
| 1479 | 0.30 | MGC75122 | cleavage stimulation factor, 3' pre-RNA, subunit 3, 77kDa |
| 80007 | 0.30 | FLJ13490 | chromosome 10 open reading frame 88 |
| 10438 | 0.30 | SUNCOR | nuclear DNA-binding protein |
| 5411 | 0.29 | SDK3 | pinin, desmosome associated protein |