

## Supplementary Table S3

List of miR-22 predicted targets. Comprehensive list of all predicted miR-22 targets found among the transcripts downregulated in RD18 NpBI-22 cells in the induced (IND) condition. The EIMMo miRNA target prediction server (<http://www.mirz.unibas.ch/EIMMo2/>) was used to perform the analysis.

	Gene description	Expected no. of seed matches under evolutionary selective pressure	Location of the seed matches within the 3'UTR
NM_005188	Homo sapiens Cas-Br-M (murine) ecotropic retroviral transforming sequence (CBL), mRNA.	1,4717	3'UTR ---X-----X-----X-X
NM_002868	Homo sapiens RAB5B, member RAS oncogene family (RAB5B), mRNA.	1,3413	3'UTR -X---X---X---
NM_002293	Homo sapiens laminin, gamma 1 (formerly LAMB2) (LAMC1), mRNA.	1,2831	3'UTR ---XX-----
NM_001039577	Homo sapiens cyclin L2 (CCNL2), transcript variant 2, mRNA.	1,2563	3'UTR --X-----X-----X--X--
NM_025250	Homo sapiens tweety homolog 3 (Drosophila) (TTYH3), mRNA.	1,1336	3'UTR ---X--XX-----
NM_033224	Homo sapiens purine-rich element binding protein B (PURB), mRNA.	1,0369	3'UTR X-----X-----
NM_003388	Homo sapiens CAP-GLY domain containing linker protein 2 (CLIP2), transcript variant 1, mRNA.	1,0179	3'UTR ---X--X-X-
NM_022497	Homo sapiens mitochondrial ribosomal protein S25 (MRPS25), nuclear gene encoding mitochondrial protein, mRNA.	1,0177	3'UTR -X-----XX--
NM_024090	Homo sapiens ELOVL family member 6, elongation of long chain fatty acids (FEN1/Elo2, SUR4/Elo3-like, yeast) (ELOVL6), mRNA.	0,9015	3'UTR -X--X-----
NM_005909	Homo sapiens microtubule-associated protein 1B (MAP1B), mRNA.	0,7875	3'UTR -----X-----X--
NM_198046	Homo sapiens zinc finger, DHHC-type containing 16 (ZDHC16), transcript variant 5, mRNA.	0,7702	3'UTR XX-
NM_018214	Homo sapiens leucine rich repeat containing 1 (LRRC1), mRNA.	0,6033	3'UTR --X----
NM_003931	Homo sapiens WAS protein family, member 1 (WASF1), transcript variant 1, mRNA.	0,6033	3'UTR --X--
NM_024334	Homo sapiens transmembrane protein 43 (TMEM43), mRNA.	0,5938	3'UTR -XX-----
NM_001315	Homo sapiens mitogen-activated protein kinase 14 (MAPK14), transcript variant 1, mRNA.	0,5893	3'UTR -----X-----
NM_003315	Homo sapiens DnaJ (Hsp40) homolog, subfamily C, member 7 (DNAJC7), mRNA.	0,5869	3'UTR -X
NM_172316	Homo sapiens Meis homeobox 2 (MEIS2), transcript variant h, mRNA.	0,5865	3'UTR ----X--
NM_001431	Homo sapiens erythrocyte membrane protein band 4.1-like 2 (EPB41L2), mRNA.	0,5657	3'UTR ----X--
NM_003887	Homo sapiens development and differentiation enhancing factor 2 (DDEF2), mRNA.	0,5591	3'UTR -----X---X-
NM_001080419	Homo sapiens unkempt homolog (Drosophila) (UNK), mRNA.	0,5557	3'UTR ----X--
NM_002305	Homo sapiens lectin, galactoside-binding, soluble, 1 (galectin 1) (LGALS1), mRNA.	0,5534	3'UTR X
NM_002523	Homo sapiens neuronal pentraxin II (NPTX2), mRNA.	0,5533	3'UTR ----X--
NM_002128	Homo sapiens high-mobility group box 1 (HMGB1), mRNA.	0,5533	3'UTR --X-----
NM_032530	Homo sapiens zinc finger protein 594 (ZNF594), mRNA.	0,5472	3'UTR --XX-----
NM_001001890	Homo sapiens runt-related transcription factor 1 (acute myeloid leukemia 1; aml1 oncogene) (RUNX1), transcript variant 2, mRNA.	0,5275	3'UTR -----X-----X-
NM_032758	Homo sapiens PHD finger protein 5A (PHF5A), mRNA.	0,5253	3'UTR -XX--
NM_147223	Homo sapiens nuclear receptor coactivator 1 (NCOA1), transcript variant 2, mRNA.	0,4955	3'UTR ---X-----
NM_194247	Homo sapiens heterogeneous nuclear ribonucleoprotein A3 (HNRPA3), mRNA.	0,495	3'UTR -X-----
NM_020135	Homo sapiens Werner helicase interacting protein 1 (WRNIP1), transcript variant 1, mRNA.	0,4819	3'UTR -X-
NM_002541	Homo sapiens oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide) (OGDH), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA.	0,4665	3'UTR ---X--
NM_002883	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA.	0,4665	3'UTR --X--X
NM_006283	Homo sapiens transforming, acidic coiled-coil containing protein 1 (TACC1), mRNA.	0,4645	3'UTR -----X--X-----
NM_005540	Homo sapiens inositol polyphosphate-5-phosphatase, 75kDa (INPP5B), nuclear gene encoding mitochondrial protein, mRNA.	0,4637	3'UTR -X-----
NM_003137	Homo sapiens SFRS protein kinase 1 (SRPK1), mRNA.	0,4252	3'UTR -----X-
NM_001079559	Homo sapiens heterogeneous nuclear ribonucleoprotein U-like 2 (HNRPUL2), mRNA.	0,4252	3'UTR --X-
NM_000593	Homo sapiens transporter 1, ATP-binding cassette, sub-family B (MDR/TAP) (TAP1), mRNA.	0,4252	3'UTR X--
NM_004879	Homo sapiens etoposide induced 2.4 mRNA (EI24), transcript variant 1, mRNA.	0,4061	3'UTR X----

NM_006227	Homo sapiens phospholipid transfer protein (PLTP), transcript variant 1, mRNA.	0,3616 3'UTR X-
NM_032034	Homo sapiens solute carrier family 4, sodium borate transporter, member 11 (SLC4A11), mRNA.	0,3289 3'UTR -X-
NM_003616	Homo sapiens survival of motor neuron protein interacting protein 1 (SIP1), transcript variant alpha, mRNA.	0,3269 3'UTR -X--
NM_006460	Homo sapiens hexamethylene bis-acetamide inducible 1 (HEXIM1), mRNA.	0,315 3'UTR ----X----
NM_032765	Homo sapiens tripartite motif-containing 52 (TRIM52), mRNA.	0,2911 3'UTR ---X--
NM_201428	Homo sapiens reticulon 3 (RTN3), transcript variant 2, mRNA.	0,2368 3'UTR -----X---
NM_178858	Homo sapiens sideroflexin 2 (SFXN2), mRNA.	0,2342 3'UTR ---X----
NM_004838	Homo sapiens homer homolog 3 (Drosophila) (HOMER3), mRNA.	0,2342 3'UTR -X
NM_013296	Homo sapiens G-protein signaling modulator 2 (AGS3-like, C. elegans) (GPSM2), mRNA.	0,2342 3'UTR -X-
NM_005990	Homo sapiens serine/threonine kinase 10 (STK10), mRNA.	0,2342 3'UTR X-----
NM_003721	Homo sapiens regulatory factor X-associated ankyrin-containing protein (RFXANK), transcript variant 1, mRNA.	0,2342 3'UTR X-
NM_000405	Homo sapiens GM2 ganglioside activator (GM2A), mRNA.	0,2323 3'UTR -----X--
NM_013237	Homo sapiens PRELI domain containing 1 (PRELID1), mRNA.	0,2323 3'UTR -X-
NM_002526	Homo sapiens 5'-nucleotidase, ecto (CD73) (NT5E), mRNA.	0,2323 3'UTR -----X--
NM_000310	Homo sapiens palmitoyl-protein thioesterase 1 (ceroid-lipofuscinosis, neuronal 1, infantile) (PPT1), mRNA.	0,2323 3'UTR ----X---
NM_001813	Homo sapiens centromere protein E, 312kDa (CENPE), mRNA.	0,2322 3'UTR X--
NM_001099404	Homo sapiens sodium channel, voltage-gated, type V, alpha subunit (SCN5A), transcript variant 3, mRNA.	0,2322 3'UTR -----X-----
NM_006407	Homo sapiens ADP-ribosylation-like factor 6 interacting protein 5 (ARL6IP5), mRNA.	0,2322 3'UTR X-----
NM_001096	Homo sapiens ATP citrate lyase (ACLY), transcript variant 1, mRNA.	0,1539 3'UTR ----X-
NM_005928	Homo sapiens milk fat globule-EGF factor 8 protein (MFG8), mRNA.	0,1377 3'UTR ---X-
NM_001048183	Homo sapiens phosphatase and actin regulator 4 (PHACTR4), transcript variant 1, mRNA.	0,0375 3'UTR -----X-----