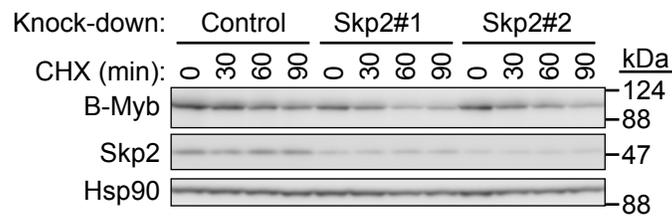


Supplementary Figure S1. Cytosolic localization of pVHL in 786-O or RCC4 cells.

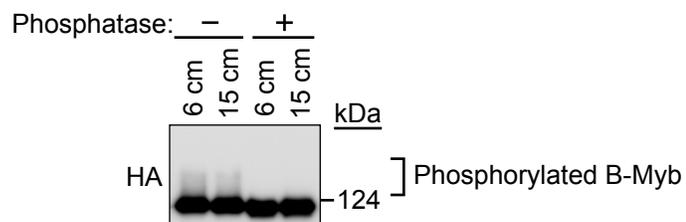
786-O cells or RCC4 cells stably expressing pVHL or control cells were cultured under sparse or confluent conditions for 1 day. Cytosolic (C) and nuclear (N) fractions were immunoblotted (IB) with antibodies against pVHL, B-Myb, HIF-2 α , Hsp90, or Lamin B1. Hsp90 and Lamin B1 were used as cytosolic and nuclear protein markers, respectively.



Supplementary Figure S2. Stabilization of B-Myb is absent in Skp2 knockdown cells.

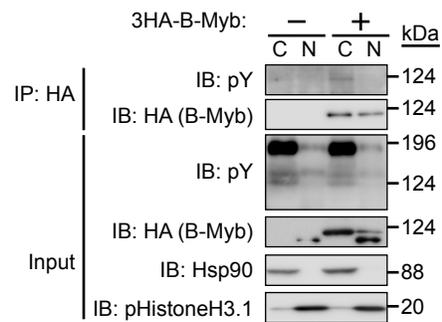
Control 786-O cells or two independent Skp2 knockdown cell lines (#1 and #2) were cultured for 1 day under confluent conditions, and then exposed to CHX (50 μ g/ml) for 30, 60, or 90 min. The lysates were subjected to western blotting with antibodies against B-Myb, Skp2, or Hsp90.

Hsp90 was used as a loading control.



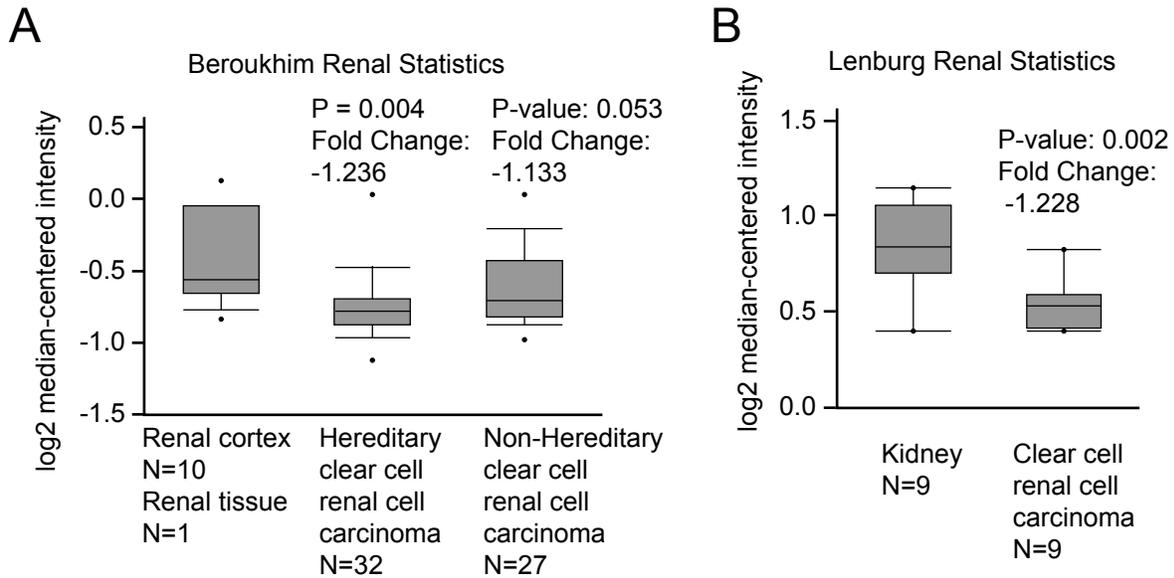
Supplementary Figure S3. Phosphorylation of B-Myb under sparse or confluent culture conditions.

3×HA-B-Myb expressing 786-O cells (3.8×10^6) were cultured for 1 day in two 6 cm (confluent condition) or three 15 cm (sparse condition) dishes. Immunoprecipitated 3×HA-B-Myb was incubated with or without phosphatase and subjected to western blotting with anti-HA antibody. The membrane was exposed for a relatively long time to detect phosphorylated 3×HA-B-Myb.



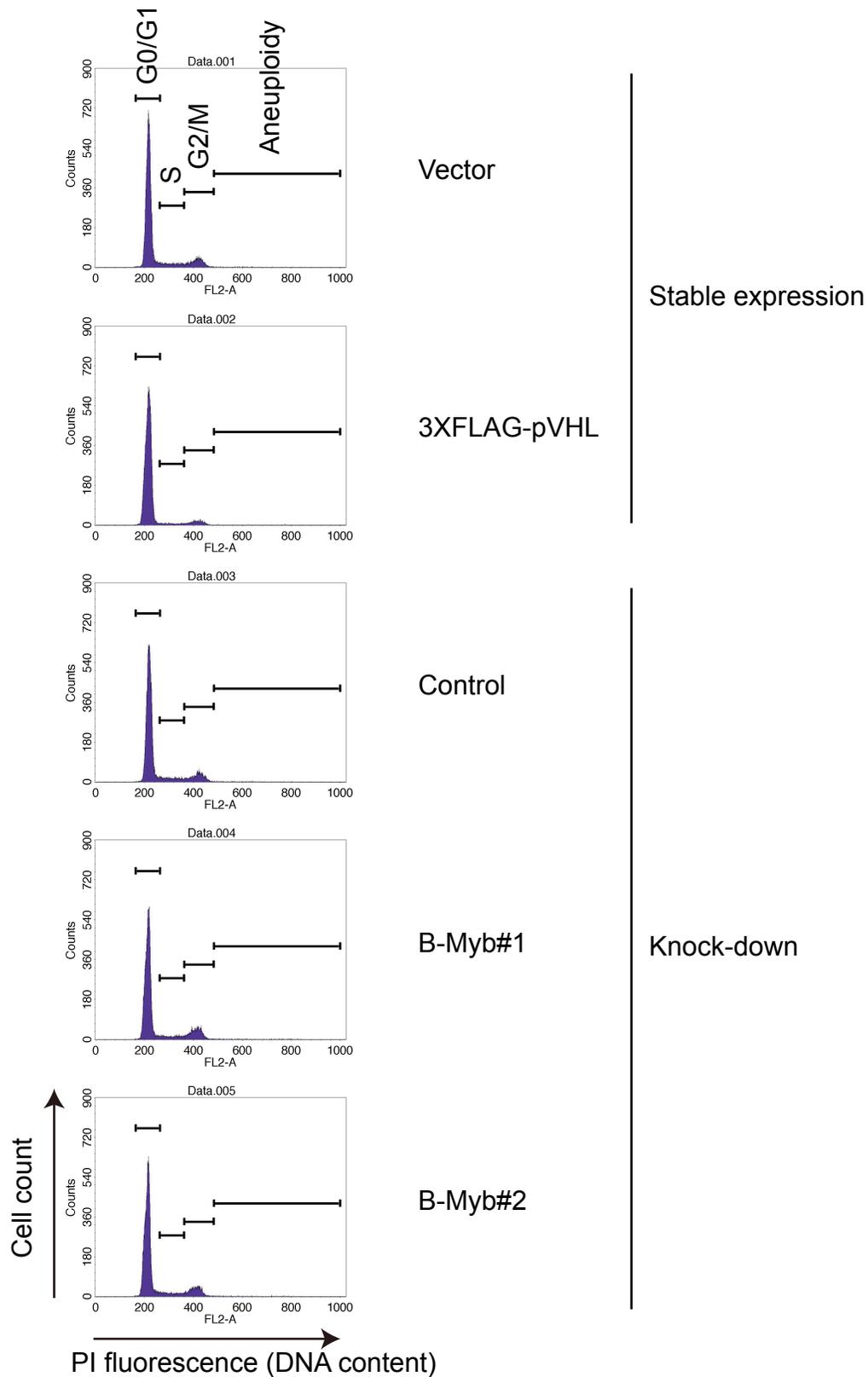
Supplementary Figure S4. Tyrosine phosphorylation of B-Myb occurs in the cytosol.

786-O cells stably expressing 3×HA-B-Myb or control cells were cultured under sparse conditions for 2 days. 3×HA-B-Myb was immunoprecipitated (IP) from the cytosolic (C) or nuclear (N) fraction with anti-HA antibody and immunoblotted (IB) with antibodies against pY, HA, Hsp90, or phosphorylated Histone 3.1. Hsp90 and phosphorylated Histone 3.1 were used as cytosolic and nuclear protein markers, respectively.



Supplementary Figure S5. Downregulation of B-Myb in clear cell renal cell carcinoma.

(A) Box plots of B-Myb transcript levels originally reported by Beroukhim et al., and provided by Oncomine data base. The box plot shows the normalized expression values, including minimum values (the bottom dot), 10th percentile (the bottom line outside the box), 25th percentile (the bottom border of the box), median (the middle line within the box), 75th percentile (the upper border of the box), 90th percentile (the upper line outside the box), and the maximum value (the upper dot). p values determined by Student' s t-test were provided by Oncomine and sample numbers in each group are indicated. (B) Box plots of B-Myb transcript levels originally reported by Lenburg et al., and provided by the Oncomine database are shown as in (A).



Supplementary Figure S6. Representative flow cytometry data.

Each cell line was harvested, fixed, and stained by propidium iodide to measure the DNA content of each cell. Cells in G0/G1, S, and G2/M phase, as well as aneuploidy are indicated.

Tables S1

Up-regulated genes by knock-down (KD) of B-Myb.

| Control (Log2) | B-Myb KD #1 (1B-Myb KD #2 (1 | GeneSymbol | Synonyms | Description | |
|----------------|------------------------------|------------|----------------|------------------------|--|
| 0 | 6.478639 | 2.8339624 | CXorf51A | CXorf51 | Homo sapiens chromosome X open reading frame 51A (CXorf51A), mRNA [NM_001144064] |
| 0 | 4.7758408 | 2.4837737 | OR1F1 | OR1F1 | Homo sapiens olfactory receptor, family 1, subfamily F, member 1 (OR1F1), mRNA [NM_012360] |
| 0 | 4.359556 | 1.0474968 | PRODH2 | HSPOX1 | Homo sapiens proline dehydrogenase (oxidase) 2 (PRODH2), mRNA [NM_021232] |
| 0 | 4.288799 | 2.111652 | MYL3 | CMH8 MLC1SB MLC1V | Homo sapiens myosin, light chain 3, alkali; ventricular, skeletal, slow (MYL3), mRNA [NM_000258] |
| 0 | 3.8127947 | 1.3498459 | C20orf160 | dJ310013.5 | Homo sapiens chromosome 20 open reading frame 160 (C20orf160), mRNA [NM_080625] |
| 0 | 3.6173735 | 2.112893 | XLOC_001280 | | BROAD Institute lincRNA (XLOC_001280), lincRNA [TCONS_00001895] |
| 0 | 3.5501838 | 3.7551284 | GRIK1-AS1 | C21orf9 GRIK1-AS GRI1 | Homo sapiens GRIK1 antisense RNA 1 (non-protein coding) (GRIK1-AS1), non-coding RNA [NR_027021] |
| 0 | 3.4837155 | 1.3371539 | ASB2 | ASB-2 | Homo sapiens ankyrin repeat and SOCS box containing 2 (ASB2), transcript variant 2, mRNA [NM_016150] |
| 0 | 3.305637 | 1.0225792 | XLOC_005633 | | BROAD Institute lincRNA (XLOC_005633), lincRNA [TCONS_00012103] |
| 0 | 3.2275786 | 2.761517 | XLOC_001515 | | Q588E3.BRALA (Q588E3) NADH dehydrogenase subunit 5, partial (4%) [THC2710260] |
| 0 | 3.2029433 | 2.2500253 | HTR1E | 5-HT1E | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA [NM_000865] |
| 0 | 3.0973997 | 1.9756703 | NTNG2 | LHLL9381 Lmmt2 NTNG | Homo sapiens netrin G2 (NTNG2), mRNA [NM_032536] |
| 0 | 3.0855465 | 1.4855504 | MGC39584 | | Homo sapiens uncharacterized LOC441058 (MGC39584), non-coding RNA [NR_038377] |
| 0 | 3.0525799 | 3.6732097 | GPR182 | 7TMR ADMR AM-R AMF | Homo sapiens G protein-coupled receptor 182 (GPR182), mRNA [NM_007264] |
| 0 | 2.9833083 | 1.7624488 | XLOC_012626 | | BROAD Institute lincRNA (XLOC_012626), lincRNA [TCONS_00026599] |
| 0 | 2.9559507 | 1.6974177 | CDH13 | CDHH P105 | Homo sapiens cadherin 13, H-cadherin (heart) (CDH13), transcript variant 1, mRNA [NM_001257] |
| 0 | 2.8441734 | 1.3601489 | IRGM | IFI1 IRGM1 LRG-47 LRC | immunity-related GTPase family, M [Source:HGNC Symbol;Acc:29597] [ENST00000520549] |
| 0 | 2.7894664 | 1.1142297 | XLOC_003422 | | BROAD Institute lincRNA (XLOC_003422), lincRNA [TCONS_00008740] |
| 0 | 2.7776098 | 2.6871138 | XLOC_I2_009449 | | PREDICTED: Homo sapiens von Willebrand factor-like (LOC100289038), miscRNA [XR_132906] |
| 0 | 2.6427112 | 1.7254534 | LOC100507165 | | PREDICTED: Homo sapiens hypothetical LOC100507165 (LOC100507165), miscRNA [XR_110530] |
| 0 | 2.501556 | 1.4363832 | MS4A7 | 4SPAN2 CD20L4 CFFM | Homo sapiens membrane-spanning 4-domains, subfamily A, member 7 (MS4A7), transcript variant 1, mRNA [NM_021201] |
| 0 | 2.4425755 | 1.05651 | LOC100652810 | | PREDICTED: Homo sapiens beta-glucuronidase-like protein SMA5-like (LOC100652810), mRNA [XM_003403424] |
| 0 | 2.4330044 | 1.1088257 | LOC441025 | | Homo sapiens uncharacterized LOC441025 (LOC441025), non-coding RNA [NR_033964] |
| 0 | 2.3985472 | 2.4625416 | CFB | AHUS4 BF BFD CFAB F | Homo sapiens complement factor B (CFB), mRNA [NM_001710] |
| 0 | 2.3705273 | 1.8792772 | LOC100270679 | | Homo sapiens uncharacterized LOC100270679 (LOC100270679), non-coding RNA [NR_038394] |
| 0 | 2.3565202 | 1.1855254 | XLOC_008706 | | Q4RGK4.TETNG (Q4RGK4) Chromosome undetermined SCAF15099, whole genome shotgun sequence, partial (6%) [THC2710827] |
| 0 | 2.310853 | 1.1752496 | MYH8 | MyHC-peri MyHC-pnl gtl | Homo sapiens myosin, heavy chain 8, skeletal muscle, perinatal (MYH8), mRNA [NM_002472] |
| 0 | 2.295967 | 2.3189268 | XLOC_001011 | | |
| 0 | 2.2576122 | 1.405354 | ZNF287 | ZKSCAN13 | Homo sapiens zinc finger protein 287 (ZNF287), mRNA [NM_020653] |
| 0 | 2.2535315 | 1.3091903 | HOXA13 | HOX1 HOX1J | Homo sapiens homeobox A13 (HOXA13), mRNA [NM_000522] |
| 0 | 2.1676388 | 1.2138968 | FLJ10038 | | Homo sapiens uncharacterized protein FLJ10038 (FLJ10038), non-coding RNA [NR_026891] |
| 0 | 2.167531 | 1.0258718 | | | Uncharacterized protein [Source:UniProtKB/TrEMBL;Acc:B5MCS7] [ENST00000431083] |
| 0 | 2.1431608 | 1.7853184 | XLOC_010505 | | BROAD Institute lincRNA (XLOC_010505), lincRNA [TCONS_00021602] |
| 0 | 2.1422071 | 1.5446191 | PVALB | D22S749 | Homo sapiens parvalbumin (PVALB), mRNA [NM_002854] |
| 0 | 2.0430498 | 1.3493695 | 6-Sep | SEP2 SEPT2 | Homo sapiens septin 6 (SEPT6), transcript variant V, mRNA [NM_145802] |
| 0 | 2.0313535 | 1.2817521 | STAG2 | SA-2 SA2 SCC3B ba51 | stromal antigen 2 [Source:HGNC Symbol;Acc:11355] [ENST00000394478] |
| 0 | 2.0214806 | 1.4171662 | | | Homo sapiens mRNA for hypothetical protein (C8ORF16). [AJ312026] |
| 0 | 2.0078535 | 1.0275364 | GPR64 | EDDM6 HE6 TM7LN2 | Homo sapiens G protein-coupled receptor 64 (GPR64), transcript variant 1, mRNA [NM_001079858] |
| 0 | 2.0017781 | 1.2358885 | FKBP1B | FKBP12.6 FKBP1L OTK | Homo sapiens FK506 binding protein 1B, 12.6 kDa (FKBP1B), transcript variant 2, mRNA [NM_054033] |
| 0 | 1.9999866 | 1.0277762 | BAI2 | | Homo sapiens brain-specific angiogenesis inhibitor 2 (BAI2), mRNA [NM_001703] |
| 0 | 1.9957113 | 1.3284645 | SNORD1A | | Homo sapiens small nucleolar RNA, C/D box 1A (SNORD1A), small nucleolar RNA [NR_004395] |
| 0 | 1.9851193 | 1.0844498 | GNAS | AHO C20orf45 GNAS1 C | Homo sapiens GNAS complex locus (GNAS), transcript variant 4, mRNA [NM_016592] |
| 0 | 1.9834514 | 1.0348482 | PCSK6 | PACE4 SPC4 | Homo sapiens proprotein convertase subtilisin/kexin type 6 (PCSK6), transcript variant 1, mRNA [NM_002570] |
| 0 | 1.9768505 | 1.2931824 | FABP1 | FABPL L-FABP | Homo sapiens fatty acid binding protein 1, liver (FABP1), mRNA [NM_001443] |
| 0 | 1.9675765 | 1.78934 | NID1 | NID | Homo sapiens nidogen 1 (NID1), mRNA [NM_002508] |
| 0 | 1.8828597 | 1.02493 | | | family with sequence similarity 95, member B1 [Source:HGNC Symbol;Acc:32318] [ENST00000455995] |
| 0 | 1.8568211 | 1.0869699 | SARM1 | SAMD2 SARM | Homo sapiens sterile alpha and TIR motif containing 1 (SARM1), mRNA [NM_015077] |
| 0 | 1.8383904 | 1.1714616 | TGM1 | ICR2 KTG2 LI1 TGASE | Homo sapiens transglutaminase 1 (K polypeptide epidermal type I, protein-glutamine-gamma-glutamyltransferase) (TGM1), mRNA [NM_000359] |
| 0 | 1.7247868 | 1.079649 | KRTAP5-5 | KRTAP5-11 KRTAP5.5 | Homo sapiens keratin associated protein 5-5 (KRTAP5-5), mRNA [NM_001001480] |
| 0 | 1.7216353 | 1.4337659 | TMEM98 | | Homo sapiens transmembrane protein 98 (TMEM98), transcript variant 1, mRNA [NM_015544] |
| 0 | 1.720727 | 1.5358481 | LIMS2 | PINCH-2 PINCH2 | Homo sapiens LIM and senescent cell antigen-like domains 2 (LIMS2), transcript variant 5, mRNA [NM_001161404] |
| 0 | 1.6468544 | 1.6294508 | AFF1 | AF4 FMR2 PBM1 | AF4/FMR2 family, member 1 [Source:HGNC Symbol;Acc:7135] [ENST00000504956] |
| 0 | 1.6038527 | 1.1272345 | 6-Sep | SEP2 SEPT2 | Homo sapiens septin 6 (SEPT6), transcript variant V, mRNA [NM_145802] |
| 0 | 1.5640907 | 1.122921 | XLOC_I2_011114 | | DB520446 RIKEN full-length enriched human cDNA library, testis Homo sapiens cDNA clone H013067K21 3', mRNA sequence [DB520446] |
| 0 | 1.5218167 | 1.0063677 | XLOC_003854 | | BROAD Institute lincRNA (XLOC_003854), lincRNA [TCONS_00009008] |
| 0 | 1.4579005 | 1.2917061 | CPA6 | CPAH ETL5 FEB11 | Homo sapiens carboxypeptidase A6 (CPA6), mRNA [NM_020361] |

| | | | | | |
|---|-----------|-----------|----------------|--------------------|--|
| 0 | 1.4542112 | 1.1074753 | REEP2 | C5orf19 SGC32445 | Homo sapiens receptor accessory protein 2 (REEP2), mRNA [NM_016606] |
| 0 | 1.4520159 | 1.0432749 | SYNGR1 | | Homo sapiens synaptogyrin 1 (SYNGR1), transcript variant 1b, mRNA [NM_145731] |
| 0 | 1.4413638 | 1.0627213 | C21orf56 | | Homo sapiens chromosome 21 open reading frame 56 (C21orf56), transcript variant 2, mRNA [NM_032261] |
| 0 | 1.4074268 | 2.9002943 | TESC | CHP3 TSC | Homo sapiens tescalcin (TESC), transcript variant 1, mRNA [NM_017899] |
| 0 | 1.4016399 | 1.2406483 | | | immunoglobulin kappa variable 2D-28 [Source:HGNC Symbol;Acc:5799] [ENST00000453166] |
| 0 | 1.3708653 | 1.2831597 | GPRASP1 | GASP GASP-1 GASP1 | Homo sapiens G protein-coupled receptor associated sorting protein 1 (GPRASP1), transcript variant 1, mRNA [NM_014710] |
| 0 | 1.367857 | 1.0640779 | LOC100507520 | | PREDICTED: Homo sapiens hypothetical LOC100507520, transcript variant 2 (LOC100507520), miscRNA [XR_109440] |
| 0 | 1.3674645 | 1.1025324 | LOC400043 | | Homo sapiens uncharacterized LOC400043 (LOC400043), non-coding RNA [NR_026656] |
| 0 | 1.3149586 | 1.010797 | XLOC_007433 | | MR3-FN0206-020201-006-h05 FN0206 Homo sapiens cDNA, mRNA sequence [BI046002] |
| 0 | 1.2779694 | 1.2874107 | COL6A2 | PP3610 | Homo sapiens collagen, type VI, alpha 2 (COL6A2), transcript variant 2C2a, mRNA [NM_058174] |
| 0 | 1.2360439 | 1.0344882 | EFNB3 | EFL6 EPLG8 LERK8 | Homo sapiens ephrin-B3 (EFNB3), mRNA [NM_001406] |
| 0 | 1.2226591 | 1.3807235 | UBE2Q2P2 | UBE2QP2 | Homo sapiens ubiquitin-conjugating enzyme E2Q family member 2 pseudogene 2 (UBE2Q2P2), non-coding RNA [NR_004847] |
| 0 | 1.1912475 | 1.2277179 | XLOC_I2_013506 | | BX097862 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGp998D083986, mRNA sequence [BX097862] |
| 0 | 1.1564093 | 1.037571 | C17orf28 | DMC1 | Homo sapiens chromosome 17 open reading frame 28 (C17orf28), mRNA [NM_030630] |
| 0 | 1.1455102 | 1.1972079 | C5orf56 | | Homo sapiens cDNA: FLJ21568 fis, clone COL06492. [AK025221] |
| 0 | 1.1242619 | 1.5627937 | DLG3 | MRX MRX90 NEDLG SA | Homo sapiens discs, large homolog 3 (Drosophila) (DLG3), transcript variant 1, mRNA [NM_021120] |
| 0 | 1.1171088 | 1.8100896 | XLOC_004747 | | BROAD Institute lincRNA (XLOC_004747), lincRNA [TCONS_00009612] |
| 0 | 1.104301 | 1.080823 | ZNF780B | ZNF779 | Homo sapiens zinc finger protein 780B (ZNF780B), mRNA [NM_001005851] |
| 0 | 1.0958476 | 1.0104222 | AXIN2 | AXIL | Homo sapiens axin 2 (AXIN2), mRNA [NM_004655] |
| 0 | 1.0128231 | 1.0061951 | RIMS3 | NIM3 RIM3 | Homo sapiens regulating synaptic membrane exocytosis 3 (RIMS3), mRNA [NM_014747] |

Tables S2

Down-regulated genes by knock-down (KD) of B-Myb.

| Control (Log2) | B-Myb KD #1 (l | B-Myb KD #2 (l | GeneSymbol | Synonyms | Description |
|----------------|----------------|----------------|----------------|------------------------|--|
| 0 | -9.51674 | -7.927818 | ZUFSP | C6orf113 dJ41217.3 | Homo sapiens zinc finger with UFM1-specific peptidase domain (ZUFSP), mRNA [NM_145062] |
| 0 | -8.877529 | -9.169393 | LOC144571 | | Homo sapiens uncharacterized LOC144571 (LOC144571), non-coding RNA [NR_026971] |
| 0 | -6.307118 | -7.574066 | CASN2 | CASB | Homo sapiens casein beta (CASN2), mRNA [NM_001891] |
| 0 | -5.929298 | -7.5290947 | CCDC85A | | Homo sapiens coiled-coil domain containing 85A (CCDC85A), mRNA [NM_001080433] |
| 0 | -5.782954 | -6.978011 | XLOC_002117 | | BROAD Institute lincRNA (XLOC_002117), lincRNA [TCONS_00002753] |
| 0 | -5.6845465 | -6.7729983 | LOC100128105 | | PREDICTED: Homo sapiens hypothetical protein LOC100128105 (LOC100128105), mRNA [XM_001721678] |
| 0 | -5.6487446 | -6.8472533 | XLOC_002975 | | BROAD Institute lincRNA (XLOC_002975), lincRNA [TCONS_00006355] |
| 0 | -5.616104 | -6.882144 | XLOC_010696 | | BROAD Institute lincRNA (XLOC_010696), lincRNA [TCONS_00021689] |
| 0 | -5.5685883 | -6.770891 | ECM2 | | extracellular matrix protein 2, female organ and adipocyte specific [Source:HGNC Symbol;Acc:3154] [ENST00000375540] |
| 0 | -5.333523 | -6.5285816 | LINC00305 | C18orf20 HsT1235 NCRI | Homo sapiens long intergenic non-protein coding RNA 305 (LINC00305), non-coding RNA [NR_027245] |
| 0 | -5.3260207 | -5.6772423 | MST1 | | BROAD Institute lincRNA (XLOC_I2_000080), lincRNA [TCONS_I2_00000119] |
| 0 | -5.1531777 | -5.5154915 | XLOC_012296 | | BROAD Institute lincRNA (XLOC_012296), lincRNA [TCONS_00025127] |
| 0 | -4.9742327 | -4.8544908 | FAM126A | DRCTNNB1A HCC HLD† | family with sequence similarity 126, member A [Source:HGNC Symbol;Acc:24587] [ENST00000409763] |
| 0 | -4.930912 | -5.1353273 | LOC100130445 | | PREDICTED: Homo sapiens hypothetical protein LOC100130445 (LOC100130445), mRNA [XM_001715069] |
| 0 | -4.87822 | -3.791369 | THBS2 | TSP2 | Homo sapiens thrombospondin 2 (THBS2), mRNA [NM_003247] |
| 0 | -4.8568244 | -6.0495753 | PRSS55 | T-SP1 UNQ9391 | Homo sapiens protease, serine, 55 (PRSS55), transcript variant 1, mRNA [NM_198464] |
| 0 | -4.7727103 | -5.1938114 | XLOC_003677 | | BROAD Institute lincRNA (XLOC_003677), lincRNA [TCONS_00008880] |
| 0 | -4.6143646 | -5.7510104 | XLOC_011218 | | BROAD Institute lincRNA (XLOC_011218), lincRNA [TCONS_00023364] |
| 0 | -4.6013403 | -5.825031 | XLOC_002643 | | BROAD Institute lincRNA (XLOC_002643), lincRNA [TCONS_00006017] |
| 0 | -4.6006675 | -5.7839346 | LOC645355 | | Homo sapiens uncharacterized LOC645355 (LOC645355), non-coding RNA [NR_038839] |
| 0 | -4.5485435 | -5.35522 | ATP2B2 | PMCA2 PMCA2a PMCA | Homo sapiens ATPase, Ca++ transporting, plasma membrane 2 (ATP2B2), transcript variant 1, mRNA [NM_001001331] |
| 0 | -4.5454006 | -5.8075333 | XLOC_I2_006449 | | BROAD Institute lincRNA (XLOC_I2_006449), lincRNA [TCONS_I2_00012046] |
| 0 | -4.444984 | -5.2535195 | XLOC_012664 | | BROAD Institute lincRNA (XLOC_012664), lincRNA [TCONS_00026615] |
| 0 | -4.2319274 | -4.2769756 | | | Homo sapiens cDNA FLJ35175 fis, clone PLACE6013400. [AK092494] |
| 0 | -4.166102 | -4.4578247 | PNPLA1 | dJ50J22.1 | Homo sapiens patatin-like phospholipase domain containing 1 (PNPLA1), transcript variant 3, mRNA [NM_001145717] |
| 0 | -4.0718365 | -5.2663674 | | | DB063160 TEST14 Homo sapiens cDNA clone TEST14003540 5', mRNA sequence [DB063160] |
| 0 | -4.0558114 | -5.225694 | XLOC_I2_011996 | | BROAD Institute lincRNA (XLOC_I2_011996), lincRNA [TCONS_I2_00022844] |
| 0 | -3.9620466 | -5.1002984 | XLOC_002060 | | BX119243 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGp998E185714, mRNA sequence [BX119243] |
| 0 | -3.886845 | -1.075253 | LOC100192378 | | Homo sapiens uncharacterized LOC100192378 (LOC100192378), non-coding RNA [NR_024360] |
| 0 | -3.8817153 | -5.074789 | XLOC_002886 | | BROAD Institute lincRNA (XLOC_002886), lincRNA [TCONS_00006283] |
| 0 | -3.788311 | -4.979326 | STON1-GTF2A1L | SALF | Homo sapiens STON1-GTF2A1L readthrough (STON1-GTF2A1L), transcript variant 2, mRNA [NM_001198593] |
| 0 | -3.787363 | -4.9814124 | | | PREDICTED: Homo sapiens putative tripartite motif-containing protein 64B-like (LOC642414), mRNA [XM_003119181] |
| 0 | -3.7613955 | -4.952389 | XLOC_012387 | | BROAD Institute lincRNA (XLOC_012387), lincRNA [TCONS_00025558] |
| 0 | -3.7003908 | -5.941253 | XLOC_009927 | | BROAD Institute lincRNA (XLOC_009927), lincRNA [TCONS_00020612] |
| 0 | -3.6420188 | -4.8440146 | RD3 | C1orf36 LCA12 | Homo sapiens retinal degeneration 3 (RD3), transcript variant 1, mRNA [NM_183059] |
| 0 | -3.6265435 | -4.828403 | LOC100652927 | | PREDICTED: Homo sapiens hypothetical LOC100652927 (LOC100652927), miscRNA [XR_132642] |
| 0 | -3.57684 | -4.84187 | LOC285556 | | PREDICTED: Homo sapiens hypothetical protein LOC285556 (LOC285556), mRNA [XM_001717423] |
| 0 | -3.5756984 | -4.772544 | ASB15 | | Homo sapiens ankyrin repeat and SOCS box containing 15 (ASB15), mRNA [NM_080928] |
| 0 | -3.51304 | -4.6876802 | STAT4 | SLEB11 | Homo sapiens signal transducer and activator of transcription 4 (STAT4), transcript variant 1, mRNA [NM_003151] |
| 0 | -3.5029874 | -4.7016544 | TSKS | STK22S1 TSKS1 TSSKS | Homo sapiens testis-specific serine kinase substrate (TSKS), mRNA [NM_021733] |
| 0 | -3.4644852 | -4.8650804 | XLOC_013308 | | BROAD Institute lincRNA (XLOC_013308), lincRNA [TCONS_00027310] |
| 0 | -3.4471517 | -1.9599371 | XLOC_010243 | | BROAD Institute lincRNA (XLOC_010243), lincRNA [TCONS_00020974] |
| 0 | -3.37919 | -4.5374866 | ADHFE1 | ADH8 HOT | Homo sapiens alcohol dehydrogenase, iron containing, 1 (ADHFE1), nuclear gene encoding mitochondrial protein, mRNA [NM_144650] |
| 0 | -3.330854 | -3.6544585 | STRC | DFNB16 | Homo sapiens stereocilin (STRC), mRNA [NM_153700] |
| 0 | -3.2498999 | -4.443956 | OSTalpha | OSTA OSTalpha | Homo sapiens organic solute transporter alpha (OSTalpha), mRNA [NM_152672] |
| 0 | -3.2351675 | -4.4480543 | XLOC_008428 | | BROAD Institute lincRNA (XLOC_008428), lincRNA [TCONS_00018149] |
| 0 | -3.2290535 | -4.3479714 | XLOC_010707 | | 601122985F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3347061 5', mRNA sequence [BE276051] |
| 0 | -3.207963 | -1.1184835 | ANO3 | C11orf25 TMEM16C | Homo sapiens anoctamin 3 (ANO3), mRNA [NM_031418] |
| 0 | -3.1598964 | -2.5124898 | RBPJL | RBP-L RBPSUHL SUH | Homo sapiens recombination signal binding protein for immunoglobulin kappa J region-like (RBPJL), mRNA [NM_014276] |
| 0 | -3.157442 | -2.5432901 | LOC642852 | | Homo sapiens uncharacterized LOC642852 (LOC642852), non-coding RNA [NR_026943] |
| 0 | -3.1509867 | -4.345913 | XKR9 | | BROAD Institute lincRNA (XLOC_006836), lincRNA [TCONS_00014752] |
| 0 | -3.1093469 | -4.280808 | CATSPERB | C14orf161 CatSper(beta | Homo sapiens cation channel, sperm-associated, beta (CATSPERB), mRNA [NM_024764] |
| 0 | -3.0562968 | -2.7815423 | SUN5 | SPAG4L TSARG4 dJ72† | Homo sapiens Sad1 and UNC84 domain containing 5 (SUN5), mRNA [NM_080675] |
| 0 | -3.0450087 | -2.8538857 | | | DB461001 RIKEN full-length enriched human cDNA library, testis Homo sapiens cDNA clone H013092F08 5', mRNA sequence [DB461001] |
| 0 | -3.03692 | -4.090977 | XLOC_000095 | | BROAD Institute lincRNA (XLOC_000095), lincRNA [TCONS_00000867] |
| 0 | -3.0244532 | -1.720139 | ZNF585A | | Homo sapiens zinc finger protein 585A (ZNF585A), transcript variant 1, mRNA [NM_152655] |
| 0 | -3.0156965 | -2.3005567 | SNORA79 | | Homo sapiens small nucleolar RNA, H/ACA box 79 (SNORA79), small nucleolar RNA [NR_003021] |

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|---|------------|------------|----------------|---|
| 0 | -2.9745045 | -3.0923657 | XLOC_012751 | BROAD Institute lincRNA (XLOC_012751), lincRNA [TCONS_00026401] |
| 0 | -2.9627347 | -4.098775 | XLOC_001501 | xv14h03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813141 3', mRNA sequence [AW272487] |
| 0 | -2.9103017 | -4.105273 | XLOC_013577 | BX113703 Soares_testis_NHT Homo sapiens cDNA clone IMAGp998E101784, mRNA sequence [BX113703] |
| 0 | -2.907257 | -1.8104877 | XLOC_I2_012210 | BROAD Institute lincRNA (XLOC_I2_012210), lincRNA [TCONS_I2_00023092] |
| 0 | -2.873784 | -4.086891 | XLOC_005633 | BROAD Institute lincRNA (XLOC_005633), lincRNA [TCONS_00012676] |
| 0 | -2.8716974 | -2.7140217 | CACHD1 | RP4-655E10.1 Homo sapiens cache domain containing 1 (CACHD1), mRNA [NM_020925] |
| 0 | -2.855507 | -4.05605 | | Uncharacterized protein [Source:UniProtKB/TrEMBL;Acc:E7EUI4] [ENST00000314552] |
| 0 | -2.8550596 | -4.0965776 | XLOC_I2_014694 | BX118352 Soares_testis_NHT Homo sapiens cDNA clone IMAGp998L221795, mRNA sequence [BX118352] |
| 0 | -2.8040504 | -3.989108 | XLOC_005465 | BROAD Institute lincRNA (XLOC_005465), lincRNA [TCONS_00011372] |
| 0 | -2.8008428 | -3.9956074 | LOC100129884 | Homo sapiens cDNA FLJ39760 fis, clone SMINT2019200. [AK097079] |
| 0 | -2.7885814 | -4.605114 | CASP12 | CASP-12 CASP12P1 Homo sapiens caspase 12 (gene/pseudogene) (CASP12), transcript variant 1, mRNA [NM_001191016] |
| 0 | -2.7719617 | -3.3725214 | ENOX1 | CNOX PIG38 bA64J21.1 Homo sapiens ecto-NOX disulfide-thiol exchanger 1 (ENOX1), transcript variant 1, mRNA [NM_017993] |
| 0 | -2.7353559 | -3.9365668 | LOC731424 | Homo sapiens uncharacterized LOC731424 (LOC731424), non-coding RNA [NR_037867] |
| 0 | -2.7169557 | -2.3692856 | MTMR9 | C8orf9 LIP-STYX MTMF Homo sapiens myotubularin related protein 9 (MTMR9), mRNA [NM_015458] |
| 0 | -2.699048 | -3.8897738 | | Uncharacterized protein cDNA FLJ34594 fis, clone KIDNE2009109 [Source:UniProtKB/TrEMBL;Acc:Q8NAX6] [ENST00000314040] |
| 0 | -2.6855206 | -4.777762 | CELF4 | BRUNOL-4 BRUNOL4 Homo sapiens CUGBP, Elav-like family member 4 (CELF4), transcript variant 1, mRNA [NM_020180] |
| 0 | -2.6848354 | -2.1676302 | MYEOV2 | Homo sapiens myeloma overexpressed 2 (MYEOV2), transcript variant 1, mRNA [NM_138336] |
| 0 | -2.6769452 | -2.5557427 | SLC9A10 | SLC9A10 sperm-NHE Homo sapiens solute carrier family 9, member 10 (SLC9A10), mRNA [NM_183061] |
| 0 | -2.6727767 | -2.723853 | KCNE4 | MIRP3 Homo sapiens potassium voltage-gated channel, Isk-related family, member 4 (KCNE4), mRNA [NM_080671] |
| 0 | -2.6712766 | -3.8618083 | STRA6 | MCOPS9 Homo sapiens stimulated by retinoic acid gene 6 homolog (mouse) (STRA6), transcript variant 5, mRNA [NM_001142620] |
| 0 | -2.66919 | -3.8500729 | CSMD3 | Homo sapiens CUB and Sushi multiple domains 3 (CSMD3), transcript variant a, mRNA [NM_198123] |
| 0 | -2.6686573 | -2.8463907 | MYRIP | SLAC2-C SLAC2C Homo sapiens myosin VIIA and Rab interacting protein (MYRIP), mRNA [NM_015460] |
| 0 | -2.6648397 | -3.8679824 | LOC100506923 | PREDICTED: Homo sapiens hypothetical LOC100506923 (LOC100506923), miscRNA [XR_108408] |
| 0 | -2.6445074 | -3.8461523 | REXO1L1 | GOR Homo sapiens REX1, RNA exonuclease 1 homolog (S. cerevisiae)-like 1 (REXO1L1), mRNA [NM_172239] |
| 0 | -2.6378212 | -3.8284755 | LIMCH1 | LIMCH1A LMO7B Homo sapiens LIM and calponin homology domains 1 (LIMCH1), transcript variant 1, mRNA [NM_014988] |
| 0 | -2.6215448 | -3.7575636 | ANKRD30B | NY-BR-1.1 Homo sapiens ankyrin repeat domain 30B (ANKRD30B), mRNA [NM_001145029] |
| 0 | -2.62113 | -1.7323217 | XLOC_004874 | BROAD Institute lincRNA (XLOC_004874), lincRNA [TCONS_00010957] |
| 0 | -2.5896797 | -3.86139 | LINC00301 | C11orf64 NCRNA00301 Homo sapiens long intergenic non-protein coding RNA 301 (LINC00301), non-coding RNA [NR_026946] |
| 0 | -2.588574 | -4.0036554 | IFIT1B | IFIT1L bA149I23.6 Homo sapiens interferon-induced protein with tetratricopeptide repeats 1B (IFIT1B), mRNA [NM_001010987] |
| 0 | -2.5852942 | -1.78476 | XLOC_004878 | BROAD Institute lincRNA (XLOC_004878), lincRNA [TCONS_00010375] |
| 0 | -2.576919 | -1.5710936 | MATN2 | Homo sapiens matrilin 2 (MATN2), transcript variant 2, mRNA [NM_030583] |
| 0 | -2.518692 | -3.7118716 | SELE | CD62E ELAM ELAM1 ES Homo sapiens selectin E (SELE), mRNA [NM_000450] |
| 0 | -2.5160718 | -3.8768706 | XLOC_I2_012175 | BROAD Institute lincRNA (XLOC_I2_012175), lincRNA [TCONS_I2_00023859] |
| 0 | -2.509128 | -1.619051 | XLOC_000702 | BROAD Institute lincRNA (XLOC_000702), lincRNA [TCONS_00002290] |
| 0 | -2.50347 | -1.660934 | SLC37A2 | pp11662 Homo sapiens solute carrier family 37 (glycerol-3-phosphate transporter), member 2 (SLC37A2), transcript variant 1, mRNA [NM_198277] |
| 0 | -2.4645867 | -3.332777 | C7orf31 | Homo sapiens chromosome 7 open reading frame 31 (C7orf31), mRNA [NM_138811] |
| 0 | -2.398849 | -2.3206182 | MIPEPP3 | LINC00539 Homo sapiens mRNA; cDNA DKFZp686C1238 (from clone DKFZp686C1238). [BX648740] |
| 0 | -2.3957453 | -3.59268 | MYCN | MODED N-myc NMYC C Homo sapiens v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian) (MYCN), mRNA [NM_005378] |
| 0 | -2.3933396 | -3.5126972 | SCRT1 | SCRT ZNF898 Homo sapiens scratch homolog 1, zinc finger protein (Drosophila) (SCRT1), mRNA [NM_031309] |
| 0 | -2.3838353 | -3.5066185 | LOC728573 | Homo sapiens cDNA FLJ41276 fis, clone BRAMY2036913. [AK123270] |
| 0 | -2.3646007 | -3.559133 | GJB7 | CX25 bA136M9.1 connexin gap junction protein, beta 7, 25kDa [Source:HGNC Symbol;Acc:16690] [ENST00000442973] |
| 0 | -2.3615012 | -2.8569312 | KLHDC8A | Homo sapiens kelch domain containing 8A (KLHDC8A), mRNA [NM_018203] |
| 0 | -2.3606777 | -2.5042715 | XLOC_011797 | BROAD Institute lincRNA (XLOC_011797), lincRNA [TCONS_00024477] |
| 0 | -2.34965 | -3.552127 | XLOC_007064 | AGENCOURT_8903005 NIH_MGC.141 Homo sapiens cDNA clone IMAGE:6389455 5', mRNA sequence [BU590318] |
| 0 | -2.3342662 | -3.5398684 | LOC100128531 | Homo sapiens uncharacterized LOC100128531 (LOC100128531), non-coding RNA [NR_038941] |
| 0 | -2.3269448 | -3.2018847 | | Homo sapiens mRNA; cDNA DKFZp547H1510 (from clone DKFZp547H1510). [AL831877] |
| 0 | -2.3259087 | -2.7552857 | XLOC_011774 | BROAD Institute lincRNA (XLOC_011774), lincRNA [TCONS_00024449] |
| 0 | -2.315988 | -3.5107403 | PTPRN2 | IA-2beta AR ICAAR PT Homo sapiens protein tyrosine phosphatase, receptor type, N polypeptide 2 (PTPRN2), transcript variant 1, mRNA [NM_002847] |
| 0 | -2.3124962 | -1.503798 | XLOC_000587 | BROAD Institute lincRNA (XLOC_000587), lincRNA [TCONS_00001308] |
| 0 | -2.28441 | -2.0306888 | FLJ26332 | Homo sapiens cDNA FLJ26332 fis, clone HRT02453. [AK129842] |
| 0 | -2.281344 | -2.9699001 | XLOC_011056 | BROAD Institute lincRNA (XLOC_011056), lincRNA [TCONS_00023122] |
| 0 | -2.2750077 | -3.14887 | XLOC_012851 | BROAD Institute lincRNA (XLOC_012851), lincRNA [TCONS_00026719] |
| 0 | -2.2615685 | -1.1478987 | PCSK5 | PC5 PC6 PC6A SPC6 Homo sapiens proprotein convertase subtilisin/kexin type 5 (PCSK5), transcript variant 2, mRNA [NM_006200] |
| 0 | -2.2578855 | -3.4492974 | XLOC_000506 | BROAD Institute lincRNA (XLOC_000506), lincRNA [TCONS_00000359] |
| 0 | -2.2553606 | -3.426083 | NAT2 | AAC2 NAT-2 PNAT Homo sapiens N-acetyltransferase 2 (arylamine N-acetyltransferase) (NAT2), mRNA [NM_000015] |
| 0 | -2.2391586 | -3.4099646 | | immunoglobulin heavy variable 6-1 [Source:HGNC Symbol;Acc:5662] [ENST00000390593] |
| 0 | -2.2325456 | -3.6936574 | XLOC_008434 | BROAD Institute lincRNA (XLOC_008434), lincRNA [TCONS_00018704] |
| 0 | -2.2255616 | -1.1641493 | LOC100505722 | PREDICTED: Homo sapiens hypothetical LOC100505722 (LOC100505722), miscRNA [XR_109304] |
| 0 | -2.196929 | -3.3803487 | KRTAP4-6 | KAP4.15 KAP4.6 KRTAP Homo sapiens keratin associated protein 4-6 (KRTAP4-6), mRNA [NM_030976] |
| 0 | -2.184043 | -3.3765059 | XLOC_006709 | BROAD Institute lincRNA (XLOC_006709), lincRNA [TCONS_00014616] |

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|---|------------|------------|----------------|---|
| 0 | -2.18155 | -2.367436 | XLOC_005941 | UI-H-EU0-azk-k-10-0-UI.s1 NCI CGAP_Car1 Homo sapiens cDNA clone IMAGE: 5849985 3', mRNA sequence [BQ182905] |
| 0 | -2.1610942 | -1.446857 | JPH3 | CAGL237 HDL2 JP-3 JFHomo sapiens junctophilin 3 (JPH3), mRNA [NM_020655] |
| 0 | -2.1601472 | -2.4183145 | RGS16 | A28-RGS14 A28-RGS16Homo sapiens regulator of G-protein signaling 16 (RGS16), mRNA [NM_002928] |
| 0 | -2.1454434 | -1.7286863 | MYBL2 | B-MYB BMYB Homo sapiens v-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2), mRNA [NM_002466] |
| 0 | -2.1397128 | -3.1006932 | XLOC_008774 | BROAD Institute lincRNA (XLOC_008774), lincRNA [TCONS_00017947] |
| 0 | -2.1395025 | -3.3346257 | | olfactory receptor, family 11, subfamily H, member 7 (gene/pseudogene) [Source:HGNC Symbol;Acc:15350] [ENST00000553765] |
| 0 | -2.1018276 | -1.4657469 | XLOC_I2_001359 | Q3SDF2_PART2 (Q3SDF2) EPI21 protein, partial (5%) [THC2694828] |
| 0 | -2.0941496 | -3.2879171 | SNORD115-2 | Homo sapiens small nucleolar RNA, C/D box 115-2 (SNORD115-2), small nucleolar RNA [NR_003294] |
| 0 | -2.0871086 | -3.894784 | XLOC_006951 | BX108468 Soares_testis_NHT Homo sapiens cDNA clone IMAGp998J144405, mRNA sequence [BX108468] |
| 0 | -2.0536985 | -3.2478924 | XLOC_009144 | BROAD Institute lincRNA (XLOC_009144), lincRNA [TCONS_00019311] |
| 0 | -2.0481334 | -2.0087762 | KCNQ4 | DFNA2 DFNA2A KV7.4 Homo sapiens potassium voltage-gated channel, KQT-like subfamily, member 4 (KCNQ4), transcript variant 1, mRNA [NM_004700] |
| 0 | -2.0478902 | -3.2513642 | XLOC_I2_011095 | BROAD Institute lincRNA (XLOC_I2_011095), lincRNA [TCONS_I2_00021856] |
| 0 | -2.0478034 | -2.0378246 | FLJ12334 | Homo sapiens uncharacterized LOC400946 (FLJ12334), non-coding RNA [NR_033875] |
| 0 | -2.0408115 | -3.4669628 | XLOC_000446 | BROAD Institute lincRNA (XLOC_000446), lincRNA [TCONS_00000327] |
| 0 | -2.0391765 | -3.2239785 | XLOC_009605 | BROAD Institute lincRNA (XLOC_009605), lincRNA [TCONS_00019805] |
| 0 | -2.0095305 | -3.2024355 | XLOC_003387 | BROAD Institute lincRNA (XLOC_003387), lincRNA [TCONS_00006757] |
| 0 | -1.9923334 | -3.1939378 | OR1D5 | C17orf2 OR17-2 OR17-5Homo sapiens olfactory receptor, family 1, subfamily D, member 5 (OR1D5), mRNA [NM_014566] |
| 0 | -1.9900599 | -3.200612 | XLOC_004839 | BROAD Institute lincRNA (XLOC_004839), lincRNA [TCONS_00010350] |
| 0 | -1.9846325 | -1.6409907 | HNF4G | NR2A2 NR2A3 hepatocyte nuclear factor 4, gamma [Source:HGNC Symbol;Acc:5026] [ENST00000396419] |
| 0 | -1.9649158 | -3.1877875 | XLOC_I2_009216 | BROAD Institute lincRNA (XLOC_I2_009216), lincRNA [TCONS_I2_00017234] |
| 0 | -1.9272666 | -2.5254693 | LAMA4 | LAMA3 LAMA4*-1 Homo sapiens laminin, alpha 4 (LAMA4), transcript variant 3, mRNA [NM_001105207] |
| 0 | -1.9270968 | -3.1304202 | | BX093647 Soares_testis_NHT Homo sapiens cDNA clone IMAGp998F023561 ; IMAGE:1409665, mRNA sequence [BX093647] |
| 0 | -1.9243431 | -1.4084883 | TNRC6C | Homo sapiens trinucleotide repeat containing 6C (TNRC6C), transcript variant 1, mRNA [NM_001142640] |
| 0 | -1.9172974 | -2.3211799 | XLOC_009152 | BROAD Institute lincRNA (XLOC_009152), lincRNA [TCONS_00019914] |
| 0 | -1.9161887 | -1.6992121 | XLOC_I2_007449 | BROAD Institute lincRNA (XLOC_I2_007449), lincRNA [TCONS_I2_00013842] |
| 0 | -1.9159961 | -3.1193051 | XIST | Homo sapiens X (inactive)-specific transcript (non-protein coding) (XIST), non-coding RNA [NR_001564] |
| 0 | -1.9067798 | -1.6977077 | GNG4 | Homo sapiens guanine nucleotide binding protein (G protein), gamma 4 (GNG4), transcript variant 1, mRNA [NM_001098722] |
| 0 | -1.904398 | -1.1191063 | XLOC_013952 | BROAD Institute lincRNA (XLOC_013952), lincRNA [TCONS_00029031] |
| 0 | -1.8908734 | -1.166347 | LOC645262 | PREDICTED: Homo sapiens phosphodiesterase 4D interacting protein-like (LOC645262), mRNA [XM_003403419] |
| 0 | -1.8890991 | -3.4179997 | LOC100129572 | Homo sapiens cDNA FLJ38722 fis, clone KIDNE2010084. [AK096041] |
| 0 | -1.8866005 | -2.3796916 | CXorf61 | CT83 KK-LC-1 KKLC1 Homo sapiens chromosome X open reading frame 61 (CXorf61), mRNA [NM_001017978] |
| 0 | -1.886539 | -3.0666947 | DDX25 | GRTH Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 25 (DDX25), mRNA [NM_013264] |
| 0 | -1.8806214 | -3.043754 | VTCN1 | B7-H4 B7H4 B7S1 B7X Homo sapiens V-set domain containing T cell activation inhibitor 1 (VTCN1), mRNA [NM_024626] |
| 0 | -1.8611178 | -3.0601172 | XLOC_I2_009493 | BROAD Institute lincRNA (XLOC_I2_009493), lincRNA [TCONS_I2_00017938] |
| 0 | -1.8594155 | -2.3572755 | XLOC_012863 | BROAD Institute lincRNA (XLOC_012863), lincRNA [TCONS_00026542] |
| 0 | -1.8592281 | -1.3057041 | XLOC_005371 | PREDICTED: Homo sapiens hypothetical LOC100506908 (LOC100506908), miscRNA [XR_108615] |
| 0 | -1.8478813 | -3.0421677 | XLOC_004427 | DB294021 Y79AA1 Homo sapiens cDNA clone Y79AA1000242 5', mRNA sequence [DB294021] |
| 0 | -1.8313565 | -3.0301528 | XLOC_013611 | BROAD Institute lincRNA (XLOC_013611), lincRNA [TCONS_00027982] |
| 0 | -1.8304877 | -3.042728 | | tetratricopeptide repeat domain 6 [Source:HGNC Symbol;Acc:19739] [ENST00000382320] |
| 0 | -1.8283806 | -3.023085 | CALHM2 | FAM26B calcium homeostasis modulator 2 [Source:HGNC Symbol;Acc:23493] [ENST00000393235] |
| 0 | -1.8208241 | -1.7290006 | XLOC_000909 | Q2QUZ4_ORYSA (Q2QUZ4) Tetraspanin family, partial (5%) [THC2731633] |
| 0 | -1.8203163 | -1.2976165 | XLOC_009813 | 602695014F1 NIH_MGC_97 Homo sapiens cDNA clone IMAGE:4827386 5', mRNA sequence [BG721449] |
| 0 | -1.8168406 | -2.720613 | XLOC_I2_010863 | |
| 0 | -1.8087773 | -1.6241236 | DISC1 | Homo sapiens disrupted in schizophrenia 1 (DISC1), transcript variant q, mRNA [NM_001164554] |
| 0 | -1.8046427 | -3.0065188 | PCDH19 | EFMR EIEE9 Homo sapiens protocadherin 19 (PCDH19), transcript variant 3, mRNA [NM_001184880] |
| 0 | -1.7932129 | -2.7960358 | ACR | Homo sapiens acrosin (ACR), mRNA [NM_001097] |
| 0 | -1.7825966 | -1.3708444 | MPZL3 | Homo sapiens myelin protein zero-like 3 (MPZL3), mRNA [NM_198275] |
| 0 | -1.7800794 | -1.1790915 | PCSK5 | PC5 PC6 PC6A SPC6 Homo sapiens proprotein convertase subtilisin/kexin type 5 (PCSK5), transcript variant 2, mRNA [NM_006200] |
| 0 | -1.77494 | -1.2791562 | DENND1B | C1ORF18 C1orf218 FANHomo sapiens DENN/MADD domain containing 1B (DENND1B), transcript variant 3, mRNA [NM_001195215] |
| 0 | -1.7701249 | -2.1753922 | SYN3 | Homo sapiens synapsin III (SYN3), transcript variant IIIa, mRNA [NM_003490] |
| 0 | -1.7642002 | -1.3587527 | SLC9A5 | NHE5 solute carrier family 9 (sodium/hydrogen exchanger), member 5 [Source:HGNC Symbol;Acc:11078] [ENST00000360183] |
| 0 | -1.7581501 | -1.7626977 | ZNF214 | BAZ-1 BAZ1 Homo sapiens zinc finger protein 214 (ZNF214), mRNA [NM_013249] |
| 0 | -1.752851 | -1.4429626 | CA1 | CA-1 CAB Car1 Homo sapiens carbonic anhydrase I (CA1), transcript variant 2, mRNA [NM_001738] |
| 0 | -1.7390709 | -2.9326315 | XLOC_001596 | BROAD Institute lincRNA (XLOC_001596), lincRNA [TCONS_00003801] |
| 0 | -1.7381363 | -1.2102847 | XLOC_006623 | BROAD Institute lincRNA (XLOC_006623), lincRNA [TCONS_00013981] |
| 0 | -1.7228937 | -1.8397512 | CCDC163P | C1orf231 Homo sapiens coiled-coil domain containing 163, pseudogene (CCDC163P), transcript variant 1, non-coding RNA [NR_033298] |
| 0 | -1.7185345 | -2.0554976 | MED23 | ARC130 CRSP130 CRSF Homo sapiens mediator complex subunit 23 (MED23), transcript variant 2, mRNA [NM_015979] |
| 0 | -1.7157836 | -1.1053996 | NHLRC1 | EPM2A EPM2B MALIN bHomo sapiens NHL repeat containing 1 (NHLRC1), mRNA [NM_198586] |
| 0 | -1.7154455 | -1.1412711 | | PREDICTED: Homo sapiens hypothetical LOC100506484 (LOC100506484), miscRNA [XR_108364] |
| 0 | -1.712338 | -1.2877874 | MOXD2P | MOXD2 Homo sapiens monooxygenase, DBH-like 2, pseudogene (MOXD2P), non-coding RNA [NR_024346] |

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|---|------------|------------|----------------|----------------------|--|
| 0 | -1.7014294 | -1.6909008 | SAGE1 | CT14 SAGE | Homo sapiens sarcoma antigen 1 (SAGE1), mRNA [NM_018666] |
| 0 | -1.6991897 | -1.1655412 | LOC729159 | | PREDICTED: Homo sapiens UPF0607 protein ENSP00000381418-like (LOC729159), mRNA [XM_001129515] |
| 0 | -1.6903462 | -1.5381908 | | | Homo sapiens cDNA, FLJ97323. [AK307375] |
| 0 | -1.687222 | -2.8949065 | C4orf6 | aC1 | Homo sapiens chromosome 4 open reading frame 6 (C4orf6), mRNA [NM_005750] |
| 0 | -1.6858077 | -1.7843723 | SERPINA3 | AACT ACT GIG25 | Homo sapiens serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3), mRNA [NM_001085] |
| 0 | -1.6842704 | -2.0393772 | THAP7-AS1 | | Homo sapiens THAP7 antisense RNA 1 (non-protein coding) (THAP7-AS1), transcript variant 1, non-coding RNA [NR_027051] |
| 0 | -1.6826763 | -2.8519855 | XLOC_006043 | | PREDICTED: Homo sapiens hypothetical LOC100506725, transcript variant 2 (LOC100506725), miscRNA [XR_108768] |
| 0 | -1.6802359 | -1.2649069 | XLOC_003674 | | BROAD Institute lincRNA (XLOC_003674), lincRNA [TCONS_00008213] |
| 0 | -1.6689167 | -2.9290938 | PHF20L1 | | PHD finger protein 20-like 1 [Source:HGNC Symbol;Acc:24280] [ENST00000361997] |
| 0 | -1.668571 | -1.1896005 | XLOC_I2_005692 | | BROAD Institute lincRNA (XLOC_I2_005692), lincRNA [TCONS_I2_00010604] |
| 0 | -1.6657157 | -1.4610658 | XLOC_002595 | | BROAD Institute lincRNA (XLOC_002595), lincRNA [TCONS_00005964] |
| 0 | -1.6524887 | -1.5352645 | AGXT | AGT AGT1 AGXT1 PH1 | Homo sapiens alanine-glyoxylate aminotransferase (AGXT), mRNA [NM_000030] |
| 0 | -1.6514959 | -3.3514957 | | | Q6E5H0_VERDA (Q6E5H0) NADH dehydrogenase subunit 1 (Fragment), partial (8%) [THC2754661] |
| 0 | -1.6502047 | -1.2475266 | LOC100507134 | | PREDICTED: Homo sapiens hypothetical LOC100507134 (LOC100507134), miscRNA [XR_108488] |
| 0 | -1.6498513 | -2.829361 | MKRN9P | MKRN5 MKRN9 MKRN9P | Homo sapiens makorin ring finger protein pseudogene 6, mRNA (cDNA clone IMAGE:5278542). [BC067894] |
| 0 | -1.6486678 | -1.9513164 | CTAG2 | CAMEL CT2 CT6.2 CT6 | Homo sapiens cancer/testis antigen 2 (CTAG2), transcript variant 2, mRNA [NM_020994] |
| 0 | -1.6337047 | -1.1169586 | | | Uncharacterized protein [Source:UniProtKB/TrEMBL;Acc:E5RGS3] [ENST00000519738] |
| 0 | -1.6315503 | -1.0629668 | XLOC_003803 | | BROAD Institute lincRNA (XLOC_003803), lincRNA [TCONS_00008949] |
| 0 | -1.6217799 | -2.8212395 | XLOC_004653 | | BROAD Institute lincRNA (XLOC_004653), lincRNA [TCONS_00010185] |
| 0 | -1.6146727 | -2.809309 | XLOC_002621 | | BROAD Institute lincRNA (XLOC_002621), lincRNA [TCONS_00005996] |
| 0 | -1.611887 | -2.8076138 | LINC00116 | NCRNA00116 | Homo sapiens long intergenic non-protein coding RNA 116 (LINC00116), non-coding RNA [NR_027063] |
| 0 | -1.6100307 | -2.8295808 | XLOC_002356 | | DA017974 ADRGL2 Homo sapiens cDNA clone ADRGL2012306 5', mRNA sequence [DA017974] |
| 0 | -1.6044307 | -1.2153182 | ARHGEF19 | WGEF | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 19 (ARHGEF19), mRNA [NM_153213] |
| 0 | -1.6036053 | -1.1810021 | XLOC_002716 | | BROAD Institute lincRNA (XLOC_002716), lincRNA [TCONS_00006104] |
| 0 | -1.596745 | -2.746243 | MTRNR2L5 | | Homo sapiens MT-RNR2-like 5 (MTRNR2L5), mRNA [NM_001190478] |
| 0 | -1.5953531 | -1.785428 | SERPINE3 | | Homo sapiens serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 3 (SERPINE3), mRNA [NM_001101320] |
| 0 | -1.593143 | -2.0054278 | XLOC_013370 | | BROAD Institute lincRNA (XLOC_013370), lincRNA [TCONS_00027385] |
| 0 | -1.5908251 | -2.785554 | XLOC_008269 | | BROAD Institute lincRNA (XLOC_008269), lincRNA [TCONS_00017391] |
| 0 | -1.5881262 | -1.1149573 | DISC1 | | Homo sapiens disrupted in schizophrenia 1 (DISC1), transcript variant n, mRNA [NM_001164551] |
| 0 | -1.5754952 | -2.7728906 | ATP4B | ATP6B | Homo sapiens ATPase, H ⁺ /K ⁺ exchanging, beta polypeptide (ATP4B), mRNA [NM_000705] |
| 0 | -1.5634899 | -2.7343125 | XLOC_I2_013124 | | |
| 0 | -1.5627961 | -2.823433 | | | coiled-coil domain containing 162, pseudogene [Source:HGNC Symbol;Acc:21565] [ENST00000440451] |
| 0 | -1.5610323 | -1.2201924 | | | PREDICTED: Homo sapiens hypothetical protein LOC100128064 (LOC100128064), mRNA [XM_001725877] |
| 0 | -1.5572367 | -1.7081962 | XLOC_005730 | | zt85h04.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:729175 5', mRNA sequence [AA397666] |
| 0 | -1.5532355 | -2.8085847 | GIPC3 | C19orf64 DFNB15 DFNE | Homo sapiens GIPC PDZ domain containing family, member 3 (GIPC3), mRNA [NM_133261] |
| 0 | -1.5427928 | -2.9652715 | CALB1 | CALB | Homo sapiens calbindin 1, 28kDa (CALB1), mRNA [NM_004929] |
| 0 | -1.5404797 | -2.7426949 | LOC100131822 | | Homo sapiens cDNA FLJ46421 fis, clone THYMU3013197. [AK128841] |
| 0 | -1.5366573 | -2.7227197 | XLOC_I2_013295 | | BROAD Institute lincRNA (XLOC_I2_013295), lincRNA [TCONS_I2_00025695] |
| 0 | -1.5341783 | -1.0758605 | XLOC_001265 | | |
| 0 | -1.5266032 | -2.72184 | LOC100507410 | | Homo sapiens uncharacterized LOC100507410 (LOC100507410), transcript variant 1, non-coding RNA [NR_040018] |
| 0 | -1.5257411 | -2.787929 | KIAA0040 | | Homo sapiens KIAA0040 (KIAA0040), transcript variant 2, mRNA [NM_014656] |
| 0 | -1.5231752 | -1.33107 | LOC285419 | | Homo sapiens uncharacterized LOC285419 (LOC285419), transcript variant 2, non-coding RNA [NR_027106] |
| 0 | -1.5227737 | -1.1994648 | | | major histocompatibility complex, class I, P (pseudogene) [Source:HGNC Symbol;Acc:21196] [ENST00000411514] |
| 0 | -1.5145192 | -1.0509543 | CDRT8 | | qf35h11.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752069 3', mRNA sequence [AI150443] |
| 0 | -1.5017343 | -1.718061 | P39192 | | ALU5_HUMAN (P39192) Alu subfamily 5C sequence contamination warning entry, partial (13%) [THC2717546] |
| 0 | -1.4937072 | -2.7057037 | XLOC_I2_011922 | | BROAD Institute lincRNA (XLOC_I2_011922), lincRNA [TCONS_I2_00023650] |
| 0 | -1.4932408 | -2.0528111 | LOC339788 | | Homo sapiens uncharacterized LOC339788 (LOC339788), non-coding RNA [NR_015405] |
| 0 | -1.4927115 | -1.0049424 | XLOC_000939 | | BROAD Institute lincRNA (XLOC_000939), lincRNA [TCONS_00001609] |
| 0 | -1.4909563 | -1.1194072 | | | hydroxysteroid (17-beta) dehydrogenase 1 pseudogene 1 [Source:HGNC Symbol;Acc:5216] [ENST00000442612] |
| 0 | -1.4869871 | -1.254005 | ACE2 | ACEH | Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA [NM_021804] |
| 0 | -1.486721 | -2.4969769 | LOC339666 | | Homo sapiens uncharacterized LOC339666 (LOC339666), non-coding RNA [NR_038918] |
| 0 | -1.4867129 | -1.2310629 | XLOC_006980 | | BROAD Institute lincRNA (XLOC_006980), lincRNA [TCONS_00014913] |
| 0 | -1.4845004 | -1.4474082 | XLOC_014364 | | PT1.3_03_G05.r tumor1 Homo sapiens cDNA 5', mRNA sequence [AI525606] |
| 0 | -1.4836206 | -2.6696625 | XLOC_009500 | | BROAD Institute lincRNA (XLOC_009500), lincRNA [TCONS_00019702] |
| 0 | -1.4817605 | -1.5213866 | LOC100616530 | | Homo sapiens tospeak (LOC100616530), transcript variant 6, non-coding RNA [NR_038206] |
| 0 | -1.4795513 | -2.6806145 | XLOC_004227 | | BROAD Institute lincRNA (XLOC_004227), lincRNA [TCONS_00009205] |
| 0 | -1.4769297 | -2.614676 | STAB1 | CLEVER-1 FEEL-1 FEL | Homo sapiens stabilin 1 (STAB1), mRNA [NM_015136] |
| 0 | -1.4753289 | -2.6769614 | XLOC_014263 | | BROAD Institute lincRNA (XLOC_014263), lincRNA [TCONS_00029612] |
| 0 | -1.4712148 | -1.7310967 | GOLGA6L1 | | Homo sapiens golgin A6 family-like 1 (GOLGA6L1), mRNA [NM_001001413] |
| 0 | -1.4665656 | -1.8090887 | DNAH10 | | Homo sapiens dynein, axonemal, heavy chain 10 (DNAH10), mRNA [NM_207437] |

| | | | | |
|---|------------|------------|----------------|---|
| 0 | -1.4631457 | -2.5956569 | XLOC_I2_003292 | BROAD Institute lincRNA (XLOC_I2_003292), lincRNA [TCONS_I2_00006110] |
| 0 | -1.4622145 | -1.3484554 | RPS6KL1 | Homo sapiens ribosomal protein S6 kinase-like 1 (RPS6KL1), mRNA [NM_031464] |
| 0 | -1.4597192 | -1.6780457 | HTATSF1P2 | Homo sapiens mRNA; cDNA DKFZp686I2072 (from clone DKFZp686I2072). [BX648511] |
| 0 | -1.4554381 | -2.677105 | XLOC_011583 | PREDICTED: Homo sapiens hypothetical LOC100507166 (LOC100507166), miscRNA [XR_109222] |
| 0 | -1.4532342 | -1.5106168 | ARSD-AS1 | PREDICTED: Homo sapiens hypothetical LOC100506356 (LOC100506356), miscRNA [XR_110924] |
| 0 | -1.4525714 | -1.3560691 | ALOX15 | 15-LOX-1 15LOX-1 Homo sapiens arachidonate 15-lipoxygenase (ALOX15), mRNA [NM_001140] |
| 0 | -1.4524384 | -2.7867951 | ARL9 | Homo sapiens ADP-ribosylation factor-like 9 (ARL9), mRNA [NM_206919] |
| 0 | -1.4461813 | -1.1654143 | XLOC_006181 | 602722001F1 NIH_MGC_97 Homo sapiens cDNA clone IMAGE:4838689 5', mRNA sequence [BG773244] |
| 0 | -1.3991346 | -1.7584057 | AQP8 | AQP-8 Homo sapiens aquaporin 8 (AQP8), mRNA [NM_001169] |
| 0 | -1.3970003 | -1.3103123 | XLOC_011299 | BROAD Institute lincRNA (XLOC_011299), lincRNA [TCONS_00023453] |
| 0 | -1.3905864 | -2.9039469 | FUT9 | Fuc-TIX Homo sapiens fucosyltransferase 9 (alpha (1,3) fucosyltransferase) (FUT9), mRNA [NM_006581] |
| 0 | -1.3827972 | -1.8840685 | RIBC1 | 2610028I09Rik Homo sapiens RIB43A domain with coiled-coils 1 (RIBC1), transcript variant 1, mRNA [NM_001031745] |
| 0 | -1.3636084 | -1.7862811 | LOC390937 | PREDICTED: Homo sapiens Ets2 repressor factor-like (LOC390937), mRNA [XM_003403707] |
| 0 | -1.340497 | -2.6471972 | LOC100508751 | PREDICTED: Homo sapiens hypothetical LOC100508751 (LOC100508751), miscRNA [XR_112271] |
| 0 | -1.3398237 | -1.234201 | NRIP3 | C11orf14 NY-SAR-105 Homo sapiens nuclear receptor interacting protein 3 (NRIP3), mRNA [NM_020645] |
| 0 | -1.3258269 | -4.2729397 | EFR3B | KIAA0953 Homo sapiens mRNA for KIAA0953 protein, partial cds. [AB023170] |
| 0 | -1.3106155 | -1.0370722 | XLOC_003225 | BROAD Institute lincRNA (XLOC_003225), lincRNA [TCONS_00007244] |
| 0 | -1.3068638 | -1.103262 | DMBX1 | MBX OTX3 PAXB Homo sapiens diencephalon/mesencephalon homeobox 1 (DMBX1), transcript variant 2, mRNA [NM_147192] |
| 0 | -1.2986679 | -1.1673393 | PTPN5 | PTPSTEP STEP Homo sapiens protein tyrosine phosphatase, non-receptor type 5 (striatum-enriched) (PTPN5), transcript variant 1, mRNA [NM_006906] |
| 0 | -1.29192 | -1.4752393 | XLOC_002735 | BROAD Institute lincRNA (XLOC_002735), lincRNA [TCONS_00006134] |
| 0 | -1.2623305 | -2.3774362 | XLOC_006008 | BROAD Institute lincRNA (XLOC_006008), lincRNA [TCONS_00013372] |
| 0 | -1.261457 | -1.377028 | RGS11 | RS11 Homo sapiens regulator of G-protein signaling 11 (RGS11), transcript variant 2, mRNA [NM_003834] |
| 0 | -1.2556262 | -1.531507 | | Homo sapiens cDNA FLJ16171 fis, clone BRHIP2003272. [AK131247] |
| 0 | -1.2523031 | -1.2737966 | LEPR | CD295 LEP-R OB-R OB Homo sapiens leptin receptor (LEPR), transcript variant 3, mRNA [NM_001003679] |
| 0 | -1.2517707 | -1.0332451 | TM6SF1 | Homo sapiens transmembrane 6 superfamily member 1 (TM6SF1), transcript variant 1, mRNA [NM_023003] |
| 0 | -1.2356224 | -2.0959735 | XLOC_006283 | BROAD Institute lincRNA (XLOC_006283), lincRNA [TCONS_00014228] |
| 0 | -1.2240372 | -1.6847954 | EME2 | SLX2B gs125 Homo sapiens essential meiotic endonuclease 1 homolog 2 (S. pombe) (EME2), mRNA [NM_001010865] |
| 0 | -1.2072263 | -2.1017014 | ATP2B1 | PMCA1 PMCA1kb Homo sapiens ATPase, Ca ⁺⁺ transporting, plasma membrane 1 (ATP2B1), transcript variant 1, mRNA [NM_001001323] |
| 0 | -1.1976624 | -2.1970782 | HMGA1P7 | Homo sapiens high mobility group AT-hook 1 pseudogene 7 (HMGA1P7), non-coding RNA [NR_037938] |
| 0 | -1.195622 | -2.0337524 | | Q2RH40_MOOTA (Q2RH40) Inner-membrane translocator, partial (5%) [THC2750096] |
| 0 | -1.1923385 | -1.2490535 | SUN3 | SUNC1 Homo sapiens Sad1 and UNC84 domain containing 3 (SUN3), transcript variant 1, mRNA [NM_001030019] |
| 0 | -1.1894283 | -2.2780585 | SIRPD | PTPNS1L2 dJ576H24.4 Homo sapiens signal-regulatory protein delta (SIRPD), mRNA [NM_178460] |
| 0 | -1.1857204 | -1.1967411 | KRTAP20-3 | KAP19D KAP20.3 KRTA Homo sapiens keratin associated protein 20-3 (KRTAP20-3), mRNA [NM_001128077] |
| 0 | -1.176044 | -1.7889819 | CXADRP3 | Homo sapiens coxsackievirus and adenovirus receptor pseudogene 3 (CXADRP3), non-coding RNA [NR_024076] |
| 0 | -1.1735463 | -1.2267842 | XLOC_I2_001222 | BROAD Institute lincRNA (XLOC_I2_001222), lincRNA [TCONS_I2_00002729] |
| 0 | -1.1472521 | -1.5215364 | SNORD125 | Homo sapiens small nucleolar RNA, C/D box 125 (SNORD125), small nucleolar RNA [NR_003686] |
| 0 | -1.1395783 | -3.4581666 | LOC100506414 | PREDICTED: Homo sapiens hypothetical LOC100506414 (LOC100506414), miscRNA [XR_108963] |
| 0 | -1.1375346 | -2.1336613 | XLOC_000377 | BROAD Institute lincRNA (XLOC_000377), lincRNA [TCONS_00000293] |
| 0 | -1.1139574 | -3.0123954 | XLOC_010743 | Q8RLX7_STRPY (Q8RLX7) Collagen-like protein 2, partial (6%) [THC2606148] |
| 0 | -1.1121006 | -1.2405043 | XLOC_001642 | BROAD Institute lincRNA (XLOC_001642), lincRNA [TCONS_00003836] |
| 0 | -1.109591 | -1.2789321 | LOC729860 | Homo sapiens cDNA FLJ41667 fis, clone FEBRA2028366. [AK123661] |
| 0 | -1.1076908 | -1.632616 | LOC100129373 | Homo sapiens cDNA FLJ46014 fis, clone SPLEN2011252. [AK127907] |
| 0 | -1.0921273 | -1.0426769 | ADAM18 | ADAM27 tMDCIII Homo sapiens ADAM metalloproteinase domain 18 (ADAM18), transcript variant 1, mRNA [NM_014237] |
| 0 | -1.0870996 | -1.0338869 | PROP1 | CPHD2 PROP-1 Homo sapiens PROP paired-like homeobox 1 (PROP1), mRNA [NM_006261] |
| 0 | -1.0848973 | -2.1177006 | CCDC144A | Homo sapiens coiled-coil domain containing 144A (CCDC144A), mRNA [NM_014695] |
| 0 | -1.0679865 | -1.4335551 | LOC257396 | Homo sapiens uncharacterized LOC257396 (LOC257396), non-coding RNA [NR_034107] |
| 0 | -1.0628457 | -2.37569 | ZNF584 | zinc finger protein 584 [Source:HGNC Symbol;Acc:27318] [ENST00000354635] |
| 0 | -1.060601 | -4.1016335 | GALM | IBD1 Homo sapiens galactose mutarotase (aldose 1-epimerase) (GALM), mRNA [NM_138801] |
| 0 | -1.0527034 | -2.0380564 | XLOC_I2_002100 | CR741727 Soares_testis_NHT Homo sapiens cDNA clone IMAGp971J0269 ; IMAGE:1641700 5', mRNA sequence [CR741727] |
| 0 | -1.0505795 | -1.9714723 | XLOC_007488 | BROAD Institute lincRNA (XLOC_007488), lincRNA [TCONS_00016096] |
| 0 | -1.0486655 | -1.4175453 | PAPD5 | TRF4-2 Homo sapiens PAP associated domain containing 5 (PAPD5), transcript variant 1, mRNA [NM_001040284] |
| 0 | -1.0399017 | -1.5837021 | BCKDHA | BCKDE1A MSU MSUD1 branched chain keto acid dehydrogenase E1, alpha polypeptide [Source:HGNC Symbol;Acc:986] [ENST00000378196] |
| 0 | -1.0378156 | -1.0221763 | MAML3 | CAGH3 ERDA3 GDN MA Homo sapiens mastermind-like 3 (Drosophila) (MAML3), mRNA [NM_018717] |
| 0 | -1.0282683 | -2.3889174 | XLOC_000211 | BROAD Institute lincRNA (XLOC_000211), lincRNA [TCONS_00000953] |
| 0 | -1.0112336 | -1.2552242 | ATG4C | APG4-C APG4C AUTL1 Homo sapiens ATG4 autophagy related 4 homolog C (S. cerevisiae) (ATG4C), transcript variant 1, mRNA [NM_032852] |
| 0 | -1.0109515 | -1.2060361 | NCAM1 | CD56 MSK39 NCAM Homo sapiens neural cell adhesion molecule 1 (NCAM1), transcript variant 3, mRNA [NM_001076682] |
| 0 | -1.0046666 | -1.2523179 | LINC00339 | Homo sapiens long intergenic non-protein coding RNA 339 (LINC00339), transcript variant 1, non-coding RNA [NR_023918] |