

Table S1. Genes regulated by hsa-miR-23a-3p

Gene symbol	Interpretation
TSC1	Homo sapiens TSC complex subunit 1 (TSC1), transcript variant 1,mRNA.
BRWD1	Homo sapiens bromodomain and WD repeat domain containing 1 (BRWD1),transcript variant 3, mRNA.
TMEM64	Homo sapiens transmembrane protein 64 (TMEM64), transcript variant1, mRNA.
DNAJC21	Homo sapiens DnaJ heat shock protein family (Hsp40) member C21(DNAJC21), transcript variant 2, mRNA.
ATAT1	Homo sapiens alpha tubulin acetyltransferase 1 (ATAT1), transcript variant 1, mRNA.
TPM3	Homo sapiens tropomyosin 3 (TPM3), transcript variant Tpm3.2, mRNA.
ZNF275	Homo sapiens zinc finger protein 275 (ZNF275), transcript variant2, mRNA.
PLAG1	Homo sapiens PLAG1 zinc finger (PLAG1), transcript variant 2, mRNA.
FSD1L	Homo sapiens fibronectin type III and SPRY domain containing 1 like(FSD1L), transcript variant 3, mRNA.
SLC6A15	Homo sapiens solute carrier family 6 member 15 (SLC6A15),transcript variant 3, mRNA.
ZNF268	Homo sapiens zinc finger protein 268 (ZNF268), transcript variant2, mRNA.
ZNF701	Homo sapiens zinc finger protein 701 (ZNF701), transcript variant1, mRNA.
GGA3	Homo sapiens Golgi associated, gamma adaptin ear containing, ARF binding protein 3 (GGA3), transcript variant 1, mRNA.
CD302	Homo sapiens CD302 molecule (CD302), transcript variant 2, mRNA.
SEMA6D	Homo sapiens semaphoring 6D (SEMA6D), transcript variant 7, mRNA.
PIK3R1	Homo sapiens phosphoinositide-3-kinase regulatory subunit 1(PIK3R1), transcript variant 4, mRNA.
MYH10	Homo sapiens myosin heavy chain 10 (MYH10), transcript variant 1,mRNA.
GLS	Homo sapiens glutaminase (GLS), transcript variant 2, mRNA; nuclear gene for mitochondrial product.
SDHD	Homo sapiens succinate dehydrogenase complex subunit D (SDHD),transcript variant 2, mRNA; nuclear gene for mitochondrial product.
GRTF1	Homo sapiens growth hormone regulated TBC protein 1 (GRTF1),transcript variant 2, mRNA.
MEM170A	Homo sapiens transmembrane protein 170A (TMEM170A), transcript variant 2, mRNA.
ST7L	Homo sapiens suppression of tumorigenicity 7 like (ST7L),transcript variant 7, mRNA.
MMGT1	Homo sapiens membrane magnesium transporter 1 (MMGT1), transcript variant 2, mRNA.
PPARGC1A	Homo sapiens PPARG coactivator 1 alpha (PPARGC1A), transcript variant 1, mRNA.
MGAT5	Homo sapiens alpha-1,6-mannosylglycoprotein6-beta-N-acetylglucosaminyltransferase (MGAT5), transcript variant
FOXO3	Homo sapiens forkhead box O3 (FOXO3), transcript variant 1, mRNA.
FUT4	Homo sapiens fucosyltransferase 4 (FUT4), mRNA.
SOCS6	Homo sapiens suppressor of cytokine signaling 6 (SOCS6), mRNA.
TERF2	Homo sapiens telomeric repeat binding factor 2 (TERF2), mRNA.
UQCRCF1	Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCRCF1), mRNA; nuclear gene for mitochondrial
LMAN2	Homo sapiens lectin, mannose binding 2 (LMAN2), mRNA.
RNF38	Homo sapiens ring finger protein 38 (RNF38), transcript variant 1,mRNA.

DYNLL2	Homo sapiens dynein light chain LC8-type 2 (DYNLL2), mRNA.
STT3B	Homo sapiens STT3 oligosaccharyltransferase complex catalytic subunit B (STT3B), mRNA.
SPTY2D1	Homo sapiens SPT2 chromatin protein domain containing 1 (SPTY2D1),mRNA.

Table S2. Genes regulated by hsa-miR-210-3p

Gene symbol	Interpretation
RPL22	Homo sapiens ribosomal protein L22 (RPL22), mRNA.
MITF	Homo sapiens melanocyte inducing transcription factor (MITF),transcript variant 4, mRNA.
FGFRL1	Homo sapiens fibroblast growth factor receptor like 1 (FGFRL1),transcript variant 1, mRNA.
GTDC1	Homo sapiens glycosyltransferase like domain containing 1 (GTDC1),transcript variant 1, mRNA.
U2AF2	Homo sapiens U2 small nuclear RNA auxiliary factor 2 (U2AF2),transcript variant 2, mRNA.
SEH1L	Homo sapiens SEH1 like nucleoporin (SEH1L), transcript variant 1,mRNA.
SCN1B	Homo sapiens sodium voltage-gated channel beta subunit 1 (SCN1B),transcript variant a, mRNA.
HMGCS1	Homo sapiens 3-hydroxy-3-methylglutaryl-CoA synthase 1 (HMGCS1),transcript variant 1, mRNA.
FOXP3	Homo sapiens forkhead box P3 (FOXP3), transcript variant 2, mRNA.
CBX1	Homo sapiens chromobox 1 (CBX1), transcript variant 2, mRNA.
TFRC	Homo sapiens transferrin receptor (TFRC), transcript variant 2,mRNA.
DDAH1	Homo sapiens dimethylarginine dimethylaminohydrolase 1 (DDAH1),transcript variant 2, mRNA.
GIT2	Homo sapiens GIT ArfGAP 2 (GIT2), transcript variant 6, mRNA.
ATG7	Homo sapiens autophagy related 7 (ATG7), transcript variant 2,mRNA.
RCC2	Homo sapiens regulator of chromosome condensation 2 (RCC2),transcript variant 2, mRNA.
VAMP4	Homo sapiens vesicle associated membrane protein 4 (VAMP4),transcript variant 2, mRNA.
RUNX1T1	Homo sapiens RUNX1 partner transcriptional co-repressor 1(RUNX1T1), transcript variant 5, mRNA.
NFIC	Homo sapiens nuclear factor I C (NFIC), transcript variant 1, mRNA.
TP53I11	Homo sapiens tumor protein p53 inducible protein 11 (TP53I11),transcript variant 1, mRNA.
ERP27	Homo sapiens endoplasmic reticulum protein 27 (ERP27), transcript variant 2, mRNA.
ZNF618	Homo sapiens zinc finger protein 618 (ZNF618), transcript variant2, mRNA.
VMP1	Homo sapiens vacuole membrane protein 1 (VMP1), transcript variant2, mRNA.
MRE11	Homo sapiens MRE11 homolog, double strand break repair nuclease(MRE11), transcript variant 3, mRNA.
DIMT1	Homo sapiens DIMT1 rRNA methyltransferase and ribosome maturation factor (DIMT1), transcript variant 2, mRNA.
CNTNAP5	Homo sapiens contactin associated protein family member 5(CNTNAP5), transcript variant 3, mRNA.
KCNJ6	Homo sapiens potassium inwardly rectifying channel subfamily Jmember 6 (KCNJ6), mRNA.

NPTX1	Homo sapiens neuronal pentraxin 1 (NPTX1), mRNA.
DYRK2	Homo sapiens dual specificity tyrosine phosphorylation regulated kinase 2 (DYRK2), transcript variant 1, mRNA.
HOXA1	Homo sapiens homeobox A1 (HOXA1), transcript variant 1, mRNA.
ACTR1A	Homo sapiens actin related protein 1A (ACTR1A), mRNA.
PKIA	Homo sapiens cAMP-dependent protein kinase inhibitor alpha (PKIA),transcript variant 1, mRNA.
UBQLN1	Homo sapiens ubiquilin 1 (UBQLN1), transcript variant 1, mRNA.
EHD2	Homo sapiens EH domain containing 2 (EHD2), mRNA.
SERTAD2	Homo sapiens SERTA domain containing 2 (SERTAD2), mRNA.
HECTD1	Homo sapiens HECT domain E3 ubiquitin protein ligase 1 (HECTD1),mRNA.
MNT	Homo sapiens MAX network transcriptional repressor (MNT), mRNA.
HIF3A	Homo sapiens hypoxia inducible factor 3 subunit alpha (HIF3A),transcript variant 2, mRNA.

Table S3. Genes regulated by hsa-miR-328-3p

Gene symbol	Interpretation
HNRNPL	Homo sapiens heterogeneous nuclear ribonucleoprotein L (HNRNPL),transcript variant 2, mRNA.
NDUFV3	Homo sapiens NADH: ubiquinone oxidoreductase subunit V3 (NDUFV3),transcript variant 2, mRNA; nuclear gene for mitochondrial product.
SKA1	Homo sapiens spindle and kinetochore associated complex subunit 1(SKA1), transcript variant 1, mRNA.
UBTF	Homo sapiens upstream binding transcription factor (UBTF),transcript variant 2, mRNA.
PTPRJ	Homo sapiens protein tyrosine phosphatase receptor type J (PTPRJ),transcript variant 2, mRNA.
EZR	Homo sapiens ezrin (EZR), transcript variant 2, mRNA.
ARHGEF25	Homo sapiens Rho guanine nucleotide exchange factor 25 (ARHGEF25),transcript variant 3, mRNA.
SZRD1	Homo sapiens SUZ RNA binding domain containing 1 (SZRD1),transcript variant 1, mRNA.
ORMDL1	Homo sapiens ORMDL sphingolipid biosynthesis regulator 1 (ORMDL1),transcript variant 2, mRNA.
MAP4	Homo sapiens microtubule associated protein 4 (MAP4), transcript variant 4, mRNA.
OTUD5	Homo sapiens OTU deubiquitinase 5 (OTUD5), transcript variant 2,mRNA.
ETV3	Homo sapiens ETS variant transcription factor 3 (ETV3), transcript variant 1, mRNA.
FKBP5	Homo sapiens FKBP prolyl isomerase 5 (FKBP5), transcript variant 2,mRNA.
MKI67	Homo sapiens marker of proliferation Ki-67 (MKI67), transcript variant 2, mRNA.
TYW3	Homo sapiens tRNA-yW synthesizing protein 3 homolog (TYW3),transcript variant 2, mRNA.
HSDL2	Homo sapiens hydroxysteroid dehydrogenase like 2 (HSDL2),transcript variant 2, mRNA.
BACE1	Homo sapiens beta-secretase 1 (BACE1), transcript variant e, mRNA.
SNX12	Homo sapiens sorting nexin 12 (SNX12), transcript variant 1, mRNA.
POM121	Homo sapiens POM121 transmembrane nucleoporin (POM121), transcript variant 1, mRNA.

STT3A	Homo sapiens STT3 oligosaccharyltransferase complex catalytic subunit A (STT3A), transcript variant 1, mRNA.
SMC1A	Homo sapiens structural maintenance of chromosomes 1A (SMC1A), transcript variant 2, mRNA.
RALGAPB	Homo sapiens Ral GTPase activating protein non-catalytic subunit beta (RALGAPB), transcript variant 2, mRNA.
TMEM132B	Homo sapiens transmembrane protein 132B (TMEM132B), transcript variant 2, mRNA.
CBX6	Homo sapiens chromobox 6 (CBX6), transcript variant 2, mRNA.
HMGB1	Homo sapiens high mobility group box 1 (HMGB1), transcript variant 3, mRNA.
AGO1	Homo sapiens argonaute RISC component 1 (AGO1), transcript variant 1, mRNA.
KCNK6	Homo sapiens potassium two pore domain channel subfamily K member 6 (KCNK6), mRNA.
SCD	Homo sapiens stearoyl-CoA desaturase (SCD), mRNA.
LPCAT3	Homo sapiens lysophosphatidylcholine acyltransferase 3 (LPCAT3), mRNA.
TMOD3	Homo sapiens tropomodulin 3 (TMOD3), mRNA.
TMEM33	Homo sapiens transmembrane protein 33 (TMEM33), mRNA.

Table S4. Genes regulated by hsa-miR-425-3p

Gene symbol	Interpretation
VAV3	Homo sapiens vav guanine nucleotide exchange factor 3 (VAV3), transcript variant 2, mRNA.
MECP2	Homo sapiens methyl-CpG binding protein 2 (MECP2), transcript variant 2, mRNA.
ISLR2	Homo sapiens immunoglobulin superfamily containing leucine rich repeat 2 (ISLR2), transcript variant 1, mRNA.
GABPB2	Homo sapiens GA binding protein transcription factor subunit beta 2 (GABPB2), transcript variant 3, mRNA.
RAC1	Homo sapiens Rac family small GTPase 1 (RAC1), transcript variant Rac1, mRNA.
SH3RF2	Homo sapiens SH3 domain containing ring finger 2 (SH3RF2), mRNA.

Table S5. Genes regulated by hsa-miR-451a

Gene symbol	Interpretation
hsa-miR-451a IL6R	Homo sapiens interleukin 6 receptor (IL6R), transcript variant 1, mRNA