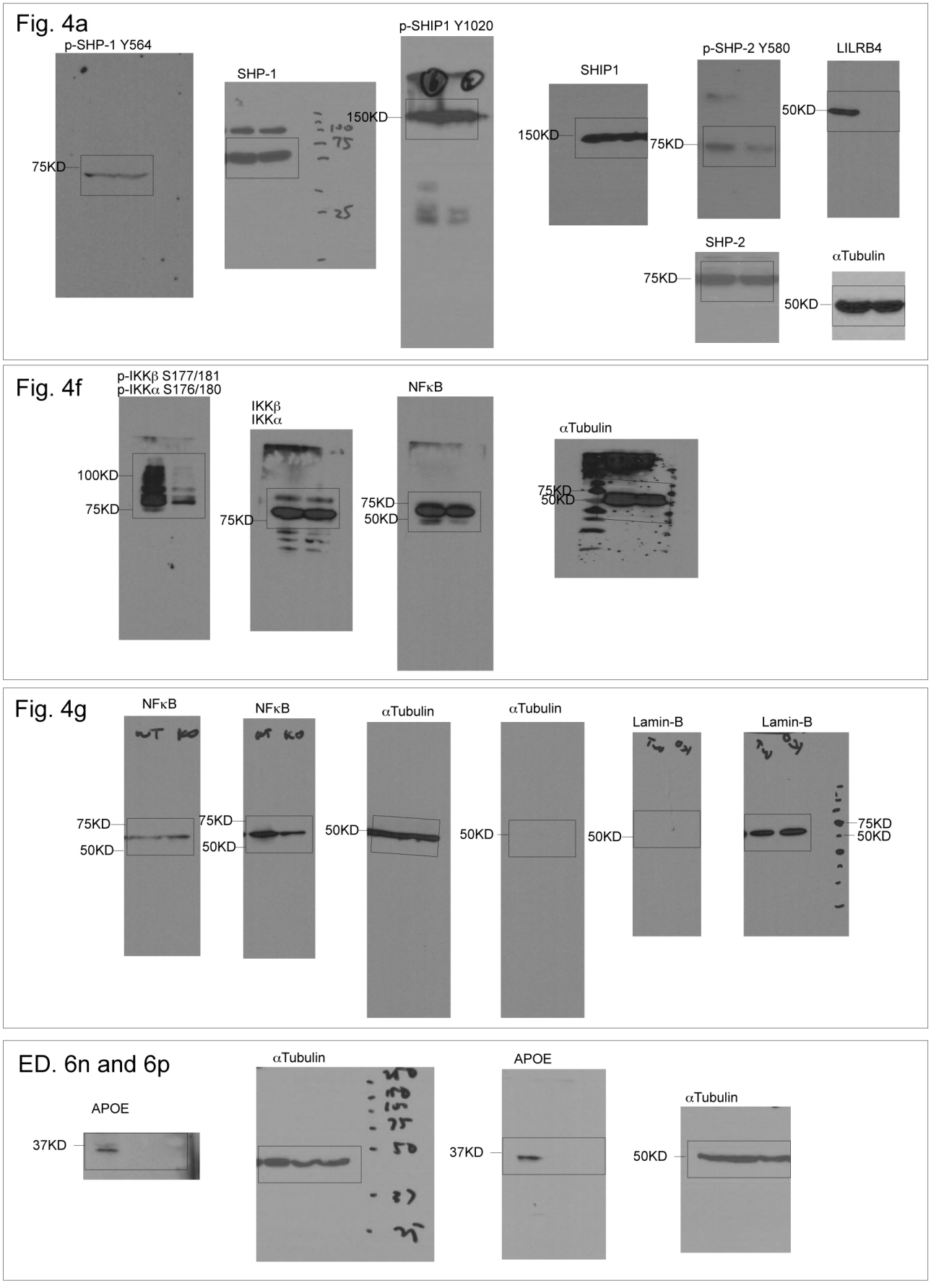
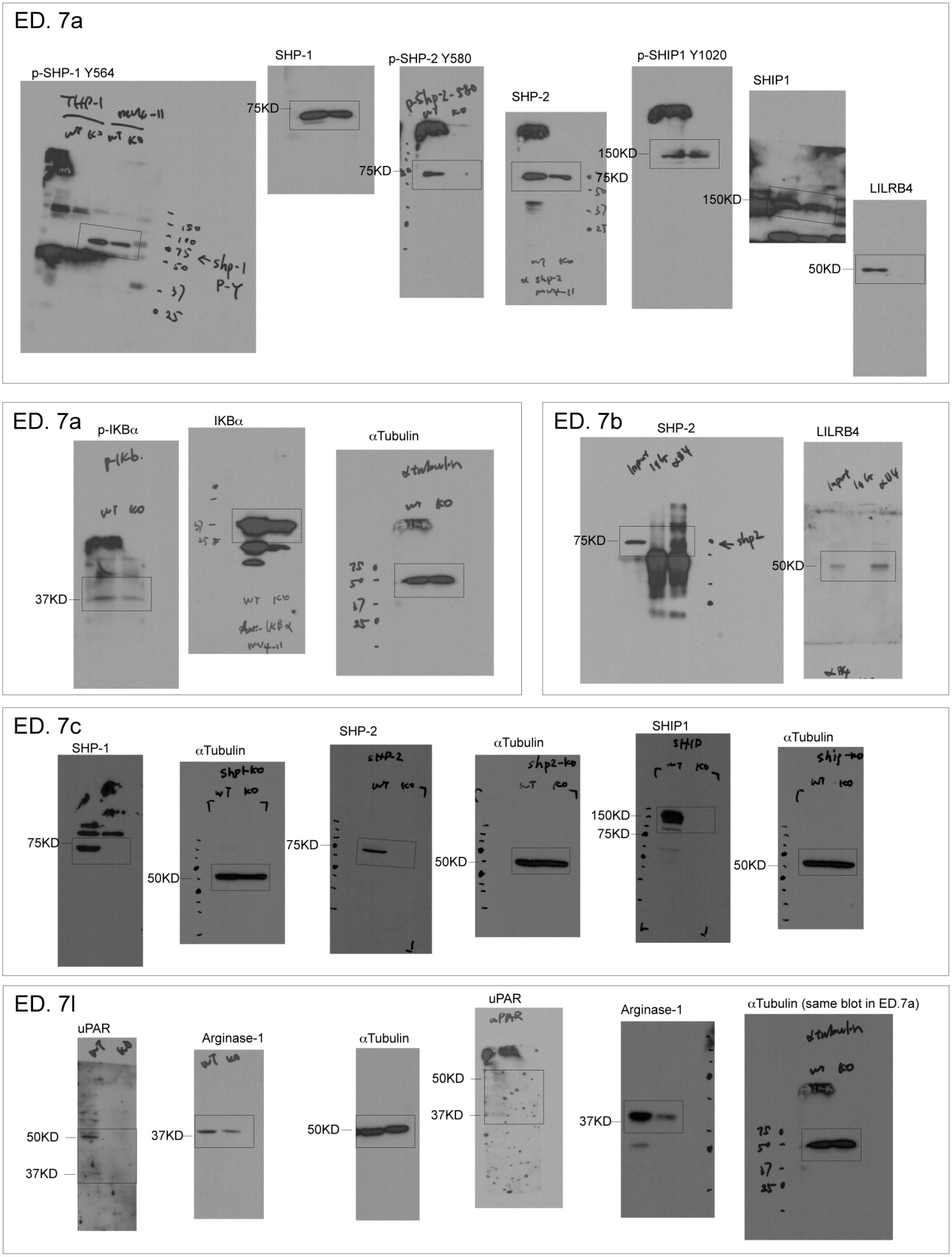
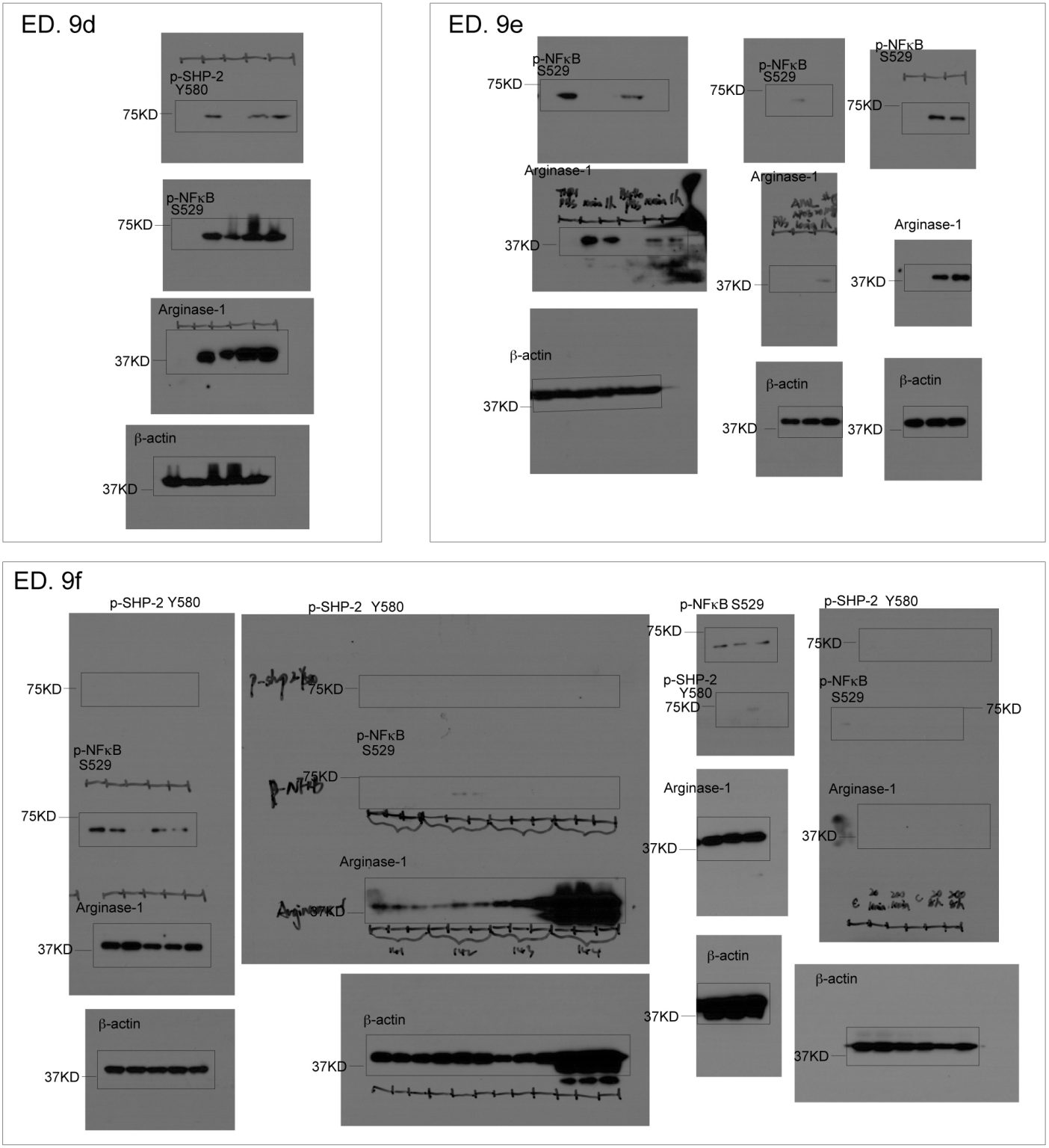



**Supplementary Figure 1.** Original uncropped images of western blots.




**(continued) Supplementary Figure 1.** Original uncropped images of western blots.




**(continued) Supplementary Figure 1. Original uncropped images of western blots.** Controls, αTubulin or β-actin, were run on the same gel as loading controls (αTubulin for p-IKBα in ED.7a; αTubulin in ED.7c; β-actin for p-NFκB in ED.9d and 9e; β-actin for p-SHP-2 in ED.9f), or on separate gels as sample processing controls.

**Supplementary Table 1. Leukemia characterization of 118 samples from 105 human AML patients in UTSW cohort. General patient information and immunophenotype of blast cells.** BM, Bone marrow; PB, Peripheral blood.

| Sample _ID | Age (yrs) | Gender | Specimen | FAB subtype | Blast cells (%) | CD14 | CD33 | CD34 | CD36 | CD64 | CD117 | LILRB4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0001 | 48 | Female | BM | M1 | 84 | - | bright + | partial + | partial + | Partial dim + | variably + | - |
| 0002 | 30 | Female | BM | M1 | 22 | - | bright + | partial + | sm sub + | - | + | - |
| 0003 | 84 | Male | PB | M1 | 90 | - | partial + | + | - | predom - | partial + | - |
| 0004 | 54 | Male | BM | M1 | 92 | predom- | partial + | variably + | sm subset + | - | sm sub+ | - |
| 0005 | 51 | Female | PB | M1 | 65 | - | bright + | - | - | - | dim + | - |
| 0006 | 68 | Male | PB | M1 | 45 | - | bright + | - | partial + | - | - | - |
| 0007 | 92 | Female | PB | M1 | 80 | - | dim + | bright + | - | - | + | - |
| 0008 | 78 | Male | BM | M1 | 80 | - | variably + | + | - | - | + | - |
| 0009 | 64 | Female | BM | M1 | 83 | - | partial + | + | - | partial dim + | + | - |
| 0010 | 72 | Female | BM | M2 | 17 | - | variably + | + | - | - | + | - |
| 0011 | 50 | Male | BM | M2 | 15 | - | + | partial + | - | - | + | - |
| 0012 | 78 | Male | BM | M2 | 10 | - | + | + | predom - | predom - | + | - |
| 0013 | 44 | Female | BM | M2 | 21 | - | variably + | + | - | - | + | - |
| 0014 | 53 | Female | BM | M2 | 58 | - | variably + | + | - | - | partial + | - |
| 0015 | 56 | Male | BM | M2 | 24 | - | bright + | variably + | - | few + | + | - |
| 0016 | 78 | Male | BM | M2 | 73 | - | variably + | variably + | - | - | + | - |
| 0017 | 78 | Male | BM | M2 | 15 | - | partial + | + | predom - | subset + | + | - |
| 0018 | 74 | Male | BM | M2 | 8 | - | bright + | partial + | - | partial dim + | + | - |
| 0019 | 78 | Male | BM | M2 | 57 | - | + | bright + | predom - | - | + | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0020 | 86 | Male | BM | M2 | 68 | - | partial + | + | sm sub + | - | + | - |
| 0021 | 6 | Female | BM | M2 | 24 | - | + | bright + | - | - | + | - |
| 0022 | 60 | Female | BM | M2 | 44 | - | partial + | variably + | - | - | predom + | - |
| 0023 | 72 | Male | BM | M2 | 18 | - | variably + | variably + | predom - | few + | + | - |
| 0024 | 41 | Male | BM | M2 | 74 | - | variably + | partial + | few + | predom - | variably + | - |
| 0025 | 67 | Female | BM | M2 | 18 | - | variably + | predom + | subset + | predom - | + | - |
| 0026 | 57 | Male | PB | M2 | 52 | - | bright + | - | - | partial + | partial + | - |
| 0027 | 74 | Male | BM | M2 | 56 | - | partial + | + | subset + | predom - | partial + | - |
| 0028 | 27 | Male | BM | M2 | 45 | - | + | + | predom - | partial dim + | + | - |
| 0029 | 53 | Female | PB | M2 | 34 | - | part dim + | bright + | - | - | variably + | - |
| 0030 | 85 | Male | BM | M2 | 8 | - | + | + | predom - | - | predom + | - |
| 0031 | 59 | Male | PB | M2 | 14 | - | bright + | partial + | partial dim + | - | + | - |
| 0032 | 35 | Male | PB | M2 | 4 | - | bright + | + | - | - | variably + | - |
| 0033 | 53 | Female | PB | M2 | 28 | - | + | predom + | predom - | - | variably + | - |
| 0034 | 46 | Male | PB | M2 | 28 | - | + | + | partial + | - | + | - |
| 0035 | 42 | Male | PB | M2 | 31 | - | partial + | + | - | - | bright + | - |
| 0036 | 56 | Male | BM | M2 | 10 | - | + | variably + | - | - | + | - |
| 0037 | 61 | Male | BM | M2 | 62 | - | bright + | predom - | - | few + | + | - |
| 0038 | 54 | Male | BM | M2 | 45 | - | bright + | partial + | predom - | predom - | variably + | - |
| 0039 | 65 | Male | BM | M2 | 29 | - | variably + | predom + | predom - | - | variably + | - |
| 0040 | 47 | Female | BM | M2 | 48 | - | + | predom - | partial + | - | partial + | - |
| 0041 | 75 | Male | BM | M2 | 42 | - | + | partial + | partial + | predom + | partial + | - |
| 0042 | 84 | Female | PB | M2 | 51 | part+ | + | + | - | predom - | partial + | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0043 | 81 | Female | BM | M2 | 31 | - | + | partial + | partial + | few dim + | + | - |
| 0044 | 43 | Male | BM | M3 | 83 | - | bright + | predom - | - | + | partial + | - |
| 0045 | 24 | Female | BM | M3 | 85 | - | bright + | predom - | - | + | + | - |
| 0046 | 60 | Male | BM | M3 | 89 | - | bright + | - | - | dim + | + | - |
| 0047 | 25 | Female | PB | M3 | 93 | - | bright + | partial + | dim + | partial + | partial + | - |
| 0048 | 39 | Male | PB | M3 | 55 | - | bright + | - | - | - | variably + | - |
| 0049 | 26 | Male | BM | M3 | 75 | - | bright + | predom - | - | partial dim + | + | - |
| 0050 | 48 | Male | BM | M3 | 82 | - | bright + | predom - | - | dim + | + | - |
| 0051 | 26 | Male | BM | M3 | 78 | - | bright + | - | - | partial + | + | - |
| 0052 | 16 | Male | BM | M3 | 80 | - | bright + | predom - | - | + | - | - |
| 0053 | 34 | Male | BM | M3 | 93 | - | bright + | - | - | partial + | + | - |
| 0054 | 72 | Male | PB | M4 | 26 (myeloblast) | - | + | bright + | - | predom - | + | - |
| | | | | | 40 (monoblast) | partial + | + | - | variable + | + | predom - | dim + |
| 0055 | 30 | Male | BM | M4 | 64 (myeloblast) | - | variably + | variably + | - | partial + | + | sm sub + |
| | | | | | 19 (monoblast) | + | bright + | - | + | + | - | + |
| 0056 | 85 | Male | PB | M4 | 6 (myeloblast) | - | bright + | - | - | dim + | + | sm sub + |
| | | | | | 22 (monoblast) | + | bright + | - | variably + | + | | + |
| 0057 | 59 | Male | BM | M4 | 33 (myeloblast) | - | bright + | bright + | - | partial + | variably + | - |
| | | | | | 30 (monoblast) | + | bright + | partial + | + | + | - | partial + |
| 0058 | 37 | Male | PB | M4 | 10 (myeloblast) | - | + | bright + | - | partial dim + | + | - |
| | | | | | 46 (monoblast) | + | + | - | + | + | - | + |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0059 | 17 | Male | PB | M4 | 11 (myeloblast) | - | + | predom + | - | Partial dim + | variably + | - |
| | | | | | 45 (monoblast) | variably + | + | - | + | + | - | + |
| 0060 | 57 | Female | BM | M4 | 30 (myeloblast) | - | + | - | predom - | predom dim + | part dim + | - |
| | | | | | 37 (monoblast) | partial + | + | - | variably + | variably + | - | + |
| 0061 | 74 | Male | BM | M4 | 27 (myeloblast) | predom - | variably + | + | partial + | partial + | + | part dim + |
| | | | | | 30 (monoblast) | variably + | bright + | sm subset + | variably + | + | - | partial + |
| 0062 | 51 | Female | BM | M4 | 16 (myeloblast) | - | + | predom + | - | partial dim + | + | - |
| | | | | | 25 (monoblast) | + | + | - | + | + | - | + |
| 0063 | 61 | Male | BM | M4 | 4 (myeloblast) | - | + | + | - | - | + | - |
| | | | | | 41 (monoblast) | partial + | + | - | + | + | - | + |
| 0064 | 29 | Female | BM | M4 | 15 (myeloblast) | - | + | + | few + | few + | + | - |
| | | | | | 54 (monoblast) | variably + | bright + | - | variably + | + | | dim + |
| 0065 | 55 | Male | BM | M4 | 28 (myeloblast) | - | bright + | predom - | predom + | predom + | subset + | partial + |
| | | | | | 40 (monoblast) | + | bright + | predom - | predom + | predom + | subset + | + |
| 0066 | 68 | Female | PB | M4 | 16 (myeloblast) | - | + | bright + | partial + | few + | + | - |
| | | | | | 29 (monoblast) | partial + | + | predom - | + | + | - | + |
| 0067 | 58 | Female | BM | M4 | 46 (monoblast) | partial + | bright + | - | + | bright + | variably + | + |
| 0068 | 68 | Female | BM | M4 | 12 (myeloblast) | - | + | + | partial + | few + | + | - |
| | | | | | 65 (monoblast) | partial + | + | predom - | + | + | - | + |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0069 | 47 | Male | BM | M4 | 14 (myeloblast) | - | + | - | - | - | + | - |
| | | | | | 61 (monoblast) | small sub + | bright + | - | variably + | + | - | + |
| 0070 | 14 | Female | BM | M4 | 14 (myeloblast) | - | variably + | - | - | - | variably + | - |
| | | | | | 28 (monoblast) | partial + | variably + | - | variably + | + | - | + |
| 0071 | 66 | Female | PB | M4 | 4 (myeloblast) | - | + | - | - | partial dim + | + | - |
| | | | | | 40 (monoblast) | partial + | + | - | + | + | - | + |
| 0072 | 66 | Female | BM | M4 | 7 (myeloblast) | - | variably + | - | - | partial dim + | + | - |
| | | | | | 42 (monoblast) | partial + | bright + | - | + | + | - | + |
| 0073 | 22 | Female | PB | M4 | 70 (myeloblast) | - | + | - | - | - | + | - |
| | | | | | 27 (monoblast) | variably + | bright + | - | variably + | + | - | + |
| 0074 | 56 | Female | BM | M4 | 1 (myeloblast) | - | + | + | - | partial + | + | - |
| | | | | | 50 (monoblast) | predom + | bright + | - | + | + | - | + |
| 0075 | 91 | Female | PB | M4 | 59 (myeloblast) | + | + | - | dim + | + | - | partial + |
| | | | | | 12 (monoblast) | predom + | bright + | - | dim + | + | - | + |
| 0076 | 74 | Male | BM | M4 | 20 (myeloblast) | few + | variably + | variably + | - | partial + | variably + | partial + |
| | | | | | 30 (monoblast) | partial + | bright + | - | dim + | + | - | partial + |
| 0077 | 13 | Female | PB | M4 | 24 (myeloblast) | - | variably + | partial + | - | partial + | + | - |
| | | | | | 54 (monoblast) | partial + | variably + | - | + | dim + | - | partial + |
| 0078 | 57 | Female | BM | M4 | 35 (myeloblast) | - | + | - | - | dim + | variably + | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 27 (monoblast) | partial + | + | - | partial + | + | - | + |
| 0079 | 7 mos | Female | PB | M4 | 35 (myeloblast) | variably + | bright + | - | + | variably + | - | - |
| | | | | | 40 (monoblast) | - | bright + | - | - | variably + | - | - |
| 0080 | 13 | Female | BM | M4 | 3 (myeloblast) | - | + | + | sm subset + | - | part dim + | - |
| | | | | | 36 (monoblast) | partial + | variably + | - | partial + | + | - | partial + |
| 0081 | 61 | Male | BM | M4 | 10 (myeloblast) | - | + | pred + | - | - | + | - |
| | | | | | 67 (monoblast) | partial + | variably + | - | variably + | partial + | - | + |
| 0082 | 62 | Female | BM | M4 | 7 (myeloblast) | - | + | + | - | predom - | predom + | - |
| | | | | | 16 (monoblast) | partial + | bright + | - | partial + | + | - | + |
| 0083 | 59 | Male | PB | M4 | 9 (myeloblast) | - | bright + | + | - | partial + | variably + | - |
| | | | | | 10 (monoblast) | + | bright + | - | - | + | - | + |
| 0084 | 56 | Female | BM | M4 | 3 (myeloblast) | - | + | + | - | partial + | + | - |
| | | | | | 9 (monoblast) | partial + | bright + | - | partial + | + | predom - | + |
| 0085 | 71 | Male | BM | M4 | 3 (myeloblast) | - | variably + | + | predom - | partial + | variably + | - |
| | | | | | 42 (monoblast) | + | + | - | partial + | + | partial + | + |
| 0086 | 56 | Female | BM | M4 | 3 (myeloblast) | - | + | + | - | partial + | + | - |
| | | | | | 50 (monoblast) | partial + | bright + | - | partial + | variably + | partial + | + |
| 0087 | 68 | Male | BM | M4 | 2 (myeloblast) | - | variably + | + | - | partial + | + | - |
| | | | | | 27 (monoblast) | predom + | + | - | + | partial + | - | + |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0088 | 16 | Male | PB | M5a | 1 (myeloblast) | - | predom + | + | - | partial + | + | - |
| | | | | | 85 (monoblast) | variably + | bright + | - | variably + | + | - | + |
| 0089 | 16 | Male | BM | M5a | 1 (myeloblast) | - | predom + | + | - | partial + | + | - |
| | | | | | 88 (monoblast) | + | bright + | - | variably + | + | - | + |
| 0090 | 72 | Male | BM | M5a | 82 | - | bright + | predom - | + | + | partial + | + |
| 0091 | 35 | Male | BM | M5a | 60 | - | bright + | predom - | partial + | + | partial + | + |
| 0092 | 69 | Female | BM | M5a | 27 | - | bright + | - | - | bright + | partial + | + |
| 0093 | 17 | Male | BM | M5a | 96 | predom - | variably + | predom - | part dim + | bright + | + | + |
| 0094 | 76 | Male | BM | M5a | 10 (myeloblast) | - | + | + | - | few + | + | - |
| | | | | | 74 (monoblast) | partial + | + | partial + | partial + | predom + | partial + | + |
| 0095 | 63 | Female | BM | M5a | 1 (myeloblast) | - | dim + | partial + | - | dim + | + | - |
| | | | | | 58 (monoblast) | pred - | bright + | - | partial + | + | + | + |
| 0096 | 61 | Female | BM | M5a | 10 | - | - | - | sl dim + | + | + | + |
| 0097 | 9 mos | Female | PB | M5a | 82 | partial + | bright + | predom - | partial + | variably + | predom - | part dim + |
| 0098 | 68 | Male | BM | M5b | 4 (myeloblast) | - | variably + | - | - | - | + | - |
| | | | | | 61 (monoblast) | partial + | bright + | - | variable + | + | - | + |
| 0099 | 82 | Female | PB | M5b | 2 (myeloblast) | - | + | - | - | partial + | + | - |
| | | | | | 74 (monoblast) | + | bright + | - | + | + | - | dim + |
| 0100 | 58 | Female | PB | M5b | 55 | partial + | variably + | predom - | + | partial + | predom - | + |
| 0101 | 62 | Male | BM | M5b | 2 (myeloblast) | - | partial + | variably + | - | partial + | + | - |
| | | | | | 83 (monoblast) | partial + | variably + | - | partial + | + | pred - | + |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0102 | 62 | Male | LN | M5b | 2 (myeloblast) | - | partial + | variably + | - | partial + | + | - |
| | | | | | 47 (monoblast) | partial + | bright + | predom - | partial + | variably + | pred - | + |
| 0103 | 51 | Female | BM | M5b | 3 (myeloblast) | - | variably + | + | - | - | + | - |
| | | | | | 77 (monoblast) | variably + | + | - | - | + | partial + | + |
| 0104 | 13 | Male | BM | M5b | 84 | sm sub + | + | - | - | + | predom - | + |
| 0105 | 7 mos | Female | BM | M5b | 46 | predom - | bright + | - | partial + | + | predom - | + |
| 0106 | 69 | Female | PB | M5b | 1 (myeloblast) | partial + | bright + | + | subset + | variably + | + | - |
| | | | | | 70 (monoblast) | partial + | bright + | pred - | subset + | variably + | sm sub + | dim + |
| 0107 | 64 | Male | BM | M5b | 86 | partial + | partial + | predom - | subset + | partial + | partial + | + |
| 0108 | 14 | Male | BM | M5b | 94 | partial + | + | - | - | bright + | - | partial + |
| 0109 | 64 | Male | BM | M5b | 23 | partial + | + | predom - | partial + | partial + | partial + | + |
| 0110 | 61 | Male | BM | M5b | 1 (myeloblast) | predom - | partial + | variably + | sm sub + | - | sm subset + | dim + |
| | | | | | 20 (monoblast) | predom - | partial + | variably + | sm subset + | - | sm subset + | dim + |
| 0111 | 67 | Female | PB | M5b | 48 | predom + | + | - | variably + | + | predom - | + |
| 0112 | 76 | Male | BM | M5b | 2 (myeloblast) | predom - | partial + | bright + | - | predom - | + | - |
| | | | | | 57 (monoblast) | + | bright + | partial dim + | + | bright + | - | + |
| 0113 | 52 | Female | BM | M6 | 8 | - | bright + | partial + | - | - | + | - |
| 0114 | 32 | Female | BM | M6a | 22 | - | bright + | - | - | - | + | - |
| 0115 | 48 | Female | BM | M7 | 35 | predom+ | variably + | + | partial + | - | variably + | - |
| 0116 | 17 | Male | BM | AUL | 56 | - | + | bright + | - | - | - | - |
| 0117 | 1 day | Male | PB | TAM | 25 | - | sm sub + | variably + | partial + | - | + | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0118 | 1 mos | Female | PB | TAM | 10 | - | + | partial + | predom + | - | variably + | - |

**Supplementary Table 2. Predicted critical amino acids of LILRB4 mediating APOE-LILRB4 interaction.** The role of mutated residues of LILRB4 in the possible APOE binding interface based on the known structures of LILRB4 and APOE. Based on the PDB structure of LILRB4 (PDBID: 3P2T) and APOE3 (PDBID: 2L7B), we identified indicated residues in four possible binding interfaces for mutagenesis study and generated a series of mutant LILRB4 reporter cells as shown in Fig. 3h.

| Pose #5 | | Pose #115 | | Pose #51 | | Pose #155 | |
|---|---|---|---|---|---|---|---|
| Residue (LILRB4) | Interaction Energy (kcal/mol) | Residue (LILRB4) | Interaction Energy (kcal/mol) | Residue (LILRB4) | Interaction Energy (kcal/mol) | Residue (LILRB4) | Interaction Energy (kcal/mol) |
| PHE201 (F) | -12.361279 | TRP32 (W) | -10.162224 | GLU90 (E) | -8.502012 | LEU165 (L) | -9.812494 |
| GLU64 (E) | -9.627243 | GLU114 (E) | -6.124348 | PHE201 (F) | -8.028892 | ARG159 (R) | -8.752884 |
| GLU63 (E) | -8.199759 | THR30 (T) | -5.663048 | TYR121 (Y) | -7.258127 | ASP111 (D) | -8.496945 |
| ARG97 (R) | -7.526236 | GLN50 (Q) | -4.54658 | GLU63 (E) | -7.189283 | HIS162 (H) | -8.100805 |
| PRO66 (P) | -6.648518 | PRO112 (P) | -4.35171 | GLU64 (E) | -6.94281 | TRP32 (W) | -6.589325 |
| TRP106 (W) | -4.482213 | LEU165 (L) | -4.31777 | ARG147 (R) | -6.633883 | ARG168 (R) | -5.058758 |
| GLN174 (Q) | -4.325576 | PRO184 (P) | -3.930789 | PRO66 (P) | -5.140189 | LEU167 (L) | -4.187927 |
| ARG95 (R) | -4.155138 | LEU164 (L) | -3.905388 | TRP41 (W) | -4.799497 | ARG95 (R) | -4.11992 |
| SER65 (S) | -3.705189 | ARG168 ® | -3.671397 | ASP91 (D) | -4.351736 | CYS166 (C) | -3.41541 |
| PRO68 (P) | -3.454256 | LEU113 (L) | -3.377484 | SER148 (S) | -3.6486 | GLU114 (E) | -3.271711 |
| GLY172 (G) | -2.956375 | HIS162 (H) | -3.349706 | SER65 (S) | -3.562618 | GLU34 (E) | -3.268257 |
| ALA67 (A) | -2.919467 | SER183 (S) | -3.268351 | SER202 (S) | -2.962636 | PRO112 (P) | -3.056938 |
| GLY200 (G) | -2.754843 | VAL188 (V) | -3.103813 | ARG95 (R) | -2.717827 | GLU170 (E) | -2.692569 |
| HIS199 (H) | -2.747746 | THR185 (T) | -2.416582 | LEU205 (L) | -2.62092 | GLN50 (E) | -2.506593 |
| ALA173 (A) | -2.562305 | | | GLY119 (G) | -2.582134 | LYS28 (K) | -2.487442 |
| LYS62 (K) | -2.133966 | | | SER122 (S) | -2.387931 | ALA161 (A) | -2.385419 |
| GLU170 (E) | -2.114094 | | | PRO149 (P) | -2.126853 | LYS157 (K) | -2.32742 |
| PRO109 (P) | -2.044897 | | | | | PRO35 (P) | -2.219545 |
| | | | | | | THR30 (T) | -2.148501 |

**Supplementary Table 3. Genes regulated by LILRB4 were identified by RNA-seq.** The gene expression in THP-1 *lilrb4*-KO cells in comparison with those in THP-1 WT cells (n=2 biologically independent samples) was obtained by RNA-seq. Genes with the ration < 0.67 or >1.5 were shown. p value were calculated by F-test, student *t*-test and associative *t*-test (See also references: Dozmorov, I et al. (2003) An associative analysis of gene expression array data. *Bioinformatics* 19(2): 204-211; Dozmorov, I et al. (2009) Internal standard-based analysis of microarray data. Part 1: analysis of differential gene expression. *Nucleic Acids Res* 37(19): 6323-6339). Full datasets have been deposited in NCBI SRA database with the SRA accession number SRP155049 (https://www.ncbi.nlm.nih.gov/sra/SRP155049).

| Gene ID | Gene Name | Average RPKM (WT) | SD | Average RPKM (KO) | SD | p-value | Ration (KO/WT) |
|---|---|---|---|---|---|---|---|
| 3494 | EHD3 | 0.010266401 | 0.000814364 | 0.00466488 | 0.006445903 | 0 | 0.454383136 |
| 6988 | CHRD | 0.010445398 | 0.000828816 | 0.004745781 | 0.006560315 | 0 | 0.454341776 |
| 7048 | CLDN1 | 0.010722875 | 0.000851228 | 0.005157639 | 0.007145014 | 0 | 0.480993984 |
| 2638 | ELF3 | 0.011314432 | 0.000899042 | 0.005138677 | 0.007115953 | 0 | 0.454170089 |
| 4149 | NEURL3 | 0.01218126 | 0.001479773 | 0.00173535 | 0.002305167 | 0 | 0.142460599 |
| 31102 | ASLL | 0.012294376 | 0.004855475 | 0.004043483 | 0.00556936 | 0 | 0.328888802 |
| 9103 | NBPF22P | 0.012294686 | 0.004373329 | 0.002268141 | 9.66038E-05 | 0 | 0.184481375 |
| 14078 | CYP7A1 | 0.012767141 | 0.001016642 | 0.005795865 | 0.008045358 | 0 | 0.453967345 |
| 33380 | KDM5D | 0.013149916 | 0.001047668 | 0.006109858 | 0.000253437 | 0 | 0.464630914 |
| 3263 | PXDN | 0.013596363 | 0.004838153 | 0.002481504 | 0.003358144 | 0 | 0.182512334 |
| 32685 | KIAA1210 | 0.014060819 | 0.001121564 | 0.006595597 | 0.003337442 | 0 | 0.46907628 |
| 21837 | TRDC | 0.014710208 | 0.005806139 | 0.004563304 | 0.006302253 | 0 | 0.310213413 |
| 22274 | C14orf38 | 0.014738082 | 0.00117656 | 0.006688226 | 0.009307346 | 0 | 0.453805694 |
| 23891 | CHRNB4 | 0.014970569 | 0.001195449 | 0.007190768 | 0.010020293 | 0 | 0.480326942 |
| 21158 | C13orf33 | 0.015330282 | 0.001224685 | 0.006956498 | 0.009686741 | 0 | 0.453774941 |
| 20682 | WSCD2 | 0.01580174 | 0.001263021 | 0.003620824 | 0.004969386 | 0 | 0.229140839 |
| 27546 | SERPINB7 | 0.015835565 | 0.001265772 | 0.007605144 | 0.01060631 | 0 | 0.480257187 |
| 17218 | PNLIPRP3 | 0.01586273 | 0.001267982 | 0.007197756 | 0.010027932 | 0 | 0.453752696 |
| 20767 | RASAL1 | 0.017225198 | 0.006795274 | 0.010599308 | 0.014838452 | 0 | 0.615337355 |
| 32568 | ZCCHC18 | 0.017656043 | 0.006964673 | 0.005472864 | 0.007588566 | 0 | 0.309971153 |
| 32492 | TMEM35 | 0.017666905 | 0.001414872 | 0.008482782 | 0.011847478 | 0 | 0.480151005 |
| 5838 | TDGF1 | 0.01776032 | 0.001422485 | 0.008057973 | 0.011244462 | 0 | 0.453706522 |
| 14973 | CNTFR | 0.017950158 | 0.001437958 | 0.008618565 | 0.012039503 | 0 | 0.480138648 |
| 2925 | LEFTY2 | 0.018117423 | 0.001451593 | 0.008698751 | 0.012152903 | 0 | 0.480131788 |
| 2203 | CASQ1 | 0.019463914 | 0.001561437 | 0.008830733 | 0.012337309 | 0 | 0.453697684 |
| 9024 | CRHBP | 0.019883323 | 0.001595678 | 0.009545516 | 0.01335041 | 0 | 0.480076489 |
| 13153 | AKR1D1 | 0.019959411 | 0.007870085 | 0.012284998 | 0.017222378 | 0 | 0.615499053 |
| 29651 | TARDBPL | 0.020129666 | 0.007936996 | 0.013105214 | 0.018384583 | 0 | 0.651039803 |
| 29332 | LILRP2 | 0.020321874 | 0.00801253 | 0.006665531 | 0.009277496 | 0 | 0.327997845 |
| 27172 | MCART4P | 0.020732397 | 0.001665037 | 0.009406397 | 0.013151421 | 0 | 0.453705227 |
| 14546 | ADCY8 | 0.020888636 | 0.029380137 | 0.008303384 | 0.000341566 | 0 | 0.397507249 |
| 33556 | DDX11L16 | 0.021282433 | 0.008389982 | 0.013101218 | 0.018376688 | 0 | 0.615588379 |
| 6968 | HTR3C | 0.021493526 | 0.001727252 | 0.010317924 | 0.01444276 | 0 | 0.480047979 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5113 | IL8RA | 0.021595966 | 0.008513173 | 0.007082225 | 0.00986679 | 0 | 0.327942032 |
| 21947 | DHRS2 | 0.021644916 | 0.001739632 | 0.010390559 | 0.014545481 | 0 | 0.48004616 |
| 1055 | PPAP2B | 0.022165403 | 0.001782204 | 0.005067921 | 0.007015889 | 0 | 0.228641034 |
| 8231 | EDNRA | 0.022299587 | 0.031372077 | 0.007898844 | 0.000325368 | 0 | 0.354214828 |
| 9552 | PCDHGA2 | 0.022632645 | 0.001820436 | 0.010642157 | 0.005380057 | 0 | 0.470212724 |
| 4684 | SLC4A10 | 0.022721488 | 0.002740368 | 0.012553179 | 0.017603887 | 0 | 0.552480477 |
| 26426 | MEOX1 | 0.022939097 | 0.009040838 | 0.014123737 | 0.019822748 | 0 | 0.615705901 |
| 32204 | HNRNPDP | 0.023124948 | 0.001860733 | 0.010492768 | 0.014687782 | 0 | 0.453742349 |
| 6839 | C3orf57 | 0.02326403 | 0.009168476 | 0.007207017 | 0.010041028 | 0 | 0.309792277 |
| 31736 | BEND2 | 0.023629151 | 0.00190202 | 0.007595412 | 0.010592547 | 0 | 0.321442446 |
| 8737 | TCP1P2 | 0.024209956 | 0.009540015 | 0.007937506 | 0.01107634 | 0 | 0.327861215 |
| 1548 | NR1H5P | 0.024344527 | 0.00069952 | 0.015097357 | 0.00175645 | 0 | 0.620154039 |
| 14343 | GDF6 | 0.024346652 | 0.004915377 | 0.013394506 | 0.01879146 | 0 | 0.550158032 |
| 19131 | FAM55D | 0.024786035 | 0.009766263 | 0.007678166 | 0.010707334 | 0 | 0.309777905 |
| 32849 | CXorf48 | 0.024808743 | 0.009775181 | 0.008133491 | 0.011353505 | 0 | 0.327847747 |
| 17224 | RPL5P27 | 0.024823469 | 0.001999876 | 0.011264431 | 0.015779079 | 0 | 0.453781504 |
| 29061 | SUMO1P4 | 0.024856981 | 0.002002623 | 0.011932192 | 0.01672568 | 0 | 0.480033834 |
| 12080 | CCDC129 | 0.025367441 | 0.003055577 | 0.010323615 | 0.005219328 | 0 | 0.40696321 |
| 1898 | NBPF18P | 0.025420848 | 0.002048853 | 0.011989812 | 0.007634339 | 0 | 0.471652711 |
| 8797 | FST | 0.026295076 | 0.002120563 | 0.011933268 | 0.016724957 | 0 | 0.453821388 |
| 26413 | RND2 | 0.026332704 | 0.00212365 | 0.016352946 | 0.000660258 | 0 | 0.621012814 |
| 17361 | C10orf92 | 0.026532037 | 0.002140007 | 0.006062439 | 0.00842235 | 0 | 0.228495039 |
| 5064 | PTH2R | 0.026861276 | 0.002167028 | 0.012528326 | 0.000509582 | 0 | 0.466408437 |
| 403 | PLA2G5 | 0.028268411 | 0.011133564 | 0.018413128 | 0.025891107 | 0 | 0.651367631 |
| 27088 | CD7 | 0.028384653 | 0.002292126 | 0.012883362 | 0.018068593 | 0 | 0.45388479 |
| 31678 | TLR7 | 0.02874419 | 0.007857087 | 0.01747271 | 0.024561155 | 0 | 0.607869262 |
| 1395 | AMY1C | 0.028779882 | 0.011334336 | 0.00943382 | 0.013192448 | 0 | 0.327792164 |
| 1954 | PGLYRP4 | 0.029183737 | 0.011492857 | 0.017982096 | 0.025279291 | 0 | 0.616168356 |
| 23943 | DNM1P38 | 0.029400263 | 0.01049177 | 0.005640853 | 0.007828384 | 0 | 0.19186405 |
| 6095 | SYNPR | 0.030102043 | 0.006068517 | 0.011081189 | 0.015519935 | 0 | 0.368120829 |
| 26369 | PTRF | 0.030580475 | 0.002472646 | 0.009532515 | 0.000390651 | 0 | 0.311719006 |
| 13085 | C7orf45 | 0.031470993 | 0.00254592 | 0.014287448 | 0.02005427 | 0 | 0.453987853 |
| 10604 | HNRNPA1P2 | 0.032358094 | 0.002618948 | 0.014691184 | 0.020625238 | 0 | 0.454018813 |
| 2742 | IL10 | 0.032817048 | 0.012918683 | 0.021383097 | 0.030091277 | 0 | 0.651585008 |
| 26620 | EPN3 | 0.033186266 | 0.022086446 | 0.008669616 | 0.000356212 | 0 | 0.26124107 |
| 30324 | SRMS | 0.033692131 | 0.047487013 | 0.02236217 | 0.000895031 | 0 | 0.663720863 |
| 9553 | PCDHGA3 | 0.035234294 | 0.008285705 | 0.007116988 | 0.009913708 | 0 | 0.201990356 |
| 25325 | PKD1L2 | 0.035449744 | 0.003355901 | 0.012280077 | 0.011256568 | 0 | 0.346408059 |
| 30165 | PTGIS | 0.035478953 | 0.001649121 | 0.017996958 | 0.007797069 | 0 | 0.507257298 |
| 23460 | STRC | 0.036039451 | 0.001674379 | 0.006393545 | 0.008892851 | 0 | 0.177404073 |
| 7014 | HRG | 0.037213524 | 0.00301924 | 0.008993936 | 0.012570359 | 0 | 0.241684615 |
| 20425 | LGR5 | 0.037827645 | 0.003069935 | 0.012153755 | 0.017039018 | 0 | 0.321292949 |
| 10772 | BZRPL1 | 0.037905845 | 0.003076391 | 0.018203406 | 0.025594516 | 0 | 0.480226894 |
| 31847 | CXorf30 | 0.038762411 | 0.020854759 | 0.006161089 | 0.008564107 | 0 | 0.158944933 |
| 9556 | PCDHGB2 | 0.039312064 | 0.00319253 | 0.014500181 | 0.009765917 | 0 | 0.368848115 |
| 23979 | ADAMTSL3 | 0.039583747 | 0.003214977 | 0.018744818 | 0.013767296 | 0 | 0.47354835 |
| 19590 | AICDA | 0.039710529 | 0.021366018 | 0.005961724 | 0.008279918 | 0 | 0.150129549 |
| 19073 | POU2AF1 | 0.042220093 | 0.011783139 | 0.01726238 | 0.024263704 | 0 | 0.40886646 |
| 9970 | FOXO1B | 0.042626389 | 0.008572916 | 0.007898614 | 0.011019094 | 0 | 0.185298691 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 13942 | RPL3P10 | 0.04306225 | 0.016936563 | 0.01334798 | 0.018725661 | 0 | 0.309969391 |
| 13138 | FAM180A | 0.044084832 | 0.003587225 | 0.010653105 | 0.014916778 | 0 | 0.241650117 |
| 31133 | GGTLC4P | 0.044274224 | 0.062452352 | 0.02211529 | 0.000885425 | 0 | 0.499507127 |
| 30071 | SEMG1 | 0.044703811 | 0.003638467 | 0.020907085 | 0.00083837 | 0 | 0.467680155 |
| 14391 | GRHL2 | 0.044844329 | 0.001185701 | 0.022405391 | 0.012782848 | 0 | 0.499625958 |
| 26111 | CCL7 | 0.045033742 | 0.003665786 | 0.020466787 | 0.028793176 | 0 | 0.45447672 |
| 27006 | C1QTNF1 | 0.046381158 | 0.029604137 | 0.011223149 | 0.000457879 | 0 | 0.241976473 |
| 12211 | NPC1L1 | 0.046453748 | 0.001225946 | 0.026840949 | 0.001068794 | 0 | 0.577799426 |
| 13145 | PTN | 0.046789535 | 0.003811223 | 0.010687489 | 0.014963159 | 0 | 0.228416227 |
| 7869 | SNCA | 0.046969698 | 0.003826152 | 0.021349862 | 0.030042032 | 0 | 0.454545447 |
| 26852 | KCNJ2 | 0.047077601 | 0.003835094 | 0.012616288 | 0.00051306 | 0 | 0.267989191 |
| 14213 | HEY1 | 0.047161389 | 0.003842037 | 0.021855592 | 0.009473116 | 0 | 0.46342129 |
| 6186 | CADM2 | 0.048601542 | 0.003624156 | 0.030480743 | 0.00120938 | 0 | 0.627155887 |
| 22011 | PRKD1 | 0.049225829 | 0.004013182 | 0.028090841 | 0.027022527 | 0 | 0.570652474 |
| 32992 | PASD1 | 0.049815541 | 0.003712954 | 0.02086866 | 0.000836873 | 0 | 0.418918664 |
| 18358 | MS4A5 | 0.050157438 | 0.004090453 | 0.022804416 | 0.032099082 | 0 | 0.454656721 |
| 7063 | FGF12 | 0.050393208 | 0.002317455 | 0.026083894 | 0.01316359 | 0 | 0.517607334 |
| 7365 | RPL32P12 | 0.051211102 | 0.004177878 | 0.024608197 | 0.034652257 | 0 | 0.480524646 |
| 13649 | C8orf74 | 0.051366116 | 0.020190722 | 0.03172577 | 0.044715782 | 0 | 0.617640043 |
| 157 | TAS1R1 | 0.053634309 | 0.004379051 | 0.024750351 | 0.016680921 | 0 | 0.461464895 |
| 24014 | FABP5L9 | 0.054738996 | 0.004470813 | 0.024895955 | 0.035056964 | 0 | 0.454812041 |
| 4398 | RPL17P15 | 0.055779392 | 0.011197491 | 0.010336942 | 0.014467411 | 0 | 0.185318295 |
| 17208 | ABLIM1 | 0.056118269 | 0.007573158 | 0.024258679 | 0.010517287 | 0 | 0.432277751 |
| 11721 | T | 0.057450728 | 0.004696197 | 0.006606839 | 0.009192249 | 0 | 0.115000101 |
| 20684 | CMKLR1 | 0.057972583 | 0.004739591 | 0.027231731 | 0.005327782 | 0 | 0.469734651 |
| 7571 | PDCL2 | 0.058918962 | 0.083163139 | 0.039274615 | 0.001547123 | 0 | 0.666587026 |
| 28536 | UPK1A | 0.059125089 | 0.00483545 | 0.014288697 | 0.020058282 | 0 | 0.241668937 |
| 7070 | ATP13A4 | 0.059214129 | 0.004842858 | 0.031458909 | 0.009896155 | 0 | 0.531273697 |
| 3449 | TRIM54 | 0.061707046 | 0.005050318 | 0.018764877 | 0.026386311 | 0 | 0.304096187 |
| 2662 | MYOG | 0.062162511 | 0.005088237 | 0.019450852 | 0.000781551 | 0 | 0.312903252 |
| 9651 | CDX1 | 0.06234487 | 0.033578182 | 0.018607062 | 0.026163126 | 0 | 0.298453776 |
| 25874 | KRT17P2 | 0.062537645 | 0.020248792 | 0.012478142 | 0.017495525 | 0 | 0.199530091 |
| 31308 | APOL4 | 0.063478206 | 0.005197799 | 0.015051833 | 0.007604221 | 0 | 0.23711812 |
| 4648 | ERMN | 0.063689652 | 0.007589518 | 0.02604433 | 0.013143662 | 0 | 0.40892561 |
| 25545 | RPL21P125 | 0.064054012 | 0.005245761 | 0.030797744 | 0.043405599 | 0 | 0.480808978 |
| 17681 | HPX | 0.064241688 | 0.012883726 | 0.025047825 | 0.035273986 | 0 | 0.389899859 |
| 2761 | CR1 | 0.065448192 | 0.010419983 | 0.015380218 | 0.003018757 | 0 | 0.23499836 |
| 21088 | ATP12A | 0.066144469 | 0.012489333 | 0.0187593 | 0.01263864 | 0 | 0.28361102 |
| 20968 | RPS6P21 | 0.066181992 | 0.025992641 | 0.021713799 | 0.030558961 | 0 | 0.328092252 |
| 31947 | RNU12 | 0.066385535 | 0.005440038 | 0.03192205 | 0.044995608 | 0 | 0.48085852 |
| 3491 | GALNT14 | 0.066579448 | 0.005456201 | 0.012532925 | 0.000509763 | 0 | 0.188240143 |
| 20281 | LRP1 | 0.067685745 | 0.002167908 | 0.006793202 | 0.002936378 | 0 | 0.100363856 |
| 13909 | FKSG2 | 0.069286957 | 0.005681963 | 0.033321424 | 0.046974621 | 0 | 0.480919142 |
| 33066 | TEX28 | 0.069574958 | 0.027320684 | 0.03232584 | 0.045564409 | 0 | 0.464618894 |
| 32562 | H2BFXP | 0.069680498 | 0.02736199 | 0.015292962 | 0.021478526 | 0 | 0.219472629 |
| 33101 | H2AFB1 | 0.069817773 | 0.005726241 | 0.033577469 | 0.047336724 | 0 | 0.480930107 |
| 17042 | RPL7P36 | 0.071003895 | 0.02787992 | 0.043926677 | 0.06197047 | 0 | 0.618651659 |
| 25624 | SLC13A5 | 0.071126437 | 0.00183437 | 0.041968239 | 0.045121694 | 0 | 0.590051199 |
| 20060 | FIGNL2 | 0.071178256 | 0.005269489 | 0.044930229 | 0.012251551 | 0 | 0.631235321 |

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|---|---|---|---|---|---|---|---|
| 23728 | LBXCOR1 | 0.071370549 | 0.003247166 | 0.036687408 | 0.001448012 | 0 | 0.514041273 |
| 27385 | NPM1P1 | 0.073626312 | 0.006044101 | 0.035414818 | 0.049935128 | 0 | 0.481007634 |
| 28625 | SPRED3 | 0.07368983 | 0.028931 | 0.012162121 | 0.017050848 | 0 | 0.165044767 |
| 14534 | SRRM1L | 0.074400552 | 0.105053968 | 0.033145163 | 0.001311979 | 0 | 0.445496202 |
| 3688 | RPL26P13 | 0.07453007 | 0.006119569 | 0.035850882 | 0.050551815 | 0 | 0.481025735 |
| 32553 | TMEM31 | 0.075325198 | 0.040586393 | 0.023773868 | 0.033472339 | 0 | 0.315616411 |
| 528 | ZNF683 | 0.075714699 | 0.009004139 | 0.020516734 | 0.000823151 | 0 | 0.270974255 |
| 11605 | RAET1E | 0.076196921 | 0.107597864 | 0.038214236 | 0.001506526 | 0 | 0.501519423 |
| 20243 | SLC39A5 | 0.07643948 | 0.005651325 | 0.023417029 | 0.032965447 | 0 | 0.306347304 |
| 27779 | CREB3L3 | 0.077162705 | 0.016077938 | 0.046922785 | 0.066209852 | 0 | 0.608101875 |
| 26574 | GIP | 0.077528678 | 0.041776355 | 0.024470772 | 0.034457909 | 0 | 0.315635093 |
| 26342 | HAP1 | 0.081409626 | 0.006011567 | 0.042927546 | 0.0137013 | 0 | 0.527303069 |
| 11861 | OCM | 0.081781853 | 0.115492704 | 0.048539237 | 0.001900545 | 0 | 0.593520881 |
| 20895 | NIACR2 | 0.08429758 | 0.006936153 | 0.02311202 | 0.032534099 | 0 | 0.274171807 |
| 24049 | PLIN | 0.085023661 | 0.006996921 | 0.051089776 | 0.00601331 | 0 | 0.600888923 |
| 19622 | NPM1P16 | 0.0856336 | 0.007047975 | 0.013096068 | 0.018369404 | 0 | 0.152931416 |
| 7975 | AGXT2L1 | 0.085808661 | 0.007062629 | 0.055627277 | 0.031784309 | 0 | 0.648271123 |
| 23682 | RASL12 | 0.090362078 | 0.002299977 | 0.032993631 | 0.010539921 | 0 | 0.365126965 |
| 26364 | HCRT | 0.091684311 | 0.03596965 | 0.028498399 | 0.040151589 | 0 | 0.31083179 |
| 10874 | ENPP5 | 0.092096848 | 0.016124494 | 0.028919366 | 0.009242446 | 0 | 0.314010379 |
| 10586 | CYP21A1P | 0.092681343 | 0.010995609 | 0.028470359 | 0.040111935 | 0 | 0.30718544 |
| 10841 | C6orf154 | 0.092831333 | 0.004189199 | 0.055923259 | 0.013377816 | 0 | 0.602417922 |
| 5144 | FEV | 0.095751893 | 0.007895774 | 0.027278863 | 0.01376545 | 0 | 0.284891104 |
| 32277 | CXorf65 | 0.09718073 | 0.052392318 | 0.030689672 | 0.043252762 | 0 | 0.315799973 |
| 17841 | LDHC | 0.097230307 | 0.01152877 | 0.05186878 | 0.034991131 | 0 | 0.533463095 |
| 27850 | CRB3 | 0.097411908 | 0.008035013 | 0.04689874 | 0.066175846 | 0 | 0.481447705 |
| 2701 | RPL13AP11 | 0.097693664 | 0.052669472 | 0.030852067 | 0.043482424 | 0 | 0.315804174 |
| 31717 | MAGEB17 | 0.09852059 | 0.020561352 | 0.016345028 | 0.022964128 | 0 | 0.165904691 |
| 10152 | RPL7P26 | 0.099729244 | 0.039114924 | 0.065229118 | 0.092098915 | 0 | 0.654062092 |
| 29364 | IL11 | 0.099770099 | 0.018895265 | 0.021797639 | 0.011004309 | 0 | 0.218478679 |
| 17886 | RPL36AP40 | 0.102448969 | 0.008457751 | 0.023450188 | 0.033012341 | 0 | 0.228896284 |
| 9581 | PCDH1 | 0.104043833 | 0.003899268 | 0.065657682 | 0.028532188 | 0 | 0.631057896 |
| 24394 | RPL18P12 | 0.111925977 | 0.009254045 | 0.052602989 | 0.002054916 | 0 | 0.469980161 |
| 27567 | RPS2P6 | 0.113206543 | 0.009361732 | 0.052720786 | 0.022898572 | 0 | 0.465704411 |
| 20980 | GALNT9_1 | 0.113779426 | 0.005101915 | 0.067555111 | 0.038611959 | 0 | 0.593737492 |
| 17433 | MUPCDH | 0.114932644 | 0.005151993 | 0.054704712 | 0.022975204 | 0 | 0.475971924 |
| 25052 | CCL17 | 0.116790805 | 0.009663251 | 0.02674705 | 0.037674808 | 0 | 0.229016748 |
| 19245 | CRTAM | 0.11860517 | 0.00981594 | 0.042238326 | 0.021296186 | 0 | 0.356125507 |
| 2308 | RPS3AP10 | 0.118966239 | 0.046632572 | 0.077868445 | 0.109973622 | 0 | 0.654542372 |
| 24379 | OR1F2P | 0.119190466 | 0.168399918 | 0.034351049 | 0.001358334 | 0 | 0.288202991 |
| 19025 | CASP5 | 0.1191917 | 0.0238022 | 0.022781066 | 0.000911323 | 0 | 0.191129633 |
| 24676 | IL27 | 0.119337332 | 0.014115809 | 0.032418181 | 0.00128401 | 0 | 0.271651633 |
| 10558 | LY6G6C | 0.119902973 | 0.04699853 | 0.039411051 | 0.055586654 | 0 | 0.328691188 |
| 1205 | RPL23P3 | 0.123516021 | 0.048409967 | 0.040602945 | 0.057272248 | 0 | 0.328726143 |
| 10299 | RSL24D1P | 0.12788003 | 0.068985283 | 0.040414887 | 0.057006294 | 0 | 0.316037517 |
| 6644 | RBP1 | 0.12853372 | 0.010652158 | 0.051852554 | 0.002026436 | 0 | 0.403415962 |
| 3616 | C2orf61 | 0.132890956 | 0.047687901 | 0.059117613 | 0.083455942 | 0 | 0.444858058 |
| 10590 | CYP21A2 | 0.135705097 | 0.011256833 | 0.079298084 | 0.019374609 | 0 | 0.584341238 |
| 19442 | RPL23AP14 | 0.136087578 | 0.011289099 | 0.064025319 | 0.002487009 | 0 | 0.470471438 |

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|---|---|---|---|---|---|---|---|
| 32621 | GNG5P2 | 0.138164635 | 0.01146434 | 0.031664968 | 0.044629794 | 0 | 0.229182869 |
| 30700 | H2BFS | 0.138269552 | 0.054172046 | 0.085861088 | 0.121274682 | 0 | 0.620968875 |
| 641 | SPOCD1 | 0.141507572 | 0.020411778 | 0.042727713 | 0.03503288 | 0 | 0.301946481 |
| 12287 | SLC25A5P3 | 0.145670851 | 0.012098003 | 0.069592753 | 0.060572788 | 0 | 0.477739726 |
| 29727 | RPL21P3 | 0.147478808 | 0.017400802 | 0.020665674 | 0.029076689 | 0 | 0.140126397 |
| 16644 | MRPL35P2 | 0.15252316 | 0.215536021 | 0.09080448 | 0.003491622 | 0 | 0.595348798 |
| 15906 | C9orf50 | 0.154750454 | 0.012865212 | 0.093836873 | 0.018230932 | 0 | 0.60637543 |
| 334 | RPL22P3 | 0.156038132 | 0.01297408 | 0.035781136 | 0.050450935 | 0 | 0.229310207 |
| 14977 | ARID3C | 0.158075329 | 0.007014952 | 0.094784148 | 0.015484332 | 0 | 0.599613799 |
| 13028 | RPL31P39 | 0.161979913 | 0.013476625 | 0.07813114 | 0.110345129 | 0 | 0.482350793 |
| 11614 | RAET1L | 0.172855992 | 0.110074852 | 0.021713799 | 0.030558961 | 0 | 0.125617854 |
| 6092 | RPS10P10 | 0.179321656 | 0.070194973 | 0.028063116 | 0.039536007 | 0 | 0.156495968 |
| 2162 | AIM2 | 0.191203948 | 0.017648267 | 0.033884066 | 0.014701863 | 0 | 0.177214258 |
| 28376 | RPL36AP51 | 0.191575349 | 0.270764156 | 0.085743347 | 0.003302528 | 0 | 0.447569832 |
| 19067 | ARHGAP20 | 0.193255737 | 0.012098318 | 0.119604188 | 0.004562062 | 0 | 0.618890751 |
| 5351 | RAMP1 | 0.193945968 | 0.038599893 | 0.055143592 | 0.023953404 | 0 | 0.284324506 |
| 11449 | RPL21P67 | 0.194903598 | 0.016266519 | 0.061359608 | 0.002386389 | 0 | 0.314820296 |
| 6156 | OR7E66P | 0.194931558 | 0.052776902 | 0.046798957 | 0.001834322 | 0 | 0.240078913 |
| 5347 | PRLH | 0.198810629 | 0.077797168 | 0.062045387 | 0.087594195 | 0 | 0.312082848 |
| 13800 | NKX3-1 | 0.201088023 | 0.009195828 | 0.025369178 | 0.020790587 | 0 | 0.126159565 |
| 31158 | IGLL3 | 0.213642535 | 0.009390226 | 0.053798903 | 0.075931906 | 0 | 0.25181738 |
| 28395 | RPL34P34 | 0.213670154 | 0.115397097 | 0.064100076 | 0.090499964 | 0 | 0.299995459 |
| 18791 | SLCO2B1 | 0.216963892 | 0.018140339 | 0.095078182 | 0.019652613 | 0 | 0.438221223 |
| 23487 | TRIM69 | 0.22634818 | 0.045130109 | 0.052803636 | 0.022934641 | 0 | 0.233285002 |
| 31392 | PDGFB | 0.229309733 | 0.033695502 | 0.034637241 | 0.008303929 | 0 | 0.151050025 |
| 28054 | VN2R13P | 0.231151755 | 0.124860289 | 0.069371936 | 0.097955501 | 0 | 0.300114253 |
| 21578 | FAM155A | 0.234355901 | 0.008963683 | 0.145070466 | 0.019085398 | 0 | 0.619017767 |
| 4342 | IL1A | 0.234929606 | 0.039811807 | 0.080582541 | 0.003109365 | 0 | 0.343007179 |
| 32348 | RPS6P26 | 0.235634366 | 0.04946045 | 0.061005194 | 0.030736284 | 0 | 0.258897696 |
| 4475 | RPL19P4 | 0.25784293 | 0.02162076 | 0.118195139 | 0.167001936 | 0 | 0.458399768 |
| 3733 | RPL27P6 | 0.25971226 | 0.030437268 | 0.10513476 | 0.045737648 | 0 | 0.404812465 |
| 6868 | SDHDP3 | 0.259805833 | 0.040808772 | 0.11409584 | 0.086247401 | 0 | 0.439158115 |
| 17303 | GALNAC4S-6ST | 0.270855065 | 0.038659658 | 0.140002293 | 0.000261316 | 0 | 0.516890068 |
| 20370 | MSRB3 | 0.278181522 | 0.023355871 | 0.166276723 | 0.022572878 | 0 | 0.597727419 |
| 10418 | HCG4 | 0.278855685 | 0.023413421 | 0.148081913 | 0.005612802 | 0 | 0.531034228 |
| 30576 | FLJ46020 | 0.284791943 | 0.023920272 | 0.181329702 | 0.132841309 | 0 | 0.636709383 |
| 15670 | TXNDC8 | 0.289377144 | 0.024311885 | 0.138391004 | 0.101415347 | 0 | 0.478237508 |
| 18936 | SNORA32 | 0.29411317 | 0.024716488 | 0.142209602 | 0.200965759 | 0 | 0.483520005 |
| 29108 | SIGLEC11 | 0.295551942 | 0.030062744 | 0.142701066 | 0.031951139 | 0 | 0.482829057 |
| 28404 | RPL34P33 | 0.307372758 | 0.120104503 | 0.151774076 | 0.214491969 | 0 | 0.493778556 |
| 22018 | RPL27P1 | 0.311957056 | 0.224376428 | 0.068145251 | 0.002642276 | 0 | 0.218444332 |
| 2188 | C1orf204 | 0.312001143 | 0.006404001 | 0.047462139 | 0.011362262 | 0 | 0.152121683 |
| 33139 | CRLF2_2 | 0.313547586 | 0.026377888 | 0.129167982 | 0.124136582 | 0 | 0.41195655 |
| 31 | NCRNA00115 | 0.323952727 | 0.027268101 | 0.100103766 | 0.104161975 | 0 | 0.309007325 |
| 30133 | SLC13A3 | 0.327903159 | 0.004071675 | 0.207241554 | 0.018980482 | 0 | 0.632020608 |
| 2749 | FCAMR | 0.336144974 | 0.028311805 | 0.073598208 | 0.002847353 | 0 | 0.218947815 |
| 965 | ELAVL4 | 0.356992048 | 0.050377864 | 0.129553048 | 0.004676793 | 0 | 0.362901775 |
| 7118 | RPS29P3 | 0.358566085 | 0.140036107 | 0.115642338 | 0.004415316 | 0 | 0.322513319 |

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|---|---|---|---|---|---|---|---|
| 15255 | CCDC29 | 0.361014234 | 0.032999731 | 0.191744013 | 0.083533074 | 0 | 0.531125909 |
| 26113 | CCL8 | 0.370977869 | 0.070933126 | 0.027097465 | 0.001078719 | 0 | 0.073043346 |
| 29743 | RIN2 | 0.373036602 | 0.048982898 | 0.151283747 | 0.05029984 | 0 | 0.405546658 |
| 10523 | HLA-X | 0.385197304 | 0.032516944 | 0.131029856 | 0.041665281 | 0 | 0.340162964 |
| 10302 | HIST1H2AI | 0.413625051 | 0.017795142 | 0.143366639 | 0.005439283 | 0 | 0.346610146 |
| 10291 | MCFD2L | 0.439057251 | 0.123927973 | 0.057493636 | 0.081157046 | 0 | 0.130947924 |
| 30800 | FABP5L11 | 0.458378321 | 0.150511705 | 0.050867777 | 0.001989045 | 0 | 0.110973349 |
| 28080 | RPS29P23 | 0.469195169 | 0.03973775 | 0.108215509 | 0.152888607 | 0 | 0.230640714 |
| 22658 | BDKRB1 | 0.47831552 | 0.016976153 | 0.117129606 | 0.013894601 | 0 | 0.244879375 |
| 5196 | SCG2 | 0.51022173 | 0.056439276 | 0.100692362 | 0.063128367 | 0 | 0.197350204 |
| 11974 | IL6 | 0.533683673 | 0.088942889 | 0.104573032 | 0.024944283 | 0 | 0.195945721 |
| 26497 | RPS26P8 | 0.533738853 | 0.04530081 | 0.250078794 | 0.143242876 | 0 | 0.468541483 |
| 7786 | C4orf22 | 0.536015206 | 0.017737328 | 0.356348193 | 0.066336673 | 0 | 0.664809859 |
| 27548 | SERPINB10 | 0.592012487 | 0.050332925 | 0.265661335 | 0.049368611 | 0 | 0.44874279 |
| 26728 | RPL12P38 | 0.619272169 | 0.026290522 | 0.186183528 | 0.106592696 | 0 | 0.300648952 |
| 1203 | IFI44L | 0.631371579 | 0.053736322 | 0.177840122 | 0.038882723 | 0 | 0.281672675 |
| 10704 | C6orf81 | 0.634473483 | 0.054004694 | 0.359087231 | 0.073698677 | 0 | 0.565960974 |
| 25492 | C17orf91 | 0.654179755 | 0.034305243 | 0.425146106 | 0.139251583 | 0 | 0.649891873 |
| 26889 | CD300E | 0.776592771 | 0.1665478 | 0.113246108 | 0.027712956 | 0 | 0.145824314 |
| 7459 | TLR1 | 0.799586852 | 0.017894636 | 0.368225763 | 0.077293844 | 0 | 0.460520033 |
| 4620 | TNFAIP6 | 0.804011771 | 0.051429815 | 0.142365677 | 0.038642639 | 0 | 0.177069145 |
| 25033 | MT1H | 0.886717696 | 0.075891964 | 0.421375337 | 0.015477104 | 0 | 0.475207993 |
| 14234 | FTHL11 | 0.923984551 | 0.079134971 | 0.406297575 | 0.220987013 | 0 | 0.439723343 |
| 26960 | AANAT | 1.001429388 | 0.20692078 | 0.200411771 | 0.007528233 | 0 | 0.200125714 |
| 2561 | RGS1 | 1.011646185 | 0.262755462 | 0.096022848 | 0.003686259 | 0 | 0.094917422 |
| 6398 | CD80 | 1.084736498 | 0.128703299 | 0.279005406 | 0.023835753 | 0 | 0.257210306 |
| 5833 | CCRL2 | 1.210717898 | 0.158189194 | 0.249721849 | 0.09184039 | 0 | 0.206259319 |
| 5811 | CDCP1 | 1.219927051 | 0.2126853 | 0.210545276 | 0.053292473 | 0 | 0.172588415 |
| 17464 | DUSP8 | 1.228956925 | 0.0419835 | 0.645857741 | 0.028664915 | 0 | 0.525533261 |
| 12243 | IGFBP3 | 1.265819873 | 0.09037107 | 0.576991517 | 0.023679432 | 0 | 0.455824347 |
| 564 | FGR | 1.588569311 | 0.251680035 | 0.285292807 | 0.087098465 | 0 | 0.179591035 |
| 20463 | RPL21P98 | 1.73228851 | 0.063397299 | 0.865116659 | 0.48866907 | 0 | 0.499406798 |
| 31213 | OSM | 1.751850807 | 0.083761988 | 1.111293206 | 0.265793547 | 0 | 0.634353794 |
| 15625 | ABCA1 | 1.860878006 | 0.030745801 | 0.750448864 | 0.054135245 | 0 | 0.403276766 |
| 7742 | CXCL10 | 2.160504624 | 0.021914236 | 0.699150889 | 0.205156927 | 0 | 0.323605366 |
| 1120 | PDE4B | 2.218625881 | 0.048056106 | 1.441071183 | 0.154221711 | 0 | 0.649533207 |
| 29342 | FCAR | 2.411683834 | 0.175436304 | 1.487981717 | 0.109609951 | 0 | 0.616988718 |
| 31584 | KLHDC7B | 2.418726688 | 0.163433302 | 1.065847431 | 0.15559048 | 0 | 0.440664684 |
| 21253 | C13orf31 | 2.673324185 | 0.115519255 | 1.713775513 | 0.075671522 | 0 | 0.641065353 |
| 30132 | C20orf123 | 2.833515919 | 0.171522225 | 0.735792571 | 0.010006503 | 0 | 0.259674762 |
| 26270 | CCR7 | 2.993139627 | 0.095931602 | 1.932035505 | 0.072201203 | 0 | 0.645487931 |
| 9827 | CPEB4 | 3.043228555 | 0.100268862 | 1.938248716 | 0.110000606 | 0 | 0.636905405 |
| 15758 | TRAF1 | 3.050653953 | 0.458591396 | 0.943933333 | 0.023273354 | 0 | 0.309419996 |
| 18996 | BIRC3 | 3.171785414 | 0.21686615 | 1.847018902 | 0.087265749 | 0 | 0.582327825 |
| 20221 | MMP19 | 3.22209397 | 0.080474045 | 1.884420262 | 0.073232754 | 0 | 0.584843359 |
| 9736 | IL12B | 3.609241842 | 0.49891917 | 0.300536397 | 0.051326689 | 0 | 0.083268567 |
| 2220 | SLAMF7 | 3.866463976 | 0.207458231 | 0.188229935 | 0.064048204 | 0 | 0.048682707 |
| 20608 | GAS2L3 | 4.431807648 | 0.358249381 | 2.699860242 | 0.456812454 | 0 | 0.609200682 |
| 10496 | IER3 | 4.51142709 | 0.830885315 | 0.903088534 | 0.1648166 | 0 | 0.200178018 |

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|---|---|---|---|---|---|---|---|
| 22656 | BDKRB2 | 4.518411081 | 0.161280206 | 2.251803672 | 0.128571774 | 0 | 0.498361843 |
| 12522 | STX1A | 4.609782778 | 0.391786085 | 2.258581419 | 0.178276541 | 0 | 0.48995398 |
| 23915 | BCL2A1 | 4.835088491 | 0.214678647 | 1.724977842 | 0.088196397 | 0 | 0.356762414 |
| 19325 | SLC37A2 | 4.907433019 | 0.488583483 | 3.119723315 | 0.007503565 | 0 | 0.635713886 |
| 2219 | CD48 | 5.276854368 | 0.076179075 | 0.969466926 | 0.253856258 | 0 | 0.183720614 |
| 1501 | CTTNBP2NL | 5.45068774 | 0.410515522 | 3.42808382 | 0.366843581 | 0 | 0.628926841 |
| 2670 | BTG2 | 5.686822502 | 0.413818498 | 3.651660162 | 0.778552636 | 0 | 0.642126629 |
| 31290 | HMOX1 | 5.865778583 | 0.150847834 | 2.262933314 | 0.24464114 | 0 | 0.385785669 |
| 15832 | ZBTB43 | 5.877113028 | 0.223500146 | 3.831184299 | 0.235514874 | 0 | 0.651882018 |
| 19163 | IL10RA | 5.947173095 | 0.491948684 | 3.320357601 | 0.045214429 | 0 | 0.558308552 |
| 5501 | IRAK2 | 6.138638686 | 0.311872597 | 3.276000011 | 0.00521317 | 0 | 0.533668811 |
| 20861 | OASL | 6.244386735 | 0.18108074 | 3.409797537 | 0.373494492 | 0 | 0.546058033 |
| 30019 | MAFB | 6.392753311 | 0.235464875 | 3.793994185 | 0.143862913 | 0 | 0.59348359 |
| 7037 | BCL6 | 6.659200385 | 0.138585415 | 2.911847605 | 0.16583589 | 0 | 0.437266854 |
| 5886 | UCN2 | 6.673760717 | 1.078882578 | 3.890655494 | 0.023340457 | 0 | 0.582977973 |
| 10783 | TREM1 | 6.677604454 | 0.198089749 | 2.565664515 | 0.69779596 | 0 | 0.384219301 |
| 24027 | ISG20 | 6.903108888 | 0.057110106 | 4.410899524 | 0.117626124 | 0 | 0.638972903 |
| 5220 | CCL20 | 7.371698074 | 0.203693637 | 3.803662041 | 0.545535456 | 0 | 0.5159818 |
| 23365 | BMF | 8.018457119 | 0.795164199 | 5.031536441 | 0.009841685 | 0 | 0.627494338 |
| 7708 | IL8 | 8.317012748 | 0.729094506 | 2.949930267 | 0.130141931 | 0 | 0.354686275 |
| 6884 | SKIL | 8.318180241 | 0.055471569 | 5.140846853 | 0.085105631 | 0 | 0.618025422 |
| 20691 | SSH1 | 8.571475435 | 0.408546908 | 5.464367385 | 0.237271824 | 0 | 0.637506043 |
| 12260 | UPP1 | 8.824826106 | 0.278376956 | 3.719198545 | 0.268396291 | 0 | 0.421447233 |
| 28291 | GDF15 | 8.901407187 | 0.509033178 | 5.345691239 | 0.064743491 | 0 | 0.600544512 |
| 26110 | CCL2 | 11.26323157 | 1.227947572 | 5.022543104 | 0.698867683 | 0 | 0.445923807 |
| 5726 | CSRNP1 | 11.82518468 | 0.896243884 | 7.171868276 | 0.313481172 | 0 | 0.606491016 |
| 21248 | EPSTI1 | 11.85963375 | 0.751813687 | 7.75568894 | 0.820794847 | 0 | 0.653956868 |
| 4650 | CYTIP | 12.96503317 | 0.269344944 | 5.441714589 | 0.626575106 | 0 | 0.419722381 |
| 20761 | OAS1 | 13.96324131 | 0.360184694 | 9.109235664 | 0.152087376 | 0 | 0.652372573 |
| 20764 | OAS2 | 15.82309047 | 0.072423169 | 8.160568436 | 0.050437491 | 0 | 0.515737962 |
| 27783 | EBI3 | 16.10939838 | 0.060915402 | 2.996117199 | 0.224608873 | 0 | 0.185985667 |
| 14402 | KLF10 | 16.1446267 | 0.510557492 | 9.51426444 | 0.212784356 | 0 | 0.589314613 |
| 9122 | ARRDC3 | 16.39914904 | 0.307198558 | 10.3572731 | 0.270228847 | 0 | 0.631573813 |
| 20249 | IL23A | 19.22269027 | 1.42518226 | 9.502052204 | 0.463942758 | 0 | 0.494314379 |
| 9454 | RPL7P19 | 19.56655146 | 0.108947941 | 11.21462753 | 1.011753743 | 0 | 0.573152993 |
| 5109 | TNS1 | 21.65854245 | 0.106663676 | 10.40597868 | 0.823473122 | 0 | 0.480456093 |
| 7851 | SPP1 | 21.95246591 | 1.870775768 | 10.47028965 | 0.381410174 | 0 | 0.47695278 |
| 28863 | BCL3 | 22.76917671 | 0.561795737 | 11.53961492 | 0.141610727 | 0 | 0.506808615 |
| 27990 | ICAM1 | 26.58944739 | 0.434335693 | 15.84314909 | 0.396140057 | 0 | 0.595843488 |
| 26163 | CCL4 | 29.73224023 | 0.365472047 | 2.56884213 | 0.47419538 | 0 | 0.086399212 |
| 28281 | IFI30 | 32.61498502 | 1.349855996 | 18.7078788 | 0.517806224 | 0 | 0.573597651 |
| 26167 | CCL4L1 | 34.99209595 | 2.313418169 | 5.213763855 | 0.247053595 | 0 | 0.14899833 |
| 11983 | GPNMB | 37.57690164 | 0.566182008 | 17.41304793 | 0.432946865 | 0 | 0.46339765 |
| 26166 | CCL3L3 | 38.39059342 | 3.315288617 | 6.891516392 | 0.621450854 | 0 | 0.179510546 |
| 18304 | LPXN | 40.15282584 | 0.959392334 | 24.84930761 | 0.64016558 | 0 | 0.618868214 |
| 5813 | TMEM158 | 48.25656783 | 3.010742416 | 9.994427161 | 0.467415728 | 0 | 0.207110195 |
| 9093 | VCAN | 49.49577253 | 1.140960404 | 27.95614534 | 1.945228761 | 0 | 0.56481885 |
| 26172 | CCL3L1 | 54.09996107 | 2.280870493 | 7.166423999 | 0.115774012 | 0 | 0.132466343 |
| 11681 | SOD2 | 77.50042992 | 0.151432787 | 49.02812666 | 1.149837721 | 0 | 0.63261748 |

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|---|---|---|---|---|---|---|---|
| 2508 | RGS16 | 77.53672493 | 2.059444138 | 41.51698864 | 1.182874686 | 0 | 0.535449346 |
| 4343 | IL1B | 90.86695509 | 0.725501915 | 13.03987309 | 0.391421394 | 0 | 0.143505118 |
| 28827 | PLAUR | 92.00921053 | 2.162848417 | 52.30805982 | 1.454054583 | 0 | 0.568508951 |
| 26162 | CCL3 | 93.13441476 | 3.742628207 | 10.74801077 | 1.083446244 | 0 | 0.115403214 |
| 9942 | SQSTM1 | 93.77919403 | 0.757537623 | 61.19489001 | 0.439830426 | 0 | 0.65254229 |
| 14559 | NDRG1 | 257.0115211 | 6.398531939 | 154.4163108 | 2.038202724 | 0 | 0.600814742 |
| 12000 | RPL7AP41 | 0.110561567 | 0.03964818 | 0.041129488 | 0.001618062 | 1.1694 E-258 | 0.372005296 |
| 30325 | C20orf195 | 0.081964734 | 0.029360793 | 0.030444359 | 0.001207977 | 3.6134 E-255 | 0.371432409 |
| 29800 | C20orf39 | 0.037682285 | 0.013459632 | 0.013940522 | 0.000565351 | 1.7483 E-246 | 0.369948961 |
| 8557 | SEMA5A | 0.015686437 | 0.005584851 | 0.005777048 | 0.000239995 | 2.6786 E-237 | 0.368282991 |
| 26170 | CCL3L2 | 3.842832053 | 1.13453594 | 0.976315754 | 0.059312646 | 3.9545 E-216 | 0.25406152 |
| 32856 | CROCCP | 0.026457156 | 0.006211281 | 0.01090431 | 0.000445224 | 1.2492 E-200 | 0.412149736 |
| 27472 | RAB27B | 0.441815368 | 0.09312138 | 0.201760847 | 0.00757739 | 3.9639 E-186 | 0.456663262 |
| 19232 | GRIK4 | 0.100951211 | 0.025815816 | 0.047074825 | 0.001844824 | 8.2983 E-160 | 0.466312627 |
| 12817 | ACTL6B | 0.056646928 | 0.044632739 | 0.022057993 | 0.000883195 | 1.0823 E-157 | 0.389394335 |
| 7879 | PGDS | 0.05393872 | 0.042501483 | 0.020997298 | 0.000841886 | 2.2623 E-157 | 0.38928062 |
| 31718 | RPL6P30 | 0.155187451 | 0.042064418 | 0.074189295 | 0.002869555 | 1.6694 E-152 | 0.478062464 |
| 16973 | PIPSL | 0.096936364 | 0.047904049 | 0.044750577 | 0.001756281 | 1.4381 E-143 | 0.461649018 |
| 12829 | ACHE | 0.202393715 | 0.050507311 | 0.102479404 | 0.003926639 | 5.4395 E-133 | 0.506336892 |
| 27142 | MYOM1 | 0.160641253 | 0.047545804 | 0.080706023 | 0.003113991 | 1.1737 E-131 | 0.502399116 |
| 26008 | SARM1 | 0.038132023 | 0.015003517 | 0.019387218 | 0.000779066 | 4.3839 E-111 | 0.508423531 |
| 31105 | VPREB3 | 0.12618197 | 0.096138948 | 0.057704427 | 0.002248209 | 4.9002 E-109 | 0.457311194 |
| 4727 | AF357534 | 0.082178626 | 0.052400113 | 0.039780589 | 0.001566484 | 4.2859 E-107 | 0.484074643 |
| 16437 | EIF3LP2 | 0.07059734 | 0.04502751 | 0.034143997 | 0.001350378 | 1.8238 E-106 | 0.483644248 |
| 24010 | DNM1P45 | 0.050709922 | 0.006058979 | 0.02733696 | 0.001087983 | 1.067E-105 | 0.539085032 |
| 32742 | RPL3P12 | 0.054590496 | 0.034833996 | 0.026362655 | 0.00105028 | 2.0373 E-105 | 0.482916569 |
| 17320 | ALDOAP2 | 0.051799019 | 0.039419898 | 0.023585903 | 0.0009426 | 2.4557 E-105 | 0.455334938 |
| 7922 | EMCN | 0.047371582 | 0.03023518 | 0.022857529 | 0.000914296 | 7.5589 E-105 | 0.482515639 |
| 1393 | AMY1B | 0.040590614 | 0.03088021 | 0.018460417 | 0.000742837 | 2.2929 | 0.454795203 |

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|---|---|---|---|---|---|---|---|
| | | | | | | E-104 | |
| 25784 | TEKT3 | 0.041479307 | 0.02648059 | 0.019998853 | 0.000802947 | 2.5479 E-104 | 0.482140476 |
| 14449 | MAPK6PS5 | 0.035287457 | 0.026840768 | 0.01603764 | 0.000647877 | 8.1185 E-104 | 0.454485576 |
| 32506 | ARMCX1 | 0.034895548 | 0.026542279 | 0.015858662 | 0.000640847 | 8.9748 E-104 | 0.454460887 |
| 25821 | ZNF287 | 0.030022485 | 0.00836506 | 0.015873424 | 0.000641427 | 1.2056 E-103 | 0.528717854 |
| 31685 | EGFL6 | 0.029636702 | 0.018931402 | 0.014260952 | 0.000577982 | 5.2294 E-103 | 0.481192253 |
| 8640 | CDH10 | 0.023000288 | 0.017484893 | 0.010431558 | 0.00042644 | 3.5722 E-102 | 0.453540322 |
| 7077 | GP5 | 0.021486355 | 0.01633253 | 0.009741701 | 0.000398987 | 6.4504 E-102 | 0.453390134 |
| 10718 | C6orf222 | 0.020101375 | 0.015278417 | 0.009110812 | 0.000373832 | 1.1468 E-101 | 0.453243212 |
| 119 | PRDM16 | 0.017253132 | 0.013110916 | 0.007814055 | 0.00032197 | 4.2462 E-101 | 0.452906471 |
| 18988 | TRPC6 | 0.015410902 | 0.009855523 | 0.007387263 | 0.00030485 | 1.5097 E-100 | 0.479353088 |
| 16663 | MYPN | 0.012373991 | 0.007916416 | 0.005923892 | 0.000245928 | 9.5168 E-100 | 0.478737386 |
| 32898 | FGF13 | 0.157425005 | 0.056527112 | 0.092574266 | 0.00330697 | 1.8679 3E-86 | 0.588053121 |
| 32651 | LRCH2 | 0.037265811 | 0.013310326 | 0.020641048 | 0.000827999 | 3.5862 5E-86 | 0.553886993 |
| 22253 | C14orf37 | 0.1693777 | 0.038406442 | 0.092757326 | 0.004124203 | 2.0517 2E-78 | 0.547636003 |
| 2632 | LMOD1 | 0.032854757 | 0.021865455 | 0.017112075 | 0.000690037 | 2.2389 3E-76 | 0.520840106 |
| 28035 | ELAVL3 | 0.027880614 | 0.018550048 | 0.01450959 | 0.000587778 | 6.0280 9E-76 | 0.520418605 |
| 17297 | RPS26P39 | 0.151812418 | 0.095499108 | 0.083763056 | 0.00322845 | 9.6580 1E-71 | 0.551753656 |
| 23279 | TRPM1 | 0.081994246 | 0.016416374 | 0.049785505 | 0.001947927 | 6.4313 5E-70 | 0.607182908 |
| 14410 | FLJ10489 | 0.194903598 | 0.016266519 | 0.122339701 | 0.004663299 | 1.8253 8E-66 | 0.627693396 |
| 6980 | CAMK2N2 | 0.174773406 | 0.106374592 | 0.099045087 | 0.003798837 | 4.3017 7E-66 | 0.566705706 |
| 2547 | PTGS2 | 1.169825926 | 0.138730674 | 0.70107249 | 0.032145886 | 1.6984 2E-55 | 0.59929642 |
| 2244 | APOA2 | 0.34467936 | 0.186349768 | 0.21285348 | 0.007981206 | 3.0954 4E-52 | 0.617540547 |
| 29932 | MT1P3 | 0.295337021 | 0.11541696 | 0.18970196 | 0.007137621 | 7.1167 E-52 | 0.642323672 |
| 1382 | RPS20P6 | 0.151242961 | 0.059237182 | 0.096778245 | 0.003714407 | 8.5816 9E-51 | 0.639885946 |
| 2065 | RXFP4 | 0.04831758 | 0.026008415 | 0.029545099 | 0.00117329 | 3.6061 5E-49 | 0.611477223 |

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|---|---|---|---|---|---|---|---|
| 29295 | CACNG6 | 0.08332059 | 0.088309213 | 0.036568952 | 0.001443469 | 3.6517 7E-49 | 0.438894544 |
| 8474 | TRIML2 | 0.042644553 | 0.022948316 | 0.026059822 | 0.001038553 | 5.4627 4E-49 | 0.611093802 |
| 17482 | TNNT3 | 0.041760187 | 0.016426124 | 0.026527068 | 0.001056645 | 7.3748 6E-49 | 0.635223883 |
| 19640 | KLRK1 | 0.033909344 | 0.013347229 | 0.021514551 | 0.000862038 | 1.4591 7E-48 | 0.634472641 |
| 16433 | CCNYL2 | 0.031342119 | 0.016854503 | 0.019123377 | 0.000768757 | 1.4972 2E-48 | 0.610149479 |
| 12530 | ELN | 0.030674195 | 0.012077827 | 0.019450852 | 0.000781551 | 2.0194 3E-48 | 0.63411125 |
| 27898 | CLEC4M | 0.028452059 | 0.015297029 | 0.017351576 | 0.000699424 | 2.0458 9E-48 | 0.609853106 |
| 1610 | ZNF697 | 4.939256536 | 0.425149214 | 2.998842695 | 0.144485413 | 2.6921 2E-48 | 0.607144552 |
| 25206 | CLEC18A | 0.027395143 | 0.010790744 | 0.017360412 | 0.00069977 | 2.9050 1E-48 | 0.633704016 |
| 27831 | FUT5 | 0.026944947 | 0.010613996 | 0.017073514 | 0.000688525 | 3.0632 8E-48 | 0.633644351 |
| 11437 | MESTP1 | 0.022745163 | 0.012222621 | 0.013855622 | 0.000562003 | 4.1795 E-48 | 0.609167828 |
| 16441 | DUXAP3 | 0.016297316 | 0.008751175 | 0.009911193 | 0.000405737 | 1.1861 7E-47 | 0.608148823 |
| 830 | CLDN19 | 0.014960832 | 0.005904732 | 0.009448206 | 0.000387291 | 1.9367 6E-47 | 0.631529422 |
| 21514 | HSP90AB6P | 0.010175722 | 0.005458279 | 0.006173732 | 0.000256014 | 4.9726 9E-47 | 0.606711944 |
| 13305 | FAM115D | 0.025613092 | 0.007967718 | 0.012784641 | 0.000866805 | 1.8085 8E-44 | 0.499144767 |
| 25326 | BCMO1 | 0.105403485 | 0.050064432 | 0.069486912 | 0.002692777 | 8.1450 6E-39 | 0.659246818 |
| 11958 | ITGB8 | 0.064625412 | 0.025402589 | 0.009637284 | 0.002332514 | 1.7247 8E-27 | 0.149125296 |
| 22183 | FRMD6 | 0.068922585 | 0.013815787 | 0.042370294 | 0.002929595 | 1.6659 E-22 | 0.61475196 |
| 27920 | ANGPTL4 | 0.860835214 | 0.326418982 | 0.570832801 | 0.033123957 | 7.6536 3E-20 | 0.663115067 |
| 9811 | DUSP1 | 2.320017245 | 0.225839039 | 1.351605337 | 0.114816471 | 2.8540 6E-19 | 0.582584177 |
| 31140 | ADORA2A | 0.809754114 | 0.093610504 | 0.424233927 | 0.043095887 | 2.8791 4E-19 | 0.523904627 |
| 15730 | TNFSF15 | 0.260446635 | 0.083877945 | 0.059172857 | 0.01415153 | 7.4320 3E-18 | 0.227197627 |
| 10629 | HLA-DOA | 0.300311019 | 0.124999427 | 0.106509457 | 0.017666755 | 2.4218 9E-17 | 0.354663832 |
| 3059 | PP2672 | 0.171597723 | 0.242511526 | 0.091209785 | 0.039666579 | 2.2204 5E-16 | 0.531532609 |
| 2890 | FAM177B | 0.199993149 | 0.035230434 | 0.074523277 | 0.032394414 | 2.2204 5E-16 | 0.37262915 |
| 17282 | HTRA1 | 0.150029178 | 0.034686576 | 0.056734817 | 0.058233441 | 6.6613 | 0.378158553 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 4E-16 | |
| 15491 | SUSD3 | 0.046547606 | 0.025053579 | 0.013882229 | 0.019481204 | 8.8817 8E-16 | 0.298237227 |
| 9822 | RPL7AP33 | 0.09342103 | 0.05036094 | 0.055647392 | 0.078546064 | 1.1102 2E-15 | 0.595662369 |
| 9533 | PCDHB4 | 0.132829529 | 0.00971715 | 0.088517014 | 0.009951561 | 3.3306 7E-15 | 0.666395601 |
| 16112 | FAM157B | 0.778943705 | 0.22046841 | 0.510384941 | 0.037038066 | 3.8633 6E-15 | 0.655226992 |
| 29407 | VN2R18P | 0.080095604 | 0.043162687 | 0.047674731 | 0.067271018 | 4.6629 4E-15 | 0.595222817 |
| 32360 | RPL21P134 | 0.124642863 | 0.079418515 | 0.029463352 | 0.04151624 | 5.5511 2E-15 | 0.236382186 |
| 168 | TNFRSF9 | 0.49396755 | 0.049889154 | 0.31051837 | 0.026019934 | 5.6271 2E-15 | 0.628620988 |
| 19803 | BHLHE41 | 0.123999927 | 0.023521425 | 0.049271527 | 0.008214744 | 7.5636 9E-15 | 0.397351263 |
| 26173 | CCL4L2 | 5.639579596 | 1.792055005 | 1.020512929 | 0.593207687 | 7.7715 6E-15 | 0.180955497 |
| 7261 | EVC2 | 0.012255705 | 0.004840253 | 0.00798023 | 0.011136761 | 1.3544 7E-14 | 0.651144079 |
| 27706 | ADAT3 | 0.035151987 | 0.018908154 | 0.010479602 | 0.014669163 | 1.4432 9E-14 | 0.29812262 |
| 6326 | DPPA4 | 0.109553134 | 0.035763361 | 0.065709174 | 0.005874495 | 1.6631 6E-14 | 0.599792737 |
| 5223 | WDR69 | 0.033294722 | 0.017906958 | 0.009925603 | 0.01388569 | 2.4202 9E-14 | 0.298113415 |
| 2599 | RPS2P9 | 0.064583601 | 0.034786681 | 0.040555766 | 0.057205526 | 5.3290 7E-14 | 0.627957643 |
| 4673 | PLA2R1 | 0.14845024 | 0.017514055 | 0.080193431 | 0.013085883 | 1.3322 7E-13 | 0.540204115 |
| 889 | PTCH2 | 0.174769067 | 0.062778987 | 0.097697142 | 0.010285722 | 1.4906 2E-13 | 0.559007058 |
| 31783 | RPS26P58 | 0.827945316 | 0.249673028 | 0.21486138 | 0.197352888 | 1.5054 6E-13 | 0.25951156 |
| 5715 | SLC22A14 | 0.028152676 | 0.015135709 | 0.008881459 | 0.012411291 | 1.7252 9E-13 | 0.31547476 |
| 16714 | NODAL | 0.279032511 | 0.036105437 | 0.154476395 | 0.085184718 | 2.9376 5E-13 | 0.553614322 |
| 14490 | RPL35AP19 | 0.155240622 | 0.098876131 | 0.077262327 | 0.109116443 | 3.0908 6E-13 | 0.497694008 |
| 3531 | SULT6B1 | 0.07486021 | 0.047741468 | 0.017656954 | 0.024819471 | 3.2485 1E-13 | 0.235865675 |
| 32981 | MAMLD1 | 0.804915707 | 0.069980511 | 0.51645462 | 0.080129533 | 3.4239 3E-13 | 0.64162572 |
| 29338 | KIR2DL4 | 0.128230791 | 0.089966397 | 0.022054945 | 0.031041414 | 4.1255 9E-13 | 0.171994142 |
| 8871 | ISCA1L | 0.074348127 | 0.047415465 | 0.018539354 | 0.026069618 | 4.6740 4E-13 | 0.249358723 |
| 7831 | SLC10A6 | 0.048824023 | 0.026281638 | 0.028998222 | 0.040858446 | 4.7695 2E-13 | 0.593933491 |

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|---|---|---|---|---|---|---|---|
| 8282 | RBM46 | 0.022128425 | 0.01189047 | 0.006599069 | 0.009181261 | 1.0289 5E-12 | 0.298216857 |
| 13087 | CPA4 | 0.019824026 | 0.010649597 | 0.00591366 | 0.008211946 | 2.7111 6E-12 | 0.298307726 |
| 8925 | SERF1B | 0.734885889 | 0.440639706 | 0.141441283 | 0.044720564 | 4.4200 5E-12 | 0.192467 |
| 15578 | NR4A3 | 0.118028171 | 0.038128759 | 0.024100107 | 0.007706923 | 5.1281 6E-12 | 0.204189443 |
| 17773 | DKK3 | 0.018687534 | 0.010037735 | 0.005902964 | 0.008199064 | 6.5940 6E-12 | 0.315877111 |
| 12154 | AMPH | 0.16478223 | 0.028983454 | 0.092410647 | 0.010937872 | 7.7320 5E-12 | 0.560804687 |
| 28223 | KLF2 | 2.928885131 | 0.286820761 | 1.830432265 | 0.233763482 | 1.0326 6E-11 | 0.624958707 |
| 32817 | MBNL3_1 | 0.325817323 | 0.074171883 | 0.126218892 | 0.024923524 | 1.7673 9E-11 | 0.387391595 |
| 1650 | NBPF8 | 0.019110927 | 0.005937518 | 0.004377353 | 0.001890164 | 1.9779 1E-11 | 0.229049765 |
| 1485 | C1orf88 | 0.477843201 | 0.093146945 | 0.29921641 | 0.029088955 | 2.1722 2E-11 | 0.62618116 |
| 14569 | MAPRE1P | 0.03125486 | 0.016807474 | 0.018534324 | 0.026060259 | 2.2879 7E-11 | 0.593006124 |
| 29603 | UBE2V1P1 | 0.03014717 | 0.016210496 | 0.017875594 | 0.025128674 | 3.0906 8E-11 | 0.592944331 |
| 10236 | HIST1H2AC | 1.035558592 | 0.494796693 | 0.582046493 | 0.064213552 | 3.2631 E-11 | 0.562060416 |
| 20455 | PHLDA1 | 0.853166537 | 0.159639819 | 0.400382376 | 0.064905133 | 5.6905 6E-11 | 0.469289826 |
| 3787 | RPL36AP16 | 0.184806199 | 0.140875681 | 0.043541591 | 0.06142812 | 6.2931 7E-11 | 0.235606765 |
| 17207 | AFAP1L2 | 0.01409113 | 0.007564046 | 0.004458735 | 0.006156616 | 7.0537 8E-11 | 0.316421393 |
| 5428 | CHL1 | 0.018546063 | 0.011856656 | 0.002350537 | 0.003175173 | 7.8944 2E-11 | 0.12674048 |
| 4350 | IL1F8 | 0.064614568 | 0.063362012 | 0.038892385 | 0.001532493 | 9.8781 3E-11 | 0.601913558 |
| 20255 | MIP | 0.051944591 | 0.046186396 | 0.033770829 | 0.001336036 | 1.4235 8E-10 | 0.65013178 |
| 5141 | KRT8P30 | 0.176267139 | 0.156543595 | 0.115444866 | 0.004407998 | 1.5592 3E-10 | 0.654942646 |
| 19753 | PIK3C2G | 0.052739415 | 0.014734853 | 0.017417412 | 0.004226772 | 1.9677 E-10 | 0.330254168 |
| 31134 | POM121L9P | 0.01210605 | 0.006496248 | 0.003835593 | 0.00527536 | 2.4067 6E-10 | 0.316832755 |
| 19206 | ABCG4 | 0.152487601 | 0.038112232 | 0.051931331 | 0.026172794 | 2.5773 3E-10 | 0.340561007 |
| 13019 | HYAL4 | 0.023166342 | 0.012449463 | 0.013727672 | 0.019262627 | 2.6237 4E-10 | 0.592569681 |
| 9828 | C5orf47 | 0.022119734 | 0.011885789 | 0.013106373 | 0.018383978 | 3.7801 8E-10 | 0.592519464 |
| 12929 | SLC26A3 | 0.091402057 | 0.035859283 | 0.052355205 | 0.00616368 | 4.3800 | 0.572801162 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 6E-10 | |
| 20528 | DCN | 0.022233259 | 0.011946928 | 0.013933085 | 0.01955537 | 5.0540 2E-10 | 0.62667759 |
| 33574 | TRNS1 | 2.675021339 | 0.570451961 | 1.407496753 | 1.350636238 | 6.3915 1E-10 | 0.526162813 |
| 15462 | ROR2 | 0.090530616 | 0.035518524 | 0.037315731 | 0.007287729 | 7.3726 3E-10 | 0.412189079 |
| 31806 | RDXP2 | 0.020576648 | 0.011054835 | 0.012894625 | 0.018086765 | 9.2236 4E-10 | 0.626663049 |
| 28727 | CYP2B6 | 0.023189539 | 0.014819454 | 0.005784734 | 0.008031862 | 1.6789 8E-09 | 0.249454478 |
| 21446 | IRG1 | 0.043644807 | 0.027860562 | 0.02162017 | 0.03042655 | 2.3359 9E-09 | 0.495366383 |
| 25761 | FLJ45455 | 0.150096033 | 0.043535666 | 0.045836619 | 0.023106739 | 3.1264 1E-09 | 0.305381946 |
| 17639 | TRIMP1 | 0.095757513 | 0.017632767 | 0.046223195 | 0.021270188 | 3.1430 1E-09 | 0.482710899 |
| 29344 | NLRP7 | 0.016353942 | 0.00878165 | 0.009686951 | 0.013548185 | 3.8091 4E-09 | 0.592331286 |
| 10423 | RPL7AP7 | 0.083449492 | 0.06354625 | 0.019626427 | 0.027606971 | 3.9033 3E-09 | 0.235189292 |
| 5727 | XIRP1 | 0.064026043 | 0.065112382 | 0.007843067 | 0.003391332 | 1.5991 4E-08 | 0.122498074 |
| 15815 | WDR38 | 0.059376972 | 0.045194958 | 0.013960656 | 0.019594361 | 2.0211 8E-08 | 0.235119034 |
| 11052 | RPSAP41 | 0.419131676 | 0.264139876 | 0.1750377 | 0.033886656 | 2.0982 4E-08 | 0.417619831 |
| 20071 | KRT121P | 0.023823976 | 0.011170133 | 0.008702573 | 0.002105318 | 2.4296 6E-08 | 0.365286318 |
| 9559 | PCDHGA6 | 0.012097432 | 0.006491613 | 0.007167061 | 0.009984522 | 3.3555 6E-08 | 0.592444845 |
| 8627 | CDH18 | 0.075836509 | 0.011585323 | 0.042042148 | 0.010070296 | 3.3955 9E-08 | 0.554378736 |
| 9342 | ADAMTS19 | 0.042344955 | 0.006503301 | 0.023219204 | 0.003757002 | 3.4441 6E-08 | 0.548334591 |
| 18892 | NOX4 | 0.011997504 | 0.00643787 | 0.007107959 | 0.009900939 | 3.5560 1E-08 | 0.592453157 |
| 25538 | SPATA22 | 0.059724147 | 0.047054241 | 0.012013298 | 0.01684038 | 4.3712 2E-08 | 0.201146406 |
| 30399 | C21orf15 | 0.013602288 | 0.00870079 | 0.003405829 | 0.004667581 | 4.3791 3E-08 | 0.250386463 |
| 18711 | UNC93B6 | 0.011500708 | 0.006170703 | 0.006814174 | 0.009485465 | 4.7727 2E-08 | 0.592500379 |
| 22834 | IGHA1 | 0.096921091 | 0.073819298 | 0.045382891 | 0.064032112 | 5.3928 6E-08 | 0.468245769 |
| 22319 | EIF2S2P | 0.056356644 | 0.044404303 | 0.01133551 | 0.015881844 | 5.6771 1E-08 | 0.201138843 |
| 31212 | LIF | 0.480602525 | 0.078548157 | 0.298385157 | 0.037047927 | 7.3364 7E-08 | 0.620856407 |
| 31151 | PIWIL3 | 0.067870718 | 0.027140916 | 0.014402379 | 0.006236476 | 8.3717 3E-08 | 0.212203133 |

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|---|---|---|---|---|---|---|---|
| 10538 | LTA | 0.209135247 | 0.089398895 | 0.061193201 | 0.019508075 | 1.41769E-07 | 0.292601091 |
| 15951 | BARHL1 | 0.04575841 | 0.036063057 | 0.009203808 | 0.012867162 | 1.42547E-07 | 0.201139149 |
| 19559 | NANOGP1 | 0.020646581 | 0.002815096 | 0.013373874 | 0.001554129 | 1.46267E-07 | 0.647752471 |
| 5038 | DYTN | 0.042577857 | 0.033559386 | 0.008092969 | 0.011293953 | 1.62504E-07 | 0.19007459 |
| 20075 | KRT86 | 0.035722129 | 0.027171832 | 0.00840257 | 0.011734041 | 2.05339E-07 | 0.235220308 |
| 33109 | RAB39B | 0.020347549 | 0.013006244 | 0.010068704 | 0.01409031 | 2.18005E-07 | 0.494836206 |
| 30053 | RPL37AP1 | 0.998051261 | 0.151700457 | 0.588595438 | 0.211438287 | 2.61192E-07 | 0.589744696 |
| 28208 | CYP4F2 | 0.03168601 | 0.024097976 | 0.007043925 | 0.009810382 | 2.87467E-07 | 0.222303955 |
| 6024 | ITIH1 | 0.075092712 | 0.023468149 | 0.028589842 | 0.023432537 | 3.44894E-07 | 0.380727252 |
| 29396 | NLRP5 | 0.018262555 | 0.011675722 | 0.009037435 | 0.012631875 | 3.94314E-07 | 0.494861471 |
| 22285 | C14orf39 | 0.02710408 | 0.020609067 | 0.006380989 | 0.008875094 | 6.75566E-07 | 0.23542542 |
| 32836 | PLAC1 | 0.380206072 | 0.076079271 | 0.194936677 | 0.070252419 | 1.20759E-06 | 0.512713213 |
| 9614 | PPP2R2B | 0.114971494 | 0.024019154 | 0.059124682 | 0.02979064 | 1.22912E-06 | 0.514255143 |
| 21024 | MRPL3P1 | 0.044266588 | 0.033680631 | 0.019572972 | 0.02752913 | 1.36158E-06 | 0.442161303 |
| 21955 | DHRS4L1 | 0.386186941 | 0.092082671 | 0.211296529 | 0.181202015 | 1.55215E-06 | 0.547135355 |
| 29169 | KLK10 | 0.061440706 | 0.028061384 | 0.025632655 | 0.006231199 | 1.55244E-06 | 0.417193362 |
| 11957 | MACC1 | 0.021079471 | 0.017788114 | 0.001863654 | 0.002484372 | 1.5835E-06 | 0.088410851 |
| 17850 | IGSF22 | 0.146912623 | 0.05754668 | 0.038248279 | 0.016600151 | 1.88557E-06 | 0.260347123 |
| 29165 | KLK6 | 0.060739518 | 0.053998277 | 0.009684147 | 0.013544219 | 2.27926E-06 | 0.159437329 |
| 4882 | GULP1 | 0.077424787 | 0.01550764 | 0.048115434 | 0.039454583 | 2.57509E-06 | 0.621447413 |
| 14259 | REXO1L1 | 0.031339437 | 0.00975755 | 0.014744095 | 0.014189102 | 3.36573E-06 | 0.470464575 |
| 199 | RBP7 | 0.315499643 | 0.200696929 | 0.127702841 | 0.031267435 | 3.98481E-06 | 0.40476382 |
| 21627 | GRK1_2 | 0.102532568 | 0.091107058 | 0.034437609 | 0.048553146 | 4.47066E-06 | 0.335869957 |
| 20118 | HIGD1D | 0.105293437 | 0.028595841 | 0.049525722 | 0.033408498 | 8.74597E-06 | 0.470359058 |
| 30338 | C20orf181 | 0.011827028 | 0.004206373 | 0.005399828 | 0.001303512 | 8.81351E-06 | 0.456566772 |
| 32777 | SMARCA1 | 0.138794972 | 0.025208965 | 0.087530536 | 0.055577864 | 1.2034 | 0.630646305 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 3E-05 | |
| 485 | C1orf130 | 0.023122274 | 0.004669834 | 0.013191649 | 0.006666157 | 1.6602 7E-05 | 0.570516942 |
| 30625 | KCNJ6 | 0.036116769 | 0.007271986 | 0.020653838 | 0.010427964 | 1.6869 1E-05 | 0.571862831 |
| 8455 | CCDC110 | 0.031017155 | 0.006251718 | 0.017400158 | 0.007537912 | 1.7069 2E-05 | 0.560984974 |
| 13274 | TRPV5 | 0.036102385 | 0.00726911 | 0.020270778 | 0.00878464 | 1.7162 4E-05 | 0.561480293 |
| 5703 | TCEA1P2 | 0.035776241 | 0.031937953 | 0.006345445 | 0.008822581 | 1.9544 9E-05 | 0.177364769 |
| 13903 | UNC5D | 0.19338112 | 0.045412594 | 0.096523515 | 0.022296555 | 2.5166 9E-05 | 0.499136189 |
| 20578 | C12orf55 | 0.084028889 | 0.060553316 | 0.040953749 | 0.007994034 | 3.1679 5E-05 | 0.487377016 |
| 10615 | HLA-DQA2 | 0.149870259 | 0.148463659 | 0.040579342 | 0.057238868 | 3.3752 5E-05 | 0.270763139 |
| 29634 | UBE2D3P | 0.170520614 | 0.240988264 | 0.077242562 | 0.0566417 | 4.2519 5E-05 | 0.452980786 |
| 2113 | ETV3L | 0.202026592 | 0.092573657 | 0.051722075 | 0.026067536 | 4.3018 3E-05 | 0.256016173 |
| 23816 | LMAN1L | 0.064725209 | 0.063470588 | 0.009545959 | 0.013348792 | 4.4565 7E-05 | 0.147484413 |
| 12983 | CTTNBP2 | 0.031156827 | 0.019543697 | 0.014145059 | 0.003429446 | 5.9643 3E-05 | 0.453995502 |
| 21091 | RNF17 | 0.032247762 | 0.007579476 | 0.016520996 | 0.004008284 | 6.5395 6E-05 | 0.512314493 |
| 2734 | C1orf147 | 0.071292351 | 0.010573964 | 0.047282878 | 0.011525822 | 6.5583 E-05 | 0.663225121 |
| 29056 | C19orf73 | 0.200101755 | 0.218099231 | 0.022134097 | 0.031151107 | 6.7743 6E-05 | 0.110614206 |
| 20894 | NIACR1 | 0.05449939 | 0.053436128 | 0.008507148 | 0.011881936 | 7.5378 3E-05 | 0.156096207 |
| 22590 | FBLN5 | 0.083680634 | 0.045099036 | 0.019498226 | 0.009845605 | 0.0001 07704 | 0.233007634 |
| 8637 | PRDM9 | 0.020344158 | 0.015463193 | 0.013430519 | 0.018842389 | 0.0001 14517 | 0.66016588 |
| 3794 | ASPRV1 | 0.242664376 | 0.04822086 | 0.146085537 | 0.027051102 | 0.0001 21296 | 0.602006523 |
| 2541 | PRG4 | 0.018716711 | 0.01669839 | 0.003333279 | 0.004562735 | 0.0001 2271 | 0.178091037 |
| 5180 | RPL23P5 | 0.010309635 | 0.014415724 | 0.005379644 | 0.002324087 | 0.0001 43658 | 0.521807417 |
| 17225 | C10orf134 | 0.049031602 | 0.013694087 | 0.026329901 | 0.019330886 | 0.0001 49317 | 0.536998584 |
| 28032 | RGL3 | 0.056482205 | 0.015785796 | 0.029536702 | 0.019911294 | 0.0001 55971 | 0.522938199 |
| 10708 | LHFPL5 | 0.059425608 | 0.016612515 | 0.031084775 | 0.020956259 | 0.0001 57438 | 0.523087203 |
| 26273 | KRT222P | 0.073386409 | 0.020536252 | 0.038432946 | 0.025917209 | 0.0001 63666 | 0.523706588 |

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|---|---|---|---|---|---|---|---|
| 17813 | RPL29P21 | 0.113599343 | 0.111444082 | 0.049989022 | 0.07054392 | 0.0001 65651 | 0.440046752 |
| 379 | PAX7 | 0.011953999 | 0.009079627 | 0.005285539 | 0.007323648 | 0.0001 716 | 0.442156566 |
| 2402 | RPL26P11 | 0.012265871 | 0.009316826 | 0.005741164 | 0.007970244 | 0.0001 8181 | 0.468060042 |
| 11196 | EPHA7 | 0.027725588 | 0.009892 | 0.01299133 | 0.011322718 | 0.0001 84883 | 0.468568245 |
| 17043 | CNNM1 | 0.015867082 | 0.014153828 | 0.002831359 | 0.003852913 | 0.0001 90675 | 0.178442323 |
| 11767 | C6orf208 | 0.033575292 | 0.009170564 | 0.017411398 | 0.010026479 | 0.0001 96417 | 0.518577711 |
| 2217 | SLAMF1 | 0.288563738 | 0.087427841 | 0.185033361 | 0.030578356 | 0.0002 68562 | 0.641221804 |
| 11212 | POU3F2 | 0.049501596 | 0.022595014 | 0.020856148 | 0.006672757 | 0.0002 83723 | 0.421322731 |
| 2498 | ZNF648 | 0.028060832 | 0.039523154 | 0.018329199 | 0.0123485 | 0.00034 7506 | 0.653195123 |
| 29253 | ZNF320 | 0.027181355 | 0.014612347 | 0.013743942 | 0.003331765 | 0.0003 51068 | 0.505638586 |
| 27795 | LSDP5 | 0.098464109 | 0.094679974 | 0.048233073 | 0.007843459 | 0.0003 84588 | 0.489854357 |
| 29388 | NLRP9 | 0.045875438 | 0.018039224 | 0.024182018 | 0.00587702 | 0.0003 94658 | 0.527123432 |
| 21038 | GJB2 | 0.157784418 | 0.061790569 | 0.058229331 | 0.022614831 | 0.0004 08913 | 0.369043608 |
| 19599 | KLRG1 | 0.299198133 | 0.052873463 | 0.197997168 | 0.073369235 | 0.0004 52965 | 0.661759372 |
| 16262 | MRC1 | 0.028569141 | 0.012139554 | 0.009775399 | 0.004229061 | 0.0005 30046 | 0.342166366 |
| 11264 | SCML4 | 0.032527958 | 0.01382714 | 0.011137731 | 0.004819915 | 0.0005 37415 | 0.342404848 |
| 10446 | HCP5P3 | 0.302683348 | 0.063638742 | 0.181496058 | 0.043183902 | 0.0005 90425 | 0.599623531 |
| 11352 | FAM26F | 0.385977456 | 0.077242159 | 0.254207764 | 0.139457191 | 0.0005 9728 | 0.658607803 |
| 30193 | RPSAP1 | 0.138838364 | 0.059276286 | 0.047910749 | 0.020804737 | 0.0006 26092 | 0.34508293 |
| 28485 | RPL29P33 | 0.233885274 | 0.100012272 | 0.080936092 | 0.035188782 | 0.0006 6093 | 0.346050399 |
| 8894 | RPL21P55 | 0.263881662 | 0.112879879 | 0.092991218 | 0.046813379 | 0.0006 64942 | 0.352397424 |
| 2979 | HIST3H2A | 0.823265823 | 0.219034155 | 0.435787615 | 0.126365816 | 0.0007 81696 | 0.529340102 |
| 32557 | ELF2P1 | 0.057038271 | 0.04760301 | 0.01714101 | 0.007425385 | 0.0010 44799 | 0.300517709 |
| 17034 | CRTAC1 | 0.161457028 | 0.116239812 | 0.052121093 | 0.022637497 | 0.0011 69338 | 0.322817123 |
| 21183 | SOHLH2 | 0.106000234 | 0.098342951 | 0.055839528 | 0.009089447 | 0.0015 35964 | 0.526786841 |
| 9297 | ZNF474 | 0.067117953 | 0.069991467 | 0.025224788 | 0.035522005 | 0.0016 | 0.375827737 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 52936 | |
| 16157 | CALML3 | 0.148823173 | 0.045222392 | 0.076973976 | 0.033462236 | 0.001691419 | 0.517217677 |
| 16655 | DNAJC12 | 0.133714324 | 0.125893732 | 0.033512359 | 0.016904234 | 0.001891837 | 0.250626549 |
| 32877 | GPR112 | 0.010658653 | 0.0094915 | 0.003584826 | 0.004920722 | 0.002269014 | 0.33633016 |
| 22187 | GNG2 | 0.034256841 | 0.035708658 | 0.008599512 | 0.012010313 | 0.002622308 | 0.251030501 |
| 13380 | ARP11 | 0.185673669 | 0.11684212 | 0.08596945 | 0.02737546 | 0.002761741 | 0.463013688 |
| 25983 | RPL34P31 | 0.767832156 | 0.183805027 | 0.486157288 | 0.243950891 | 0.002857239 | 0.633155676 |
| 20322 | LRIG3 | 0.083385397 | 0.025069214 | 0.045185536 | 0.01898613 | 0.00322864 | 0.541887879 |
| 29402 | RPL13P13 | 0.308677245 | 0.163681909 | 0.193012556 | 0.037345732 | 0.003403256 | 0.625289228 |
| 24683 | CDC37P1 | 0.238138008 | 0.071930713 | 0.129719621 | 0.054365686 | 0.0036767 | 0.544724558 |
| 2260 | FCGR3A | 0.108930522 | 0.064031404 | 0.04181384 | 0.018151431 | 0.004030849 | 0.383857884 |
| 31175 | MIAT | 0.030264571 | 0.008270558 | 0.018564074 | 0.010587998 | 0.004319811 | 0.613392953 |
| 28402 | ZNF492 | 0.116729417 | 0.033241468 | 0.065573607 | 0.020679139 | 0.004395702 | 0.561757338 |
| 23602 | AQP9 | 0.227184901 | 0.084946028 | 0.106578136 | 0.043272913 | 0.004805837 | 0.469125085 |
| 10876 | RCAN2 | 0.051797311 | 0.056705819 | 0.01578639 | 0.022176338 | 0.005027349 | 0.304772378 |
| 28569 | COX7A1 | 0.261299717 | 0.119818883 | 0.129964124 | 0.119331283 | 0.006435082 | 0.497375678 |
| 2193 | IGSF9 | 0.303574241 | 0.072657962 | 0.191803312 | 0.053938505 | 0.006529115 | 0.631816823 |
| 1172 | RPL29P5 | 0.195700243 | 0.103881811 | 0.080547362 | 0.035019379 | 0.006697658 | 0.411585398 |
| 14205 | ZFHX4 | 0.010486979 | 0.002880916 | 0.006201326 | 0.001992077 | 0.00678756 | 0.591335797 |
| 28046 | VN2R12P | 0.394156722 | 0.263391868 | 0.154683087 | 0.067353764 | 0.006957319 | 0.392440565 |
| 23862 | KRT8P23 | 0.089608851 | 0.024355813 | 0.053610819 | 0.01709841 | 0.007427943 | 0.598275937 |
| 11971 | MGC87042 | 0.117007668 | 0.045867377 | 0.062678732 | 0.019980052 | 0.007787218 | 0.535680552 |
| 17181 | ADRA2A | 0.059785701 | 0.014630766 | 0.038896804 | 0.016882283 | 0.007928686 | 0.650603789 |
| 30716 | AIRE | 0.158700959 | 0.079338447 | 0.061725893 | 0.037589788 | 0.007977877 | 0.388944674 |
| 5871 | CAMP | 0.630692949 | 0.222343777 | 0.347405547 | 0.218191286 | 0.008117353 | 0.550831506 |
| 30241 | CTCFL | 0.056618851 | 0.017278161 | 0.033854813 | 0.019328168 | 0.008224188 | 0.597942434 |

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|---|---|---|---|---|---|---|---|
| 5354 | ESPNL | 0.050924188 | 0.020345173 | 0.025015817 | 0.014274754 | 0.009040407 | 0.491236444 |
| 16588 | ASAH2 | 0.007206174 | 0.010030213 | 0.020838411 | 0.009031218 | 0 | 2.891744243 |
| 23646 | MGC15885 | 0.004912768 | 0.006783403 | 0.010555942 | 0.002555904 | 0 | 2.148674825 |
| 9566 | PCDHGA10 | 0.003735151 | 0.005121446 | 0.010673812 | 0.004618689 | 2.5979E-14 | 2.857665176 |
| 9547 | PCDHB19P | 0.004261022 | 0.005861694 | 0.010907857 | 0.004720204 | 9.9920E-14 | 2.559915934 |
| 24246 | SOX8 | 0.006419588 | 0.008914368 | 0.011153523 | 0.000455117 | 0 | 1.737420244 |
| 17800 | INSC | 0.005794817 | 0.008034252 | 0.011260145 | 0.000459347 | 0 | 1.943140936 |
| 25613 | WSCD1 | 0.006349292 | 0.000499358 | 0.01168185 | 0.000476068 | 0 | 1.839866618 |
| 17234 | EMX2 | 0.006037792 | 0.008377871 | 0.011740078 | 0.000478376 | 0 | 1.944432508 |
| 152 | HES2 | 0.004137872 | 0.005690979 | 0.01185066 | 0.005129187 | 7.1054E-15 | 2.863950439 |
| 17872 | SLC6A5 | 0.006829109 | 0.009493518 | 0.01187479 | 0.000483713 | 0 | 1.738849045 |
| 6705 | AGTR1 | 0.007590964 | 0.010570943 | 0.013217107 | 0.000536804 | 0 | 1.741163204 |
| 6344 | TMPRSS7 | 0.006949624 | 0.009667396 | 0.013542238 | 0.000549639 | 0 | 1.948628914 |
| 10186 | NRSN1 | 0.00809622 | 0.011285484 | 0.014107656 | 0.000571941 | 0 | 1.742498979 |
| 19261 | SCN3B | 0.005770488 | 0.007999847 | 0.014222823 | 0.01239514 | 0.001481483 | 2.46475229 |
| 22106 | MIA2 | 0.008539702 | 0.011912661 | 0.014889526 | 0.000602737 | 0 | 1.743565038 |
| 23905 | ANKRD34C | 0.007871449 | 0.010971055 | 0.015365706 | 0.000621471 | 0 | 1.952080863 |
| 16259 | FAM23A | 0.007150847 | 0.009948523 | 0.015621092 | 0.005002653 | 0 | 2.18450945 |
| 1891 | RORC | 0.006095812 | 0.008456479 | 0.015696206 | 0.006798099 | 1.1102E-15 | 2.574916267 |
| 23800 | GOLGA6 | 0.005515948 | 0.007639873 | 0.015883213 | 0.006879283 | 2.2204E-16 | 2.879507139 |
| 16700 | COL13A1 | 0.006196144 | 0.00859837 | 0.015958266 | 0.006911867 | 8.8817E-16 | 2.57551558 |
| 2107 | INSRR | 0.004747979 | 0.006550356 | 0.016136505 | 0.010869484 | 4.7609E-07 | 3.398604599 |
| 6744 | CLRN1 | 0.006159793 | 0.008546962 | 0.016158704 | 0.008162292 | 1.0691E-11 | 2.623254288 |
| 7264 | C4orf50 | 0.00551255 | 0.007635067 | 0.016168825 | 0.008167394 | 3.0224E-12 | 2.933093662 |
| 8715 | LIFR | 0.008751261 | 0.00177917 | 0.016316953 | 0.000658845 | 0 | 1.864526034 |
| 3427 | KCNK3 | 0.009256435 | 0.000732903 | 0.016819194 | 0.011329945 | 4.9548E-17 | 1.817027236 |
| 6025 | ITIH3 | 0.005763044 | 0.007989319 | 0.016915871 | 0.008544002 | 1.9475E-12 | 2.93523206 |
| 13505 | DLGAP2 | 0.001795956 | 0.00237901 | 0.016992226 | 0.010145797 | 1.2350E-12 | 9.461381384 |
| 32585 | CLDN2 | 0.005911813 | 0.008199711 | 0.017042945 | 0.007382805 | 0 | 2.88286245 |
| 21650 | POTEG | 0.010088034 | 0.014102333 | 0.017620633 | 0.000709965 | 0 | 1.746686507 |
| 32156 | ITIH5L | 0.004214772 | 0.005796287 | 0.017795594 | 0.014579167 | 4.7026E-05 | 4.222195817 |
| 13907 | KCNU1 | 0.009834344 | 0.000779497 | 0.017875494 | 0.012042448 | 5.0901E-17 | 1.81766008 |
| 6897 | FLJ23172 | 0.009222294 | 0.012881438 | 0.018040273 | 0.000726397 | 0 | 1.956158906 |
| 20599 | DNM1P19 | 0.006320263 | 0.008777346 | 0.018240094 | 0.007902655 | 0 | 2.88597068 |

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|---|---|---|---|---|---|---|---|
| 29994 | BPI | 0.0105244 | 0.014719449 | 0.01839069 | 0.000740109 | 0 | 1.747433482 |
| 21080 | C1QTNF9 | 0.009495334 | 0.013267574 | 0.01858119 | 0.000747561 | 0 | 1.956875909 |
| 769 | OXCT2P | 0.01075427 | 0.015044533 | 0.018796398 | 0.000755976 | 0 | 1.747807918 |
| 15959 | GFI1B | 0.009677769 | 0.013525577 | 0.018942668 | 0.000761695 | 0 | 1.957338232 |
| 6406 | C3orf15 | 0.003982118 | 0.00547071 | 0.019024971 | 0.004618717 | 0 | 4.777600773 |
| 28199 | CYP4F12 | 0.011245844 | 0.015739724 | 0.01966413 | 0.00078988 | 0 | 1.748568644 |
| 31500 | PNPLA5 | 0.006963238 | 0.00968665 | 0.020125672 | 0.008721609 | 0 | 2.890274759 |
| 28721 | CYP2F1P | 0.008828819 | 0.005651691 | 0.020823691 | 0.005057444 | 3.3596 9E-08 | 2.358604345 |
| 18890 | GRM5 | 0.007009768 | 0.003756902 | 0.02083348 | 0.011026109 | 0.0055 28019 | 2.97206408 |
| 11018 | MCART3P | 0.01078 | 0.015084367 | 0.021127536 | 0.000846962 | 0 | 1.959882674 |
| 20606 | SLC17A8 | 0.009244928 | 0.000731976 | 0.02139817 | 0.006845587 | 7.4282 3E-48 | 2.31458485 |
| 32519 | NXF2 | 0.014323092 | 0.007688844 | 0.021552584 | 0.005235278 | 0.0065 76976 | 1.504743799 |
| 9662 | MYOZ3 | 0.005131272 | 0.007092414 | 0.022243167 | 0.007114996 | 0 | 4.334825034 |
| 13816 | EBF2 | 0.008481143 | 0.011829846 | 0.022335958 | 0.011275539 | 4.583E-13 | 2.633602453 |
| 10808 | PRPH2 | 0.012132144 | 0.000965207 | 0.022398943 | 0.000896462 | 0 | 1.846247731 |
| 13208 | WEE2 | 0.011296195 | 0.015814376 | 0.022442208 | 0.016479562 | 1.5699 5E-05 | 1.98670516 |
| 6260 | FILIP1L | 0.008265301 | 0.000653112 | 0.022587503 | 0.009791113 | 1.0590 8E-65 | 2.732810879 |
| 31562 | IL17REL | 0.01012096 | 0.000802624 | 0.023181723 | 0.005632849 | 8.4595 3E-48 | 2.290466749 |
| 12979 | WNT2 | 0.012627966 | 0.001005365 | 0.023319348 | 0.000932245 | 0 | 1.846643185 |
| 25549 | GSG2 | 0.013832236 | 0.019397434 | 0.023886627 | 0.016098064 | 2.0348 2E-06 | 1.726881099 |
| 6391 | UPK1B | 0.00844216 | 0.011778161 | 0.024467024 | 0.010607827 | 0 | 2.89819489 |
| 25236 | MARVELD3 | 0.016531055 | 0.008876969 | 0.024893491 | 0.006050717 | 0.0065 23738 | 1.505862254 |
| 10790 | PGC | 0.01274448 | 0.01786256 | 0.02502506 | 0.000998453 | 0 | 1.963599997 |
| 17001 | DNTT | 0.009532348 | 0.013316475 | 0.025135742 | 0.012686005 | 1.3833 4E-13 | 2.636888895 |
| 14480 | ENPP2 | 0.015404532 | 0.021624443 | 0.025137576 | 0.006110313 | 0 | 1.63182987 |
| 1557 | CASQ2 | 0.013576349 | 0.001082251 | 0.025408581 | 0.018655214 | 6.6863 9E-17 | 1.871532672 |
| 26669 | RNF126P1 | 0.014665874 | 0.020576376 | 0.025705502 | 0.001024827 | 0 | 1.752742593 |
| 21400 | LGMN2P | 0.008901422 | 0.012427656 | 0.025816269 | 0.01119421 | 0 | 2.900241004 |
| 10780 | TREML3 | 0.005592972 | 0.007748801 | 0.026893144 | 0.006539025 | 0 | 4.808382015 |
| 30679 | UBASH3A | 0.013831829 | 0.019400304 | 0.027538929 | 0.020217516 | 6.8276 7E-06 | 1.990982522 |
| 21498 | DCT | 0.015248155 | 0.001218009 | 0.028186301 | 0.001120818 | 0 | 1.848505747 |
| 2293 | LMX1A | 0.014646895 | 0.005781231 | 0.02833719 | 0.039925851 | 1.0093 1E-09 | 1.934689266 |
| 22641 | GSC | 0.01448489 | 0.020323872 | 0.028481294 | 0.001132216 | 0 | 1.966276211 |
| 2519 | LAMC2 | 0.011302372 | 0.000898067 | 0.028848108 | 0.012134697 | 1.1191 8E-56 | 2.552394169 |
| 19060 | C11orf87 | 0.015667881 | 0.001252134 | 0.028966374 | 0.00115095 | 0 | 1.848774148 |

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|---|---|---|---|---|---|---|---|
| 14118 | TRIM55 | 0.006126954 | 0.008503965 | 0.029158736 | 0.023899237 | 5.5389 9E-06 | 4.759091954 |
| 21554 | NALCN | 0.013097038 | 0.002655394 | 0.029210681 | 0.005720954 | 8.4120 4E-09 | 2.230327258 |
| 3431 | DPYSL5 | 0.010783154 | 0.005784861 | 0.029338989 | 0.00573765 | 1.5765 2E-14 | 2.720816911 |
| 3352 | NT5C1B | 0.012068956 | 0.016907226 | 0.029412562 | 0.007154487 | 0 | 2.437042803 |
| 14880 | DMRTA1 | 0.01676533 | 0.023545456 | 0.029417326 | 0.001168359 | 0 | 1.754652355 |
| 2322 | DUSP27 | 0.004365967 | 0.006013554 | 0.029707445 | 0.018891638 | 1.1188 2E-11 | 6.80432161 |
| 511 | EXTL1 | 0.018220193 | 0.001459972 | 0.029847351 | 0.018980482 | 1.5985 9E-11 | 1.638146815 |
| 371 | PADI4 | 0.016167842 | 0.001292803 | 0.029895709 | 0.001186817 | 0 | 1.849084674 |
| 17383 | CYP2E1 | 0.011631603 | 0.01628527 | 0.030730638 | 0.015503694 | 1.7097 4E-14 | 2.641994962 |
| 19474 | GALNT8 | 0.017142405 | 0.001372141 | 0.030794544 | 0.043398829 | 0 | 1.796395801 |
| 8043 | NDST3 | 0.015223415 | 0.003083348 | 0.031068708 | 0.010781466 | 1.5607 6E-06 | 2.040850065 |
| 31651 | VCX3B | 0.01585222 | 0.022257569 | 0.031198533 | 0.001237045 | 0 | 1.968086059 |
| 25104 | CMTM2 | 0.018135728 | 0.025483492 | 0.031841307 | 0.001261803 | 0 | 1.75572254 |
| 11143 | HTR1E | 0.017863365 | 0.001430883 | 0.032095565 | 0.04523875 | 0 | 1.796725594 |
| 736 | DNALI1 | 0.013023978 | 0.018257831 | 0.032113353 | 0.010259638 | 0 | 2.465709986 |
| 13731 | FGL1 | 0.011113977 | 0.015556681 | 0.032322603 | 0.014022814 | 0 | 2.908284168 |
| 6123 | LMOD3 | 0.009488819 | 0.013254916 | 0.032557399 | 0.021950357 | 1.1326 1E-08 | 3.431132856 |
| 8462 | FLJ38576 | 0.011191847 | 0.015666806 | 0.032856834 | 0.001300888 | 0 | 2.935782974 |
| 31152 | TOP1P2 | 0.011365633 | 0.015912577 | 0.033063222 | 0.014344885 | 0 | 2.909052289 |
| 6315 | MYH15 | 0.017949024 | 0.0021707 | 0.033220427 | 0.012147334 | 9.0622 3E-12 | 1.850820763 |
| 25480 | TUSC5 | 0.020321301 | 0.001631449 | 0.033307481 | 0.021177569 | 1.6261 1E-11 | 1.639042794 |
| 2147 | SPTA1 | 0.008664574 | 0.012092703 | 0.03353338 | 0.010551015 | 0 | 3.870170521 |
| 12910 | FLJ23834 | 0.019517696 | 0.002358121 | 0.033622669 | 0.009656927 | 7.872E-10 | 1.722676094 |
| 25971 | FLJ36000 | 0.022169041 | 0.001045136 | 0.033905127 | 0.00662522 | 1.1221 5E-35 | 1.529390749 |
| 21159 | C13orf26 | 0.019302402 | 0.027133417 | 0.033905577 | 0.001341216 | 0 | 1.756547065 |
| 21236 | OR7E36P | 0.017264834 | 0.024255307 | 0.034007347 | 0.001345127 | 0 | 1.969746515 |
| 17185 | TECTB | 0.017350802 | 0.024376883 | 0.034178332 | 0.001351698 | 0 | 1.96984166 |
| 10204 | NUP50P2 | 0.019280926 | 0.001546501 | 0.034654582 | 0.048857747 | 0 | 1.797350498 |
| 28244 | USHBP1 | 0.016023088 | 0.022495767 | 0.034903069 | 0.008496539 | 0 | 2.178298563 |
| 8524 | SLC6A3 | 0.018633856 | 0.001493707 | 0.034928629 | 0.0256358 | 7.6677 8E-17 | 1.874471333 |
| 4189 | C2orf15 | 0.01353147 | 0.018972087 | 0.035158124 | 0.01525598 | 0 | 2.598248731 |
| 30473 | HSPD1P7 | 0.015595226 | 0.001246226 | 0.035805492 | 0.008717214 | 2.3166 4E-47 | 2.29592651 |
| 26540 | SP6 | 0.019270861 | 0.00154568 | 0.035902894 | 0.013961821 | 7.4238 2E-25 | 1.863066376 |
| 33020 | PNMA3 | 0.024025328 | 0.004850945 | 0.036073954 | 0.001424482 | 0 | 1.501496855 |
| 18428 | METTL12 | 0.012490172 | 0.017502916 | 0.036374024 | 0.015784847 | 0 | 2.912211496 |

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|---|---|---|---|---|---|---|---|
| 19606 | PZP | 0.023740811 | 0.001911165 | 0.036687408 | 0.001448012 | 0 | 1.545330847 |
| 24589 | NCRNA00169 | 0.012296786 | 0.001909713 | 0.037095541 | 0.00255936 | 0 | 3.016685861 |
| 33513 | DNM1P26 | 0.022885845 | 0.022424814 | 0.037434596 | 0.003323153 | 0 | 1.635709593 |
| 28481 | RPS4P21 | 0.019250483 | 0.027063439 | 0.037958047 | 0.001496713 | 0 | 1.971797103 |
| 23563 | BCL2L10 | 0.019336101 | 0.027184521 | 0.038128456 | 0.00150324 | 0 | 1.971879202 |
| 13055 | FAM71F1 | 0.011291025 | 0.01580362 | 0.038811693 | 0.026172947 | 4.15157E-09 | 3.437393184 |
| 12949 | RPL7AP42 | 0.022309816 | 0.031386544 | 0.039229257 | 0.001545387 | 0 | 1.75838545 |
| 21448 | DHX9P | 0.021340237 | 0.004312293 | 0.039540931 | 0.020951471 | 0.000126729 | 1.852881558 |
| 14321 | CDH17 | 0.020244885 | 0.02846629 | 0.039878436 | 0.00468271 | 0 | 1.969803078 |
| 6908 | SPATA16 | 0.017582836 | 0.001408021 | 0.039925632 | 0.032733408 | 1.39287E-27 | 2.270716309 |
| 25933 | LGALS9B | 0.013864715 | 0.019446812 | 0.041156011 | 0.02075154 | 2.22045E-16 | 2.968399382 |
| 24370 | ZSCAN10 | 0.013992256 | 0.019627182 | 0.041179361 | 0.001619968 | 0 | 2.94301093 |
| 9722 | SOX30 | 0.021691732 | 0.013863895 | 0.041417922 | 0.001629084 | 0 | 1.909387509 |
| 11366 | ROS1 | 0.005027739 | 0.000393772 | 0.041538566 | 0.014543745 | 0 | 8.261877939 |
| 18654 | TBX10 | 0.023568689 | 0.001897068 | 0.042401714 | 0.059813847 | 0 | 1.799069715 |
| 288 | LRRC38 | 0.022803986 | 0.008987763 | 0.043095648 | 0.001693154 | 0 | 1.889829585 |
| 25212 | CLEC18C | 0.018563606 | 0.001487977 | 0.043122752 | 0.013763396 | 3.75207E-47 | 2.322972812 |
| 9830 | HMP19 | 0.008345266 | 0.011637687 | 0.04380451 | 0.022084279 | 0 | 5.249025057 |
| 6136 | CCDC137P | 0.022203169 | 0.031239167 | 0.043837566 | 0.001721463 | 0 | 1.97438332 |
| 17141 | CALHM1 | 0.023874148 | 0.001922087 | 0.044237416 | 0.001736714 | 0 | 1.852942163 |
| 11038 | B3GAT2 | 0.0178395 | 0.025068007 | 0.044565429 | 0.038803131 | 6.80222E-05 | 2.498132246 |
| 23245 | SYNGR2P1 | 0.015418136 | 0.021643681 | 0.04500335 | 0.019539365 | 0 | 2.918858047 |
| 10297 | GPR89P | 0.018099117 | 0.025435161 | 0.045219953 | 0.039372565 | 6.51361E-05 | 2.498461839 |
| 32362 | BRAFPS2 | 0.01666767 | 0.008950495 | 0.045707479 | 0.023041765 | 0.006288515 | 2.742283711 |
| 7412 | ATP5LP3 | 0.024084467 | 0.033899725 | 0.047586361 | 0.001864294 | 0 | 1.975811217 |
| 29294 | CACNG8 | 0.027083911 | 0.038138133 | 0.047686657 | 0.001868111 | 0 | 1.760700577 |
| 2095 | HAPLN2 | 0.009785238 | 0.01367756 | 0.047944658 | 0.015296977 | 0 | 4.899692653 |
| 3389 | C2orf84 | 0.028849279 | 0.040638185 | 0.04833928 | 0.042086284 | 0.000169146 | 1.675580212 |
| 21705 | KLHL33 | 0.025096382 | 0.035330788 | 0.049603554 | 0.001941011 | 0 | 1.976522114 |
| 22798 | C14orf151 | 0.02276681 | 0.03203283 | 0.049726223 | 0.012124149 | 0 | 2.1841542 |
| 33106 | MTCP1 | 0.029405751 | 0.041425156 | 0.0511474 | 0.012240328 | 0 | 1.739367267 |
| 29051 | NTF4 | 0.017196677 | 0.024158918 | 0.051155241 | 0.025782409 | 0 | 2.974716661 |
| 12746 | KPNA7 | 0.032981542 | 0.017738144 | 0.051368738 | 0.072497378 | 2.65038E-08 | 1.557499605 |
| 7502 | GRXCR1 | 0.017333539 | 0.024352471 | 0.051566239 | 0.025989149 | 0 | 2.974939973 |
| 10453 | HCP5P2 | 0.016146665 | 0.00129108 | 0.051916774 | 0.00844672 | 0 | 3.21532493 |
| 654 | LCK | 0.015411331 | 0.021634058 | 0.052726944 | 0.008579437 | 0 | 3.421310235 |
| 8699 | RANBP3L | 0.029506688 | 0.022438443 | 0.053263764 | 0.002079983 | 0 | 1.805142056 |
| 18993 | C11orf70 | 0.028874988 | 0.002332417 | 0.053558114 | 0.002091146 | 0 | 1.854827212 |
| 1670 | HFE2 | 0.032835438 | 0.002658258 | 0.05356063 | 0.012815156 | 9.30487E-17 | 1.631183686 |

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|---|---|---|---|---|---|---|---|
| 11935 | SOSTDC1 | 0.010391181 | 0.014531048 | 0.053703878 | 0.023326574 | 0 | 5.168216932 |
| 115 | MMEL1 | 0.026933523 | 0.037925453 | 0.053780983 | 0.027103152 | 8.8817 8E-16 | 1.996804586 |
| 19654 | TAS2R10 | 0.018572273 | 0.026104304 | 0.054311569 | 0.023591149 | 0 | 2.924336184 |
| 26963 | PRCD | 0.018318146 | 0.025744914 | 0.054523591 | 0.027476659 | 0 | 2.976479836 |
| 6751 | P2RY12 | 0.023705168 | 0.001908246 | 0.054550959 | 0.013306009 | 6.0303 4E-47 | 2.301226428 |
| 15380 | RPS2P34 | 0.018395588 | 0.025854435 | 0.054756239 | 0.027593672 | 0 | 2.976596257 |
| 11427 | C6orf58 | 0.01608902 | 0.022589009 | 0.055484314 | 0.037433443 | 4.9591 2E-10 | 3.448582617 |
| 30630 | KCNJ15 | 0.018527949 | 0.009951825 | 0.055667481 | 0.013579578 | 2.4832 6E-11 | 3.004513885 |
| 22399 | ADAM21P | 0.035468619 | 0.002875277 | 0.056979032 | 0.032557959 | 1.6249 3E-11 | 1.606463203 |
| 28507 | FXYD3 | 0.016594457 | 0.023303806 | 0.057242211 | 0.038620985 | 4.0978 3E-10 | 3.449477698 |
| 25942 | CDRT15L2 | 0.024562506 | 0.034575774 | 0.057599917 | 0.059120929 | 0.0021 66416 | 2.345034194 |
| 20145 | HOXC11 | 0.026303251 | 0.010362048 | 0.057777202 | 0.009407041 | 1.2820 9E-12 | 2.19658021 |
| 2227 | ITLN2 | 0.014968812 | 0.021008242 | 0.057886648 | 0.039056345 | 1.6406 7E-10 | 3.867150421 |
| 1385 | OLFM3 | 0.027175302 | 0.024253439 | 0.058237612 | 0.011450166 | 6.3704 6E-13 | 2.1430346 |
| 17328 | ADAM12 | 0.033371069 | 0.008193186 | 0.058246129 | 0.015866175 | 0.0016 03393 | 1.745407947 |
| 12432 | EEF1DP4 | 0.026803306 | 0.037741298 | 0.058608835 | 0.014300382 | 0 | 2.186627044 |
| 14092 | NASPP1 | 0.027226443 | 0.038339703 | 0.059204689 | 0.031393722 | 5.1070 3E-15 | 2.174528978 |
| 25659 | TNK1 | 0.030906816 | 0.02437003 | 0.059528 | 0.002317178 | 0 | 1.926047651 |
| 29804 | VSX1 | 0.017438977 | 0.024498137 | 0.060613777 | 0.019109933 | 0 | 3.475764456 |
| 18365 | MS4A15 | 0.017534174 | 0.024636212 | 0.060962152 | 0.038727936 | 8.0491 2E-12 | 3.476762008 |
| 22136 | RPL10L | 0.023638749 | 0.033265939 | 0.061693598 | 0.026805651 | 0 | 2.609850339 |
| 16469 | TMEM72 | 0.033509641 | 0.002713796 | 0.062204081 | 0.002418278 | 0 | 1.856303999 |
| 1614 | NBPF7 | 0.019371986 | 0.001553933 | 0.062349206 | 0.010156696 | 0 | 3.218524225 |
| 25982 | TUFML | 0.012240174 | 0.017145919 | 0.063362279 | 0.027532406 | 0 | 5.176583339 |
| 7545 | SPATA18 | 0.025435065 | 0.002050019 | 0.063578912 | 0.046632358 | 1.3478 5E-40 | 2.499655967 |
| 21992 | CMA1 | 0.02450315 | 0.034488385 | 0.063965863 | 0.027795294 | 0 | 2.610515955 |
| 30612 | PSMD15 | 0.023418886 | 0.001884801 | 0.064966239 | 0.002522494 | 0 | 2.774096055 |
| 9899 | FAM153C | 0.040169386 | 0.003263371 | 0.065592813 | 0.015679529 | 1.0125 4E-16 | 1.632905544 |
| 31262 | C22orf24 | 0.029195984 | 0.002358799 | 0.065660775 | 0.092707126 | 0 | 2.248966025 |
| 8460 | TLR3 | 0.028834127 | 0.022737661 | 0.066851408 | 0.018200282 | 2.3168 2E-07 | 2.318482121 |
| 11162 | SPACA1 | 0.024331471 | 0.001959554 | 0.067511635 | 0.002618415 | 0 | 2.774663136 |
| 28006 | AP1M2 | 0.041441333 | 0.00336852 | 0.067680824 | 0.016176341 | 1.0258 E-16 | 1.633171961 |
| 20673 | BTBD11 | 0.04544559 | 0.009135886 | 0.068628258 | 0.0106887 | 0.0001 | 1.510119208 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 66773 | |
| 4229 | IL18RAP | 0.0209204 | 0.011239934 | 0.069697156 | 0.011593419 | 0 | 3.331540306 |
| 19722 | PLBD1 | 0.038633603 | 0.029389459 | 0.069830642 | 0.002705711 | 0 | 1.807510461 |
| 12264 | CDC14C | 0.036913164 | 0.014525502 | 0.070255267 | 0.019123209 | 0.000645173 | 1.903257809 |
| 25138 | LRRC36 | 0.037491205 | 0.007546789 | 0.070469747 | 0.002729754 | 0 | 1.879634078 |
| 20986 | P2RX2 | 0.009093986 | 0.012699983 | 0.071601365 | 0.05250949 | 6.31297E-11 | 7.873484873 |
| 2224 | ITLN1 | 0.016330973 | 0.022931183 | 0.072404634 | 0.063018218 | 2.49068E-06 | 4.43357736 |
| 19677 | PS5 | 0.041391642 | 0.058372321 | 0.073068988 | 0.00282747 | 0 | 1.765307766 |
| 9724 | C5orf52 | 0.024527727 | 0.034526589 | 0.07319537 | 0.036864992 | 0 | 2.984188833 |
| 17305 | OATL3 | 0.036969398 | 0.052121768 | 0.07330619 | 0.002836382 | 0 | 1.982888374 |
| 31489 | RPS25P10 | 0.04197687 | 0.059199957 | 0.074108133 | 0.002866507 | 0 | 1.76545163 |
| 28041 | CNN1 | 0.033697691 | 0.013264194 | 0.074126059 | 0.012089355 | 1.28697E-12 | 2.199737057 |
| 17338 | CLRN3 | 0.031825416 | 0.002575092 | 0.074136653 | 0.023619217 | 1.26739E-46 | 2.329479432 |
| 3319 | RPL6P4 | 0.037615595 | 0.05303563 | 0.074597796 | 0.002884896 | 0 | 1.983161365 |
| 20465 | RWDD1L1 | 0.042438497 | 0.059852797 | 0.074927857 | 0.002897289 | 0 | 1.765563374 |
| 21540 | GPR183 | 0.039431848 | 0.025175725 | 0.075044772 | 0.023676744 | 0.001256519 | 1.903151257 |
| 15522 | NCRNA00092 | 0.027505035 | 0.014786746 | 0.075182809 | 0.014625118 | 8.65974E-15 | 2.733419811 |
| 19962 | OR8T1P | 0.032616721 | 0.002640245 | 0.075190473 | 0.018366656 | 1.23508E-46 | 2.30527385 |
| 5085 | VWC2L | 0.039972247 | 0.003247079 | 0.075210693 | 0.055153384 | 1.059E-16 | 1.881572786 |
| 6909 | NLGN1 | 0.03947439 | 0.022542837 | 0.075230644 | 0.006737113 | 0 | 1.905808924 |
| 4794 | RPS15AP14 | 0.03803115 | 0.053623313 | 0.075428473 | 0.002916083 | 0 | 1.983334001 |
| 10920 | RPS15AP20 | 0.042910453 | 0.060520243 | 0.07576596 | 0.002928751 | 0 | 1.76567608 |
| 1376 | VCAM1 | 0.040599286 | 0.004863568 | 0.075791427 | 0.012362828 | 2.5712E-13 | 1.866816737 |
| 29904 | RPL31P2 | 0.038628707 | 0.054468385 | 0.076623067 | 0.002960915 | 0 | 1.983578375 |
| 4979 | PFTK2 | 0.033301695 | 0.046934852 | 0.076627679 | 0.012500166 | 0 | 2.301014422 |
| 5247 | SPATA3 | 0.043886765 | 0.061900957 | 0.077499834 | 0.002993807 | 0 | 1.765904463 |
| 19003 | MMP8 | 0.023159498 | 0.01480029 | 0.077509945 | 0.018514126 | 1.73195E-14 | 3.346788703 |
| 2578 | CFHR1 | 0.042742259 | 0.023001013 | 0.077975717 | 0.003011654 | 0 | 1.824323719 |
| 4466 | TUBA3E | 0.037252979 | 0.052519368 | 0.07797724 | 0.080023786 | 0.001586392 | 2.0931813 |
| 4910 | SDPR | 0.039765863 | 0.011094966 | 0.078631209 | 0.010398288 | 1.05027E-13 | 1.977354511 |
| 12909 | RPL13AP16 | 0.026848245 | 0.037808297 | 0.078781679 | 0.034249942 | 0 | 2.93433254 |
| 27197 | CCDC58P1 | 0.026848245 | 0.037808297 | 0.078781679 | 0.034249942 | 0 | 2.93433254 |
| 15172 | FAM27A | 0.030491728 | 0.042957515 | 0.07894022 | 0.072456276 | 5.59131E-05 | 2.588906047 |
| 29566 | PDYN | 0.03593038 | 0.012831617 | 0.07944197 | 0.021613236 | 3.3931E-05 | 2.210997176 |
| 32434 | CAPZA1P | 0.040111895 | 0.035812341 | 0.079889836 | 0.033521616 | 0.0033 | 1.991674454 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 60117 | |
| 22074 | NUTF2P2 | 0.042573065 | 0.003462123 | 0.08012934 | 0.05875615 | 1.0871 4E-16 | 1.8821605 |
| 559 | FCN3 | 0.037062451 | 0.05224992 | 0.080284051 | 0.065863413 | 2.7922 9E-06 | 2.166182979 |
| 22142 | ATP5GP2 | 0.05433739 | 0.076683818 | 0.081846074 | 0.04121297 | 2.2204 5E-16 | 1.506257015 |
| 25277 | FA2H | 0.051870663 | 0.006196025 | 0.082337572 | 0.055578624 | 7.0961 3E-05 | 1.58736302 |
| 31453 | SLC25A5P1 | 0.021395691 | 0.030097221 | 0.083630666 | 0.026395271 | 0 | 3.908762109 |
| 10557 | LY6G6D | 0.042233612 | 0.059566492 | 0.083832201 | 0.003231038 | 0 | 1.984964028 |
| 15646 | RPL36AP6 | 0.047686474 | 0.067274558 | 0.084249485 | 0.003246651 | 0 | 1.766737545 |
| 22388 | C14orf162 | 0.038452915 | 0.015129356 | 0.084651054 | 0.013818346 | 1.2894 1E-12 | 2.201421001 |
| 8314 | PSME2P3 | 0.021703328 | 0.030532285 | 0.085418781 | 0.00329039 | 0 | 3.93574576 |
| 11701 | PLG | 0.013341674 | 0.001063217 | 0.085774387 | 0.003303689 | 0 | 6.429057395 |
| 11886 | OR7E39P | 0.037365168 | 0.003031756 | 0.087962684 | 0.076547399 | 3.7346 E-27 | 2.354135927 |
| 17183 | RPS6P15 | 0.025072444 | 0.03529349 | 0.087971944 | 0.003385833 | 0 | 3.508710302 |
| 29240 | ZNF534 | 0.053955725 | 0.052902675 | 0.088180366 | 0.030697386 | 0.0017 25737 | 1.634309724 |
| 30680 | RSPH1 | 0.051348461 | 0.032768796 | 0.088354911 | 0.124803725 | 1.1763 7E-06 | 1.720692501 |
| 14163 | XKR9 | 0.016250904 | 0.022821393 | 0.089208118 | 0.04885005 | 0 | 5.489424913 |
| 1368 | BRI3P1 | 0.051581804 | 0.072783386 | 0.089918735 | 0.060702844 | 1.7318 9E-09 | 1.743225865 |
| 29141 | ASPDH | 0.059142976 | 0.045016618 | 0.091063607 | 0.128632155 | 5.5761 6E-05 | 1.539719733 |
| 10521 | HLA-S | 0.020941484 | 0.029451429 | 0.091150756 | 0.022284358 | 0 | 4.352640724 |
| 13372 | SSPO | 0.052209316 | 0.002639484 | 0.09192074 | 0.005054273 | 0 | 1.760619483 |
| 2558 | RGS18 | 0.060413656 | 0.040246778 | 0.093799748 | 0.0184913 | 7.504E-05 | 1.552624927 |
| 9110 | RPS3AP22 | 0.019866383 | 0.027934452 | 0.09703922 | 0.023730574 | 0 | 4.884594288 |
| 27830 | FUT3 | 0.055869017 | 0.004564711 | 0.097691737 | 0.012895274 | 6.9268 9E-22 | 1.748585219 |
| 30614 | SIM2 | 0.035750984 | 0.017549897 | 0.098199062 | 0.010564787 | 0 | 2.746751334 |
| 8328 | RPL35AP12 | 0.050125826 | 0.070727768 | 0.099628526 | 0.003820558 | 0 | 1.987568744 |
| 221 | PTCHD2 | 0.065602561 | 0.000541488 | 0.099848155 | 0.0098014 | 0 | 1.52201613 |
| 16530 | FAM25G | 0.056838798 | 0.080217898 | 0.100516717 | 0.003853617 | 0 | 1.768452543 |
| 11421 | YWHAZP4 | 0.032852186 | 0.029223272 | 0.101409052 | 0.055961819 | 0.0016 54732 | 3.086828119 |
| 2779 | ADORA2BP | 0.014843791 | 0.020827989 | 0.102020993 | 0.068884068 | 8.3932 9E-14 | 6.872974468 |
| 7718 | CXCL3 | 0.062357248 | 0.005104451 | 0.102058109 | 0.024347098 | 1.2146 6E-16 | 1.636667926 |
| 10967 | RPSAP44 | 0.03414818 | 0.048131964 | 0.1021793 | 0.051429374 | 0 | 2.992232665 |
| 31269 | RFPL2 | 0.022922026 | 0.032255784 | 0.102349588 | 0.051514917 | 0 | 4.465119704 |
| 14011 | RPL29P19 | 0.026040127 | 0.036665446 | 0.102652204 | 0.003933066 | 0 | 3.942077663 |
| 26000 | FLJ40504 | 0.059292877 | 0.083688489 | 0.104880615 | 0.00401592 | 0 | 1.768856927 |
| 16066 | CLIC3 | 0.023638749 | 0.033265939 | 0.105073086 | 0.091424275 | 6.638E- | 4.44495114 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 07 | |
| 1847 | HORMAD1 | 0.04763206 | 0.009572338 | 0.107953963 | 0.029334496 | 1.5258 7E-08 | 2.266413905 |
| 22208 | ATP5C2 | 0.066811204 | 0.00547552 | 0.109387241 | 0.026087267 | 1.2494 7E-16 | 1.637258936 |
| 14144 | RPS15AP25 | 0.072706119 | 0.102661124 | 0.109739464 | 0.055226908 | 0 | 1.509356641 |
| 16024 | LHX3 | 0.028242967 | 0.002280486 | 0.110413265 | 0.023323578 | 0 | 3.909407419 |
| 2938 | C1orf95 | 0.061285773 | 0.007306363 | 0.111750234 | 0.044762514 | 2.8060 7E-11 | 1.82342864 |
| 20139 | RPL31P51 | 0.043006113 | 0.060655528 | 0.114658794 | 0.057697653 | 0 | 2.666104527 |
| 13428 | CRYGN | 0.023657063 | 0.033295284 | 0.115741326 | 0.028326319 | 0 | 4.892463901 |
| 9051 | RPL7AP32 | 0.019686393 | 0.027679908 | 0.116885997 | 0.058816202 | 0 | 5.937400438 |
| 11863 | RSPH10B | 0.076812348 | 0.090963338 | 0.11799716 | 0.056477895 | 0.0057 8018 | 1.536174375 |
| 12854 | PMS2L12 | 0.072462809 | 0.102313586 | 0.118946302 | 0.00836178 | 0 | 1.641480692 |
| 12841 | MOGAT3 | 0.064788731 | 0.023188036 | 0.119927703 | 0.038146304 | 0.0064 86247 | 1.851058059 |
| 16860 | C10orf99 | 0.020694506 | 0.029105595 | 0.121898419 | 0.004646972 | 0 | 5.890375926 |
| 1594 | RPL6P2 | 0.066909523 | 0.036042345 | 0.122339701 | 0.004663299 | 0 | 1.828434811 |
| 16207 | RPL5P25 | 0.040636304 | 0.057307556 | 0.122710203 | 0.117934154 | 4.2955 1E-05 | 3.019718625 |
| 6691 | RPL21P39 | 0.035693659 | 0.050314155 | 0.123811849 | 0.083617913 | 2.7893 2E-12 | 3.468735175 |
| 15304 | RPL24P8 | 0.065668361 | 0.005380266 | 0.123864063 | 0.090781037 | 1.2995 8E-16 | 1.886206095 |
| 27897 | RPL21P129 | 0.034983304 | 0.049309562 | 0.124540082 | 0.09127594 | 2.7944 7E-10 | 3.559986259 |
| 18513 | PYGM | 0.069285139 | 0.008248131 | 0.130697789 | 0.031144142 | 1.4354 1E-13 | 1.886375504 |
| 31100 | C22orf43 | 0.067944165 | 0.053521937 | 0.130784561 | 0.032025376 | 2.3730 7E-06 | 1.92488289 |
| 28480 | RPS4P20 | 0.081357555 | 0.006690185 | 0.132354575 | 0.021670943 | 1.3102 5E-16 | 1.626825866 |
| 29099 | FUZ | 0.034271177 | 0.018433321 | 0.134575695 | 0.009479115 | 0 | 3.9267894 |
| 16561 | PGBD3 | 0.084829763 | 0.053307181 | 0.138919673 | 0.016505889 | 1.0722 5E-12 | 1.637628917 |
| 30274 | MTCO2L | 0.070747266 | 0.099890888 | 0.140972821 | 0.005351125 | 0 | 1.992625702 |
| 30074 | MATN4 | 0.08647876 | 0.026341145 | 0.141572703 | 0.00512479 | 0 | 1.637080627 |
| 11336 | RPSAP43 | 0.060849739 | 0.004978956 | 0.142225705 | 0.045212938 | 5.2674 1E-46 | 2.337326459 |
| 13302 | CTAGE6 | 0.061490721 | 0.014507102 | 0.145065544 | 0.003382244 | 0 | 2.359145257 |
| 20563 | RPL14P4 | 0.049191242 | 0.069406066 | 0.146370168 | 0.005549831 | 0 | 2.975533063 |
| 884 | RPS15AP11 | 0.078211308 | 0.006427129 | 0.147650449 | 0.108192973 | 1.3953 7E-16 | 1.88784017 |
| 32918 | RPL36AP52 | 0.070463762 | 0.037961311 | 0.150795742 | 0.035909774 | 1.2233 E-06 | 2.140046709 |
| 19637 | C12orf59 | 0.097131515 | 0.01701315 | 0.15080082 | 0.014190637 | 2.3279 2E-11 | 1.552542647 |
| 23952 | DNM1P39 | 0.097334648 | 0.022561454 | 0.153339971 | 0.008602037 | 0 | 1.575389392 |
| 3109 | RPS11P2 | 0.094300469 | 0.133200147 | 0.156210158 | 0.038281592 | 0 | 1.656515178 |

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|---|---|---|---|---|---|---|---|
| 15501 | CYCSP24 | 0.060221793 | 0.085002175 | 0.158095049 | 0.068842942 | 0 | 2.625213254 |
| 31694 | UBE2E4P | 0.094937943 | 0.051180511 | 0.159086592 | 0.014379866 | 0 | 1.675690307 |
| 20633 | C12orf42 | 0.088319727 | 0.058874203 | 0.160885498 | 0.006083131 | 0 | 1.821625852 |
| 4745 | MRPS29P2 | 0.033067549 | 0.04660372 | 0.16393462 | 0.052089277 | 0 | 4.957567954 |
| 12273 | DDC | 0.100393083 | 0.015297514 | 0.16754284 | 0.106284425 | 0.000176646 | 1.66886837 |
| 7230 | DOK7 | 0.049807438 | 0.01391183 | 0.169853841 | 0.012008291 | 0 | 3.410210373 |
| 8446 | HELT | 0.075379915 | 0.057393649 | 0.171561978 | 0.054504507 | 2.29534E-05 | 2.275964052 |
| 9551 | PCDHGA1 | 0.096430829 | 0.002557394 | 0.172313454 | 0.044289196 | 1.5635E-198 | 1.786912504 |
| 14227 | CKS1A | 0.049845874 | 0.070328411 | 0.175628055 | 0.006623274 | 0 | 3.523422099 |
| 27756 | C19orf71 | 0.103848721 | 0.066190447 | 0.175841459 | 0.041844559 | 0.000229819 | 1.693246266 |
| 30405 | LIPI | 0.061978887 | 0.087490526 | 0.176304681 | 0.107749334 | 4.44089E-16 | 2.844592577 |
| 23910 | RPS12P25 | 0.049653105 | 0.070055794 | 0.177100184 | 0.129746219 | 3.56273E-11 | 3.566749418 |
| 3756 | RPS15AP15 | 0.094951293 | 0.007828636 | 0.177242671 | 0.006682345 | 0 | 1.86666937 |
| 8325 | NPY1R | 0.104250551 | 0.008609035 | 0.177295389 | 0.049502943 | 1.74617E-18 | 1.700666206 |
| 1439 | SYPL2 | 0.043462024 | 0.010233041 | 0.181131213 | 0.049447593 | 2.58168E-17 | 4.167574301 |
| 17273 | RPS15AP5 | 0.114494881 | 0.044885593 | 0.181168829 | 0.044427323 | 0.00576595 | 1.582331248 |
| 3114 | RPLP1P2 | 0.114988724 | 0.04507855 | 0.181954826 | 0.044620928 | 0.00576552 | 1.582371036 |
| 28785 | CEACAM1 | 0.120152754 | 0.060114266 | 0.182710654 | 0.02039357 | 1.02584E-09 | 1.52065306 |
| 11292 | C6orf224 | 0.101071579 | 0.043110854 | 0.184817363 | 0.058487829 | 0.005993776 | 1.828578953 |
| 13523 | XKR5 | 0.109576768 | 0.014318761 | 0.186476052 | 0.007853053 | 0 | 1.701784565 |
| 19826 | RPL29P27 | 0.030660647 | 0.043196402 | 0.190034426 | 0.120530971 | 0 | 6.197991339 |
| 26826 | RPL17P41 | 0.116603059 | 0.009647453 | 0.191466579 | 0.045545045 | 1.5652E-16 | 1.642037366 |
| 3904 | RPL38P2 | 0.055207306 | 0.07791062 | 0.194628311 | 0.007317378 | 0 | 3.525408585 |
| 29570 | TGM6 | 0.056574027 | 0.037684795 | 0.198659702 | 0.058981357 | 1.80873E-10 | 3.511500129 |
| 254 | HNRNPCL1 | 0.112510467 | 0.013317573 | 0.198824811 | 0.114040681 | 8.5323E-09 | 1.767167239 |
| 9469 | MGC29506 | 0.130138625 | 0.010787433 | 0.199640797 | 0.163916639 | 0.000134046 | 1.534062589 |
| 20302 | RPL13AP23 | 0.090290294 | 0.035424549 | 0.199752912 | 0.032797407 | 1.30584E-12 | 2.212340913 |
| 24829 | CSDAP1 | 0.110553093 | 0.033637593 | 0.200250955 | 0.005910813 | 0 | 1.811355515 |
| 8161 | RPS23P2 | 0.038387936 | 0.054124438 | 0.200433813 | 0.087327802 | 0 | 5.221270936 |
| 25378 | RPL39P30 | 0.088913227 | 0.007322596 | 0.208228565 | 0.066110316 | 1.1894E-45 | 2.341930136 |
| 13180 | CLEC2L | 0.116162804 | 0.126574526 | 0.208466062 | 0.007821566 | 0 | 1.794602522 |
| 33085 | CXorf52 | 0.121143935 | 0.095361025 | 0.211204691 | 0.025193147 | 0 | 1.743419437 |

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|---|---|---|---|---|---|---|---|
| 3181 | OR2B11 | 0.097455245 | 0.087082386 | 0.211964558 | 0.057442765 | 1.7756 9E-07 | 2.174993844 |
| 24138 | C15orf51 | 0.12150357 | 0.023502011 | 0.213160097 | 0.042685484 | 4.5233 6E-05 | 1.75435254 |
| 5187 | SGPP2 | 0.133596698 | 0.00977219 | 0.222960132 | 0.030993125 | 8.7631 6E-23 | 1.668904517 |
| 17861 | CSRP3 | 0.122778143 | 0.066227034 | 0.225177332 | 0.008429084 | 0 | 1.834018066 |
| 10256 | HIST1H2BI | 0.12968372 | 0.183236175 | 0.226124244 | 0.207705467 | 8.6792 9E-06 | 1.743659448 |
| 16576 | AGAP7 | 0.131604254 | 0.03045042 | 0.22820805 | 0.020719834 | 0 | 1.734047676 |
| 32538 | TCEAL5 | 0.142449329 | 0.119005052 | 0.230509174 | 0.049033323 | 6.3032 7E-06 | 1.618183645 |
| 6039 | CHDH | 0.142990091 | 0.018738182 | 0.230753183 | 0.034551165 | 2.813E-07 | 1.613770449 |
| 10207 | RPL21P68 | 0.157907281 | 0.031472196 | 0.238023996 | 0.075389968 | 0.0054 0691 | 1.507365552 |
| 8770 | RPL29P12 | 0.112446309 | 0.009297799 | 0.239411454 | 0.193596239 | 1.2062 5E-21 | 2.129117937 |
| 7091 | RPL24P6 | 0.132229504 | 0.100752799 | 0.241941378 | 0.093606119 | 0.0086 82915 | 1.829707968 |
| 6385 | LSAMP | 0.161419601 | 0.01902524 | 0.249174053 | 0.067356362 | 5.2738 5E-07 | 1.543641865 |
| 16944 | FGFBP3 | 0.086673347 | 0.066004482 | 0.249176508 | 0.046103709 | 0 | 2.874891969 |
| 27647 | C19orf21 | 0.168306572 | 0.01225645 | 0.25303618 | 0.017713269 | 2.2204 5E-16 | 1.503424245 |
| 10233 | HIST1H4C | 0.128898852 | 0.182129649 | 0.253261732 | 0.232651113 | 4.0066 2E-06 | 1.964809839 |
| 10491 | RPL7P4 | 0.130330706 | 0.115780868 | 0.25326413 | 0.05020436 | 1.3940 9E-10 | 1.943242211 |
| 13757 | GFRA2 | 0.038476541 | 0.010733517 | 0.254255371 | 0.125144328 | 2.8736 5E-20 | 6.608062119 |
| 11436 | LAMA2 | 0.152261221 | 0.054368499 | 0.255731567 | 0.005065864 | 0 | 1.679558103 |
| 10441 | HLA-U | 0.14531928 | 0.034455472 | 0.256300992 | 0.072910482 | 0.0009 17509 | 1.763709482 |
| 4566 | RPL15P5 | 0.163187636 | 0.17784596 | 0.256806849 | 0.009575201 | 0 | 1.5736906 |
| 7698 | ADAMTS3 | 0.164927613 | 0.060928675 | 0.26229621 | 0.021929634 | 0 | 1.590371708 |
| 10317 | HIST1H2AM | 0.108442254 | 0.04252044 | 0.275327797 | 0.010244253 | 0 | 2.538934649 |
| 10736 | COX6A1P2 | 0.096485986 | 0.037847035 | 0.277528336 | 0.139414817 | 0.0003 02522 | 2.87635903 |
| 29712 | BANF2 | 0.177060209 | 0.014753439 | 0.27795211 | 0.088161175 | 4.5909 8E-13 | 1.569816911 |
| 29868 | RPL24P1 | 0.148969317 | 0.012376627 | 0.2787468 | 0.010367605 | 0 | 1.871169219 |
| 16037 | C9orf163 | 0.170836512 | 0.053674015 | 0.279915738 | 0.001245288 | 0 | 1.638500666 |
| 26868 | CPSF4L | 0.111069427 | 0.009182027 | 0.285564038 | 0.047054665 | 5.8990 9E-58 | 2.571040894 |
| 16151 | RPL26P28 | 0.096621858 | 0.136483086 | 0.286395923 | 0.124884811 | 0 | 2.964090407 |
| 8334 | ANP32C | 0.102017262 | 0.008421506 | 0.308295261 | 0.022001615 | 0 | 3.021991124 |
| 18502 | C11orf20 | 0.166896426 | 0.019662953 | 0.311641895 | 0.178570014 | 1.1440 4E-10 | 1.86727722 |
| 28798 | PSG11 | 0.185870256 | 0.015500211 | 0.320041474 | 0.052695379 | 7.6258 | 1.721854166 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 8E-20 | |
| 17045 | NKX2-3 | 0.201280386 | 0.054487057 | 0.320688338 | 0.079302523 | 0.007952728 | 1.593241866 |
| 19037 | GUCY1A2 | 0.209694967 | 0.024638249 | 0.32303395 | 0.00398399 | 0 | 1.540494529 |
| 30595 | RPL23AP3 | 0.069951756 | 0.005737419 | 0.324577639 | 0.012016782 | 0 | 4.640021292 |
| 1810 | HIST2H3C | 0.071181275 | 0.005840006 | 0.328614781 | 0.08079797 | 0 | 4.616590251 |
| 33191 | TBL1Y | 0.218916371 | 0.111459688 | 0.334644874 | 0.05153198 | 8.10812E-06 | 1.528642524 |
| 9474 | ECSCR_1 | 0.117265058 | 0.045967939 | 0.337653173 | 0.169553209 | 0.000295538 | 2.879401416 |
| 175 | RPL7P11 | 0.157510713 | 0.013098599 | 0.341174507 | 0.125585424 | 3.40868E-36 | 2.166040013 |
| 15650 | RPL36P14 | 0.173634775 | 0.245392353 | 0.342080962 | 0.258887035 | 1.643233E-10 | 1.970117803 |
| 1728 | NBPF11 | 0.200346728 | 0.045976165 | 0.343318679 | 0.014954388 | 0 | 1.713622592 |
| 3147 | C1orf101 | 0.222777268 | 0.003045838 | 0.355887175 | 0.016360297 | 0 | 1.597502197 |
| 17269 | RPL19P16 | 0.142528838 | 0.055835143 | 0.362433919 | 0.013373466 | 0 | 2.542881316 |
| 7462 | TMEM156 | 0.222421548 | 0.111449754 | 0.3656718 | 0.026030231 | 0 | 1.644048448 |
| 604 | RNU11 | 0.139831832 | 0.197587772 | 0.368738981 | 0.160885691 | 0 | 2.637017448 |
| 12453 | SNORA22 | 0.125093765 | 0.176748444 | 0.371479156 | 0.162084059 | 0 | 2.969605675 |
| 2320 | GPA33 | 0.094673372 | 0.037138367 | 0.37215695 | 0.047448123 | 0 | 3.930956965 |
| 31366 | KCNJ4 | 0.191203878 | 0.042818277 | 0.378364984 | 0.008262303 | 0 | 1.978856227 |
| 18851 | RPL7AP54 | 0.205086754 | 0.073712693 | 0.378976381 | 0.039495124 | 0 | 1.847883267 |
| 2405 | SLC9A11 | 0.223239031 | 0.03755496 | 0.382297503 | 0.040678389 | 6.32827E-13 | 1.712502969 |
| 10121 | RPL15P3 | 0.227165097 | 0.016446858 | 0.384926724 | 0.215430541 | 4.898559E-18 | 1.694480046 |
| 4853 | PDE1A | 0.206736637 | 0.008513956 | 0.399339986 | 0.01840944 | 0 | 1.931636263 |
| 9034 | OTP | 0.225696485 | 0.000293041 | 0.407800264 | 0.11168496 | 0 | 1.806852531 |
| 11768 | RPL12P23 | 0.075605842 | 0.106761951 | 0.413561 | 0.067976093 | 0 | 5.469960914 |
| 1066 | RPS26P15 | 0.273870295 | 0.077127466 | 0.435424237 | 0.086573499 | 0.000812363 | 1.589892169 |
| 13462 | SHH | 0.278944845 | 0.055376581 | 0.444629523 | 0.043422381 | 7.38698E-12 | 1.59396931 |
| 20831 | RNU4-2 | 0.118951667 | 0.168062205 | 0.47431825 | 0.017358705 | 0 | 3.987487204 |
| 10323 | RPLP2P1 | 0.25277213 | 0.021188508 | 0.47431825 | 0.017358705 | 0 | 1.876465776 |
| 25431 | DPEP1 | 0.2401958 | 0.047733713 | 0.483625867 | 0.030521663 | 0 | 2.013465132 |
| 24647 | CYCSP39 | 0.268914398 | 0.380141533 | 0.49085484 | 0.246303462 | 0 | 1.825320045 |
| 8913 | GTF2H2C | 0.305075183 | 0.049224402 | 0.505182066 | 0.319972732 | 0.000498272 | 1.655926456 |
| 23718 | LCTL | 0.275608995 | 0.011461929 | 0.51515728 | 0.158027843 | 5.05164E-93 | 1.869159891 |
| 25696 | CYB5D1 | 0.104994246 | 0.004719867 | 0.526644714 | 0.213077274 | 0 | 5.015938828 |
| 21658 | DUXAP9 | 0.213071154 | 0.028796982 | 0.531481134 | 0.060869544 | 0 | 2.494383326 |
| 29847 | DEFB124 | 0.252343607 | 0.136334047 | 0.539571956 | 0.089186044 | 1.38156E-12 | 2.138243019 |
| 1430 | SCARNA2 | 0.170379642 | 0.014187578 | 0.55492022 | 0.091740199 | 0 | 3.25696318 |
| 29509 | ZNF837 | 0.314878436 | 0.026491722 | 0.5580106 | 0.025933489 | 0 | 1.772146126 |
| 10246 | HIST1H2BG | 0.261502472 | 0.369659487 | 0.560303495 | 0.138089771 | 0 | 2.142631735 |
| 25747 | RPS27AP1 | 0.300413598 | 0.251177138 | 0.574788391 | 0.107303979 | 1.1961 | 1.913323477 |

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|---|---|---|---|---|---|---|---|
| | | | | | | 1E-10 | |
| 4215 | SNORD89 | 0.291300448 | 0.411800189 | 0.586099962 | 0.021310433 | 0 | 2.012011878 |
| 3436 | EMILIN1 | 0.399188229 | 0.068680963 | 0.602991563 | 0.173825859 | 0.0011 10165 | 1.510544449 |
| 25461 | DOC2B | 0.313295352 | 0.00327654 | 0.60317073 | 0.131120998 | 0 | 1.925246342 |
| 11287 | PPIL6 | 0.385995963 | 0.043041316 | 0.608822194 | 0.093890929 | 9.9706 3E-09 | 1.577276068 |
| 11223 | PRDM13 | 0.359263315 | 0.00709304 | 0.642654931 | 0.118619606 | 0 | 1.788813119 |
| 25403 | SNAI3 | 0.222649083 | 0.126694339 | 0.659781519 | 0.140665875 | 1.9095 8E-14 | 2.963324668 |
| 16113 | TUBB8 | 0.417313253 | 0.165046948 | 0.659959195 | 0.134464467 | 0.0007 58261 | 1.581447965 |
| 1161 | RPL31P12 | 0.34926526 | 0.493774811 | 0.667501317 | 0.189196927 | 0 | 1.911158635 |
| 26640 | RPL7P48 | 0.176882428 | 0.13482773 | 0.705517913 | 0.223075991 | 1.7552 8E-11 | 3.988626358 |
| 17245 | LDHAL5 | 0.398593812 | 0.070494976 | 0.729029402 | 0.052730125 | 0 | 1.829003313 |
| 14094 | NPM1P6 | 0.410299254 | 0.07268673 | 0.734572019 | 0.260946592 | 9.4741 7E-06 | 1.79033233 |
| 12523 | WBSCR26 | 0.292008682 | 0.157815264 | 0.73626459 | 0.152538403 | 1.7109 9E-11 | 2.521379109 |
| 27547 | SERPINB2 | 0.491410009 | 0.064459847 | 0.746281297 | 0.027264026 | 0 | 1.518653025 |
| 26789 | SNORA76 | 0.39191046 | 0.15301318 | 0.752711563 | 0.02715707 | 0 | 1.920621264 |
| 6110 | RPL21P41 | 0.355050845 | 0.095839291 | 0.77021763 | 0.504411252 | 0.0005 03255 | 2.169316424 |
| 33261 | CDC27P2 | 0.526467002 | 0.225670751 | 0.804299765 | 0.078108992 | 8.6273 2E-12 | 1.527730632 |
| 18023 | CHRM4 | 0.487764734 | 0.110085426 | 0.862157049 | 0.032956844 | 0 | 1.767567411 |
| 18941 | SNORA18 | 0.394849403 | 0.154156785 | 0.881044526 | 0.146106532 | 1.3340 4E-12 | 2.231343187 |
| 16758 | MYOZ1 | 0.516039646 | 0.027753218 | 0.919242593 | 0.017738048 | 0 | 1.781341026 |
| 5368 | TWIST2 | 0.537559333 | 0.193893444 | 0.929110306 | 0.209382742 | 0.0004 09654 | 1.728386521 |
| 29682 | ISM1 | 0.422436464 | 0.002458484 | 0.946078008 | 0.07913092 | 0 | 2.23957468 |
| 9678 | SPARC | 0.509615643 | 0.027523695 | 0.95076649 | 0.086318216 | 0 | 1.865654054 |
| 93 | TMEM52 | 0.497773065 | 0.016419938 | 0.9573063 | 0.058759833 | 0 | 1.923178184 |
| 29217 | FPR1 | 0.352283158 | 0.067333379 | 0.974694172 | 0.05268855 | 0 | 2.766791858 |
| 30463 | ADAMTS1 | 0.405636274 | 0.066200231 | 0.979000229 | 0.080407817 | 0 | 2.413492808 |
| 628 | NKAIN1 | 0.493832791 | 0.131043575 | 1.040912178 | 0.056859768 | 0 | 2.107823126 |
| 22159 | RN7SL3 | 0.418692545 | 0.118152934 | 1.108583473 | 0.274039643 | 3.0162 1E-08 | 2.647726803 |
| 24898 | TOP | 0.748326739 | 0.037764052 | 1.129558836 | 0.298717703 | 2.1289 2E-28 | 1.509446044 |
| 16077 | GRIN1 | 0.700792454 | 0.047110624 | 1.201967348 | 0.021319691 | 0 | 1.715154524 |
| 5332 | SH3BP4 | 0.544718722 | 0.017684267 | 1.225790683 | 0.02876187 | 0 | 2.250318619 |
| 30698 | HSF2BP | 0.726650385 | 0.113818737 | 1.231588208 | 0.215307701 | 2.2409 1E-06 | 1.694884133 |
| 5509 | SLC6A11 | 0.520502694 | 0.042625728 | 1.339794645 | 0.188602727 | 0 | 2.574039793 |
| 11877 | ZNF853 | 0.697767982 | 0.004452959 | 1.360077579 | 0.165959674 | 0 | 1.94918313 |
| 22045 | RNU1F1 | 0.30543645 | 0.431791514 | 1.418852481 | 0.524391413 | 0 | 4.645327964 |
| 25197 | TMED6 | 0.963340743 | 0.079907281 | 1.448381214 | 0.07799525 | 0 | 1.503498346 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4601 | RPS29P8 | 0.855919164 | 0.073213494 | 1.4536236 | 0.620301219 | 1.3725 9E-15 | 1.698318791 |
| 15759 | C5 | 0.865986411 | 0.060605946 | 1.564435997 | 0.072286303 | 0 | 1.806536428 |
| 18942 | SNORA40 | 0.68607202 | 0.135346545 | 1.564956703 | 0.313356408 | 4.3370 1E-09 | 2.281038516 |
| 27656 | KISS1R | 0.837251591 | 0.10982477 | 1.999730959 | 0.160202111 | 0 | 2.38844689 |
| 23410 | LTK | 1.487174567 | 0.198678394 | 2.253919861 | 0.0783515 | 0 | 1.515571817 |
| 1772 | RNU1G3 | 0.115313665 | 0.162913848 | 2.398697961 | 1.626144157 | 0 | 20.80150661 |
| 25440 | SPIRE2 | 1.387291965 | 0.096999619 | 2.622720257 | 0.026179428 | 0 | 1.890532291 |
| 353 | RNU1A | 0.43235124 | 0.036567643 | 2.878481429 | 2.890866447 | 4.0636 E-147 | 6.65773834 |
| 22044 | RNU1G1 | 0.320436805 | 0.125191846 | 3.016596642 | 1.900471906 | 1.9274 4E-14 | 9.414014231 |
| 899 | HPDL | 2.177109437 | 0.026871508 | 3.487762483 | 0.391408902 | 0 | 1.602015233 |
| 8522 | TERT | 1.76298792 | 0.170800741 | 3.601942944 | 0.241927139 | 0 | 2.043089975 |
| 25233 | CHST4 | 2.200079249 | 0.069986376 | 3.956529646 | 0.112180548 | 0 | 1.798357786 |
| 18446 | RNU2-2 | 0.915246692 | 0.612449416 | 4.014018214 | 3.579700013 | 0.0085 66984 | 4.385722723 |
| 24235 | CCDC78 | 2.729563304 | 0.093641337 | 4.177686576 | 0.782934272 | 3.2973 6E-66 | 1.53053295 |
| 14087 | CA8 | 2.323352736 | 0.298084655 | 4.189522979 | 0.112604695 | 0 | 1.803222952 |
| 1720 | GPR89B | 2.787769768 | 1.362838098 | 4.587802847 | 0.977477174 | 0.0002 89033 | 1.645689289 |
| 28997 | ZNF114 | 3.318019654 | 0.006466424 | 4.984637585 | 0.010970193 | 0 | 1.502292965 |
| 25904 | SNORD3A | 0.801794142 | 0.158003115 | 6.911434999 | 5.12629411 | 2.8627 9E-46 | 8.619961953 |
| 10065 | F13A1 | 3.942445891 | 0.042576978 | 7.317303564 | 0.145725805 | 0 | 1.85603145 |
| 29661 | C20orf103 | 3.989996595 | 0.050286903 | 8.470905483 | 0.567427879 | 0 | 2.123035767 |
| 17896 | LGR4 | 6.565888638 | 0.31435892 | 9.964743765 | 0.166975828 | 0 | 1.517653484 |
| 12903 | PUS7 | 6.13679177 | 0.334508686 | 10.00060316 | 0.081221432 | 0 | 1.629614225 |
| 3360 | SDC1 | 6.176473102 | 0.374098253 | 11.19408395 | 0.379649518 | 0 | 1.812374759 |
| 17343 | EBF3 | 6.020848134 | 0.200069251 | 12.12614387 | 0.208260067 | 0 | 2.014025865 |
| 5752 | RPS27P4 | 6.292631463 | 0.276706001 | 13.30238947 | 2.318178844 | 1.4415 E-125 | 2.113962902 |
| 31529 | WNT7B | 9.196437237 | 0.261323726 | 14.09424665 | 0.070675454 | 0 | 1.532576833 |
| 29724 | C20orf12 | 11.41342403 | 0.422801904 | 18.72822357 | 1.097459606 | 0 | 1.640894399 |
| 4717 | DHRS9 | 9.435790339 | 0.56729593 | 21.30148689 | 1.385081057 | 0 | 2.257520157 |
| 26671 | AKAP1 | 16.87595617 | 0.2643531 | 25.42286699 | 0.077094736 | 0 | 1.506454908 |
| 9851 | NOP16 | 20.13205679 | 0.038452113 | 31.13896961 | 1.122384305 | 0 | 1.546735633 |
| 27068 | PCYT2 | 26.27783436 | 0.038145831 | 39.97920171 | 0.391444377 | 0 | 1.521403977 |
| 31823 | CXorf21 | 22.98809647 | 0.49100914 | 40.60730156 | 0.479679393 | 0 | 1.766449067 |
| 33156 | RPS4Y1 | 26.48963821 | 1.546752367 | 65.9893584 | 2.132533173 | 0 | 2.49113853 |
| 22145 | RN7SL1 | 20.5264985 | 1.01763626 | 71.66107949 | 43.95985247 | 1.9212 E-234 | 3.491149721 |
| 13457 | INSIG1 | 90.92012164 | 1.56547048 | 151.8826773 | 0.846154926 | 0 | 1.670506754 |
| | | | | | | | |

**Supplementary Table 4. Ingenuity upstream regulator analysis in Ingenuity pathway analysis (IPA).** The predicated activation of transcription factors was obtained by IPA upstream regulator analysis using the significantly altered genes (shown in Supplementary Table 3) in THP-1 *lilrb4*-KO cells in comparison with those in THP-1 WT cells (n=2 biologically independent samples). Transcription factors with activation z-score >1.5 or <-1.5 were shown. The *p* value was calculated using Fisher's Exact Test, and significance is generally attributed to *p* value < 0.01.

| GENE ID | z-score | *p* value |
|---|---|---|
| SMARCA4 | -4.172 | 0.000245 |
| RELA | -3.936 | 9.56E-12 |
| CREB1 | -3.325 | 0.000279 |
| CEBPA | -3.101 | 0.00000153 |
| IRF7 | -3.098 | 0.0042 |
| ECSIT | -3.094 | 1.01E-08 |
| IRF5 | -3.054 | 0.000126 |
| NFKB1 | -3.025 | 5.78E-11 |
| STAT1 | -2.946 | 1.82E-08 |
| HNF1B | -2.828 | 0.0492 |
| ID3 | -2.813 | 0.00825 |
| FOXL2 | -2.782 | 3.66E-09 |
| FOXO1 | -2.743 | 0.000172 |
| IFI16 | -2.739 | 0.0000456 |
| STAT4 | -2.675 | 0.000715 |
| REL | -2.633 | 0.00318 |
| IRF6 | -2.613 | 0.000000869 |
| PPRC1 | -2.592 | 0.000769 |
| CEBPB | -2.578 | 0.0000267 |
| IRF8 | -2.445 | 0.00000239 |
| HIF1A | -2.425 | 0.00000234 |
| JUNB | -2.405 | 0.00111 |
| EGR1 | -2.369 | 0.000439 |
| EP300 | -2.228 | 8.12E-08 |
| STAT2 | -2.219 | 0.00101 |

| | | |
|---|---|---|
| KAT5 | -2.219 | 0.289 |
| HMGB1 | -2.215 | 6.98E-10 |
| NFE2L2 | -2.2 | 0.159 |
| NCOA1 | -2.183 | 0.145 |
| TARDBP | -2 | 0.0204 |
| MAML1 | -2 | 0.00136 |
| ISL1 | -1.982 | 0.176 |
| DDIT3 | -1.98 | 0.142 |
| EPAS1 | -1.96 | 0.0436 |
| HEY2 | -1.96 | 0.0204 |
| HOXA5 | -1.949 | 0.00422 |
| HMGB1 | -1.922 | 0.000201 |
| ETV4 | -1.916 | 0.0204 |
| KLF6 | -1.862 | 0.00178 |
| TWIST1 | -1.861 | 0.0000715 |
| STAT3 | -1.86 | 4.23E-10 |
| ATF2 | -1.843 | 0.0000489 |
| ELF3 | -1.78 | 0.000376 |
| IRF3 | -1.774 | 0.00000104 |
| FOXO3 | -1.751 | 1 |
| CDKN2A | -1.731 | 0.00119 |
| SAMD2 | -1.72 | 0.0247 |
| SMAD3 | -1.684 | 0.000000124 |
| FOS | -1.675 | 0.00206 |
| POU5F1 | -1.65 | 0.00319 |
| CREBBP | -1.64 | 0.0000128 |
| NFKB1A | -1.625 | 0.000000139 |
| SPI1 | -1.526 | 0.0078 |
| JUN | -1.525 | 8.25E-10 |
| TSC22D3 | 1.555 | 0.00000175 |
| GPS2 | 1.633 | 0.000769 |
| BCL6 | 1.66 | 0.00000203 |
| NCOR1 | 1.698 | 0.0002 |
| FOXA2 | 1.787 | 0.126 |
| ZBTB16 | 1.802 | 0.00549 |
| BCL3 | 1.827 | 0.0000749 |
| HNF1A | 1.854 | 0.032 |
| SMAD7 | 1.875 | 0.0358 |
| MYCN | 1.949 | 1 |
| TFAP2A | 1.953 | 0.231 |
| PTF1A | 1.98 | 0.155 |

| | | |
|---|---|---|
| ASCL1 | 1.982 | 0.385 |
| HLX | 1.982 | 0.0251 |
| TRIM24 | 2.138 | 0.0179 |
| BACH2 | 2.191 | 0.0165 |
| FOSL1 | 2.562 | 0.000142 |
| GFI1 | 2.804 | 0.00205 |
| ZFP36 | 3.082 | 6.6E-11 |

**Supplementary Table 5. General patient information of 31 leukemia patient samples used in this study from UTSW and MD Anderson cohorts.** BM, Bone marrow; PB, Peripheral blood; PDX, Patient-derived xenograft; ED, Extended Data figure; N/A, not available.

| Sample_ID in text | Age (yrs) | Gender | Specimen | FAB subtype | Cohort | Experiments | Index |
|---|---|---|---|---|---|---|---|
| AML#1 | 13 | Male | BM | M5b | UTSW | PDX/ Infiltration | Fig1/ED4 |
| AML#2 | 17 | Male | BM | M5a | UTSW | PDX | Fig1 |
| AML#3 | 47 | Female | PB | M4 | MD Anderson | PDX | Fig1 |
| AML#4 | N/A | Male | BM | M5b | UTSW | PDX | ED4 |
| AML#5 | 57 | Female | BM | M4 | UTSW | PDX | ED4 |
| AML#6 | 66 | Female | PB | AMML | UTSW | PDX | ED4 |
| AML#7 | 66 | Female | BM | AMML | UTSW | PDX | ED4 |
| AML#8 | 76 | Male | BM | M5a | UTSW | PDX/ T/AML coculture | ED4/ ED1 |
| AML#9 | 32 | Female | PB | M5a | MD Anderson | PDX | ED4 |
| AML#10 | 29 | Female | BM | M4 | UTSW | PDX | ED4 |
| AML#11 | 50 | Male | PB | M5a | MD Anderson | PDX | ED4 |
| AML#12 | 57 | Female | BM | M4 | UTSW | PDX | ED4 |
| AML#13 | 55 | Male | BM | M4 | UTSW | PDX | ED4 |
| AML#14 | 51 | Female | BM | M5b | UTSW | PDX | ED4 |
| AML#15 | N/A | N/A | PB | AMML | UTSW | PDX | ED4 |
| AML#16 | 58 | Female | BM | M4 | UTSW | PDX | ED4 |
| AML#17 | 79 | Male | BM | M5a | UTSW | T/AML coculture | ED1 |
| AML#18 | 84 | Male | BM | M5b | UTSW | T/AML coculture/ Flow | ED1/ED7/ED8 |
| AML#19 | 47 | Male | BM | M4 | UTSW | T/AML coculture/ Flow | ED1/ED7/ED8 |
| AML#20 | 64 | Female | BM | M5 | UTSW | T/AML coculture/ Infiltration | ED1/ ED4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AML#21 | 1 | Female | PB | M5 | UTSW | Infiltration | ED4 |
| AML#22 | 35 | Male | PB | M4 | MD Anderson | Flow | ED8 |
| AML#23 | 55 | Female | PB | M4 | MD Anderson | Flow | ED8 |
| AML#24 | 41 | Male | PB | M4 | MD Anderson | Flow | ED8 |
| AML#25 | 69 | Male | PB | AMML | UTSW | Flow | ED8 |
| AML#26 | N/A | N/A | PB | M5a | UTSW | Flow | ED8 |
| AML#27 | 88 | Female | BM | AMML | UTSW | Flow | ED8 |
| AML#28 | 63 | Femle | BM | M4 | UTSW | Western blot | ED9 |
| AML#29 | 58 | Male | PB | M5a | UTSW | Western blot | ED9 |
| B-ALL#1 | 8 | Male | MCD | B-ALL | UTSW | T/ALL coculture | ED1 |
| B-ALL#2 | 5 | Male | PB | B-ALL | UTSW | T/ALL coculture | ED1 |