

Box S1. Inflammation-related genes (IRGs) integrated from GeneCards and PubMed literature.

Gene

ABCA1

ABI1

ACVR1B

ACVR2A

ADM

ADORA2B

ADRM1

AHR

APLNR

AQP9

ATP2A2

ATP2B1

ATP2C1

AXL

BDKRB1

BEST1

BST2

BTG2

C3AR1

C5AR1

CALCRL

CCL17

CCL2

CCL20

CCL22

CCL24

CCL5

CCL7

CCR7

CCRL2

CD14

CD40

CD48

CD55

CD69

CD70

CD82

CDKN1A

CHST2

CLEC5A

CMKLR1

CSF1

CSF3

CSF3R

CX3CL1
CXCL10
CXCL11
CXCL6
CXCL9
CXCR6
CYBB
DCBLD2
EBI3
EDN1
EIF2AK2
EMP3
ADGRE1
EREG
F3
FFAR2
FPR1
FZD5
GABBR1
GCH1
GNA15
GNAI3
GP1BA
GPC3
GPR132
GPR183
HAS2
HBEGF
HIF1A
HPN
HRH1
ICAM1
ICAM4
ICOSLG
IFITM1
IFNAR1
IFNGR2
IL10
IL10RA
IL12B
IL15
IL15RA
IL18
IL18R1
IL18RAP
IL1A

IL1B
IL1R1
IL2RB
IL4R
IL6
IL7R
CXCL8
INHBA
IRAK2
IRF1
IRF7
ITGA5
ITGB3
ITGB8
KCNA3
KCNJ2
KCNMB2
KIF1B
KLF6
LAMP3
LCK
LCP2
LDLR
LIF
LPAR1
LTA
LY6E
LYN
MARCO
MEFV
MEP1A
MET
MMP14
MSR1
MXD1
MYC
NAMPT
NDP
NFKB1
NFKBIA
NLRP3
NMI
NMUR1
NOD2
NPFFR2
OLR1

OPRK1
OSM
OSMR
P2RX4
P2RX7
P2RY2
PCDH7
PDE4B
PDPN
PIK3R5
PLAUR
PROK2
PSEN1
PTAFR
PTGER2
PTGER4
PTGIR
PTPRE
PVR
RAF1
RASGRP1
RELA
RGS1
RGS16
RHOG
RIPK2
RNF144B
ROS1
RTP4
SCARF1
SCN1B
SELE
SELL
SELENOS
SEMA4D
SERPINE1
SGMS2
SLAMF1
SLC11A2
SLC1A2
SLC28A2
SLC31A1
SLC31A2
SLC4A4
SLC7A1
SLC7A2

SPHK1
SRI
STAB1
TACR1
TACR3
TAPBP
TIMP1
TLR1
TLR2
TLR3
TNFAIP6
TNFRSF1B
TNFRSF9
TNFSF10
TNFSF15
TNFSF9
TPBG
VIP
IL10RB
IFNAR2-IL10RB
TNF
ADAM17
TGFB1
TLR4
CRP
PTGS2
RIPK1
IFNG
IL23R
CCL3
PDGFRA
IAH1
IL37
EGFR
IL4
IL17A
IL1RN
HLA-DRB1
IL13
ABCB1
STAT3
IRF5
CCL4
ATG16L1
IFNB1
CD163

AIF1
MAPK14
TNFRSF1A
PTGS1
ARPC1B
ALOX5
CARD8
IL2
IL5
IRGM
NLRP12
PSTPIP1
IL19
CCR5
HLA-B
CCL11
CAPN5
INAVA
ALB
MPO
HMOX1
VCAM1
TLR6
ELANE
IL2RA
NOS2
CCR1
CTLA4
MIF
IL21
PPARG
HMGB1
MMP9
PMP22
CASP1
MMP1
PTPN22
STAT1
CD40LG
IL6R
S100A9
IRF3
CXCL2
AIF1L
SYK
TTC7A

NR3C1
CSF2
PLA2G7
LTF
STAT4
ALK
FOXP3
IKBKB
ADIPOQ
TNFAIP3
NFE2L2
TLR5
LEP
CDSN
TP53
PRTN3
IL22
PIK3CG
NLRP2
JAK2
S100A8
MMP3
TPMT
CCR6
ANXA1
HLA-DQB1
FAS
SLC22A4
RNASE3
ITGAM
IL22RA2
IRAK3
CD4
XIAP
TRAF3
HLA-C
JUN
PRKCQ
IL1RAPL2
F5
IKBKG
VEGFA
MYD88
IFIH1
IL23A
SELP

PLA2G2A
SAA1
RANBP2
CXCL1
PI4KA
IL12A
MMP2
BTNL2
IFNAR2
HP
TTR
ITGB2
FLG
IFNA21
MAPK1
IFNA6
CHUK
IFNA4
FMNL2
CHI3L1
F2RL1
COX5A
LY9
IL17F
TLR9
IL6ST
VDR
MAPK8
ADA2
RAB27A
RETN
TPM3
F2
CARD14
CD28
SLPI
TLR7
CCR3
IFNGR1
TBX21
KNG1
INS
NLRP1
IL17RA
PLA2G4A
HLA-DQA1

NOD1
CXCR3
PYCARD
ITGA4
MVK
CDH1
PPARA
IL36RN
AKT1
IFI44L
IL11
HLA-G
TREM1
APP
PTX3
CD84
STAT6
CXCR4
CCR2
SOCS1
C4A
CARS1
CXCL12
CAMP
SLC22A5
IL33
THBD
MST1
PDE4A
S100A12
ADA
CYP2C9
SERPINA1
APOE
FCGR3A
CCL18
LACC1
CXCL5
LRBA
IL3
APOA1
PTPN2
FCGR2A
CD36
TGFB2
PSORS1C1

AGER
FLG2
PDCD1
SLC11A1
CXCR2
CFTR
CTSG
C3
IL27
TRIM69
SMAD3
CCL8
CCL19
IL7
NLRC4
TGM5
HLA-DPB1
MTHFR
MBL2
CYBA
ACE
IFI44
GDF15
GATA3
TPM4
IFNA1
SPINK5
CREB1
LMNA
CD86
PECAM1
PIK3CD
ERAP1
CLTC
TNFSF11
PLCG2
SPP1
ACE2
GSDMD
LTV1
CD80
IDO1
PIK3CA
EGF
NOX1
LPIN2

ITGAL
FOS
DEFB4A
THBS1
RARRES2
TREX1
CXCR1
NR1H4
NR1H2
CYSLTR1
IL2RG
CR2
FASLG
TRAF6
CASP8
TRAF3IP2
CTNNB1
SMAD2
FN1
TNIP1
CX3CR1
TSLP
CEBPB
IGHE
SERPINC1
SRC
HLA-A
PLA2G6
ABCD1
PTEN
EPX
CD79A
NCF4
CCL1
IRAK1
BGLAP
MAPKAPK2
ZAP70
CIITA
CYSLTR2
LTB4R
CBS
CALCA
ADRB2
SOD1
SOCS3

ESR1
TNFRSF11B
CARD9
PTGES
BMP6
ANGPT2
HGF
IGF1
FGF2
CLEC7A
IL12RB2
VWF
ITCH
MUC1
WAS
CAT
IL16
AR
UBA1
XDH
HPGD

Box S2. List of 623 unique hypoxia-related genes (HRGs) obtained from GeneCards and PubMed literature after deduplication.

Gene
FOXM1
CSRP2
CD3EAP
CDC20
PHF21A
G6PD
PARP1
RFX5
PCSK9
GNB1L
ATP5MC1
HASPIN
CIP2A
RFC4
CDCA7
MCM5
PPP1R3E
CCT5
DNMT1
TIMELESS
TCTEX1D2
GINS4
SPIN4
FANCB
FAM111A
TMEM201
BRI3BP
WDR4
HSPA1A
PRR7
LRP11
TNFRSF21
RHOQ
RUVBL1
GYS1
HDAC4
NUP107
MCM6
CHAF1B
TBC1D7
MCTS1
TCHP
FHL3
CPSF6
P4HA2
CA12
BIRC7
PPFIA4
FTSJ3
RCN2
MRPL24
RRAS
DDIT4
PHLDA2
ARV1
ITGAE
DEPDC1B
BCS1L
NAE1
TIGD5
RRM2
LSM4
SLC46A1
TAP2

WDR92
CATSPER1
RBM45
TSPAN8
NBEAL2
DKK1
AHS1
PFKFB4
RANGAP1
LRP8
XRCC3
CENPB
RRP7A
MED10
PLAC8
TYMS
NEDD8
PUSL1
NME1
ZMYM1
SLC38A6
POLR3K
RBM15B
PRC1
NUP37
ACYP1
NDRG1
KIF23
MRPS23
ZNF232
POLQ
DARS2
CENPF
CENPE
SLC2A14
CKS2
UHRF1
WDR12
DHDH
SKP2
GNPDA1
XPO1
SKA1
HELLS
TTK
MCRS1
SNRPF
MCM3
HNRNPA3
DCTPP1
CDT1
PALD
CCDC14
MANEAL
MCM2
ECT2
UBE2T
PHF14
TSEN54
CASP2
HIST2H2BE
NOP56
METTL3
NQO1
RRP15
FAM83D

CDC7
COL7A1
HSPA4
CENPO
FLVCR1
FANCG
SOX18
APOO
A4GALT
FAM72D
SLC22A5
CKLF
RRM1
BIRC5
DUT
CHST10
STXBP6
ZNF165
RFWD3
KIF4A
DOLK
POLG2
TTL
NCKIPSD
RFC3
ZNF416
NUAK1
IGFBP3
DLGAP5
PA2G4
DHX9
SETMAR
PKP4
HMBS
RPUSD1
ASNS
DDX41
PSME3
DCK
PFAS
ADCK2
CAD
MSH2
MTG1
TARBP1
DNAJC9
MAD2L1
MELK
ACLY
NXT2
TAF4
BUB1B
FOXD1
ZNF114
HLA-G
MCM7
HSPH1
CENPM
EXOSC2
FERMT1
EPDR1
PRICKLE4
CDCA2
NHP2
NEIL3
TUBA1A

USP1
GINS2
SLC6A8
ITGA5
CDC25A
ESCO2
SDF2L1
PDSS1
ACTR5
NUF2
HSPB1
SLC7A6
TUFT1
CDKN3
CHAF1A
ALKBH2
MCM4
ZNF518A
ZWILCH
PITX1
ATRIP
GTF3C2
TFCP2
METTL13
CDCA4
SPAG4
DONSON
NEK2
LOX
FKBP14
CHEK1
NCOA5
KAT2A
TPX2
LYAR
ZNF512B
POP1
DUS1L
TYSND1
BANF1
ABCC4
FDPS
NCAPG
EGLN3
MT1X
EME1
FIBCD1
NUP188
CHST3
TOR3A
RAN
ZNF503
SLC7A11
CKAP2
FBXO5
GADD45B
TMEM45B
CDCA8
SLBP
CA5B
HNRNPA1
USP39
PBK
RCC2
DNAJB6
NOL3

LBR
PIK3IP1
AURKA
PLK1
FEN1
YEATS2
SMTN
SNRPD1
ZNF142
DTNA
FAM111B
FSCN2
PIR
SAC3D1
RDH13
CRYBB2
UBL4A
CDC25C
CENPA
STX10
GINS3
NDC80
PRR11
PRIM1
CHRNA5
POLA2
EXOSC8
CEP55
SLC25A19
HMMR
FOXRED2
ZSCAN16
INTS3
AURKB
NUP85
CSTF2
POLR2L
PHF19
CHCHD3
CDC123
NFXL1
CDK5
DDIT3
SQLE
ANAPC4
FOS
NCAPD2
TOP2A
HABP4
DNAJB11
FASN
NUPL2
FANCI
HCFC1
POLE2
E2F2
KIAA0100
WDR54
NOL11
FAM13A
NUP62
TROAP
NUP155
RPIA
HSPA14
HSPA1B

PNCK
BLM
COPS6
ARID3B
MRT04
STRBP
HDAC1
GALR2
DTL
RACGAP1
ZFP36
CSE1L
IRX3
PPIH
TIPIN
PAQR4
STXBP5
KIF2C
STC1
CACYPB
SLC5A6
SPC25
TSEN2
SAAL1
CCNA2
CENPK
CDCA3
CDK6
RCOR2
RRS1
ALG6
KIF20A
PCNA
TUSC2
CCNF
TACC3
MRPL52
CCNO
PSPH
PFDN6
CCDC138
WISP2
ILF3
ANGEL2
ABHD12
DSCC1
TTC13
ZNF30
MIIP
REXO4
EXO1
DEPDC1
FN3KRP
TXN
TTF2
SKA2
SNRPC
CENPI
AKR1B10
TLE6
KIF20B
UCN2
PLIN2
DCLRE1B
ASPM
WFS1

CCNB1
ZMYND19
GMNN
HIF1A
EGLN1
HIF3A
VEGFA
EGLN2
EPAS1
HIF1AN
VHL
ARNT
SETD2
HYOU1
HILPDA
HIGD1A
EPO
CA9
HIGD2A
HIGD1B
EP300
P4HTM
TP53
SLC2A1
HIGD1C
HIGD2B
BNIP3
MTOR
MAPK1
HMOX1
IL6
TNF
CTNNB1
CASP3
TGFB1
JUN
EDN1
AKT1
KDR
CITED2
STAT3
CREBBP
NOS2
CXCL8
PDK1
CREB1
COL1A1
PTGS2
ADM
BCL2
IL1B
NFKB1
CUL2
EGFR
NOS3
CASP9
HSP90AA1
JAK2
CCL2
SERPINE1
CXCR4
MYC
ACE
BDNF
MAPK3
SOD1

HIPK2
TIGAR
CCN2
PGF
ELOC
FLT1
MAPK14
CD274
LEP
CYB5R3
MMP2
PIK3CG
RORA
SDHB
REST
SP1
SIAH2
NOS1
RWDD3
ANGPTL4
SFTPC
NFE2L2
VEGFC
CXCL12
FAM162A
ANGPT2
EGR1
EPOR
MMP9
MGARP
RELA
TH
PSMA7
BAX
NOTCH1
SIRT1
ENG
PIK3CA
HGF
XDH
TEK
HK2
ELOB
PTEN
ALKBH5
MDM2
LDHA
NOX4
TLR4
BMPR2
SRC
FGF2
RAC1
SPP1
BHLHE40
CRP
LRP5
IFNG
MAPK8
LIMD1
SESN2
PKM
DPP4
RHOA
PPARG
SOX9

PRKAA1
TERT
ARNT2
PRKCA
PRKAA2
HMGB1
CDH1
THBS1
LOXL2
SOD2
FUNDC1
AHR
MIF
IL10
ENO1
IGF1
ATF4
TFRC
NPPA
TWIST1
BECN1
MB
NAA10
NDP
PLAUR
ESR1
NGF
CAT
ADA
UBC
S100B
ACE2
CYCS
PGK1
PLK3
SLC2A3
NGB
WDR83
RBX1
ENO2
ERO1A
FZD4
ANGPT1
AGT
ZEB1
UBE2D1
DICER1
HP1BP3
ETS1
INS
SNAI1
BNIP3L
GFAP
CDKN1A
ABCB1
ENSG00000287856
SIAH1
CYB5A
CHRD1
RUNX2
ICAM1
ADORA2B
CD36
TYMP
IL1A
AJUBA

F3
AQP1
SMAD3
NFKBIA
COL2A1
USP28
MET
EIF4EBP1
FOXO3
TLR2
ALB
VEGFB
ATM
FLCN
WTIP
SENP1
NTRK1
REN
PPARA
ZNF408
BCL2L1
SIRT2
CEBPB
SLC16A1
MMP14
ACAN
KDM3A
AR
CKB
IGF1R
ATR

Box S3. List of 83 inflammation- and hypoxia-related genes (IHRGs) identified by integrating IRGs and HRGs.

Gene
ADM
ADORA2B
AHR
CCL2
CDKN1A
EDN1
F3
HIF1A
ICAM1
IL10
IL1A
IL1B
IL6
CXCL8
ITGA5
MET
MMP14
MYC
NDP
NFKB1
NFKBIA
PLAUR
RELA
SERPINE1
TLR2
TNF
TGFB1
TLR4
CRP
PTGS2
IFNG
EGFR
ABCB1
STAT3
MAPK14
ALB
HMOX1
NOS2
MIF
PPARG
HMGB1
MMP9
NFE2L2
LEP
TP53
PIK3CG
JAK2

JUN
VEGFA
MMP2
MAPK1
MAPK8
INS
CDH1
PPARA
AKT1
HLA-G
CXCR4
CXCL12
SLC22A5
ADA
CD36
SMAD3
ACE
CREB1
SPP1
ACE2
PIK3CA
FOS
THBS1
CTNNB1
CEBPB
SRC
PTEN
SOD1
ESR1
ANGPT2
HGF
IGF1
FGF2
CAT
AR
XDH

Table S1. Primer sequences used for RT-qPCR assay.

Gene(R)	Prime	Product length	Login ID
COL1A1	F: GAAGCGAAGGTTCCGAT R: CTTGAGGTTGCCAGTCTGT	140	NM_053304.1
COL3A1	F: GATGCTGGTGCTGAGAAGA R: GCTGGAAAGAAGTCTGAGGA	135	NM_032085.1
TGF- β 1	F: ACCTGGGTTGGAAGTGGAT R: TGGTTGTAGAGGGCAAGGA	121	NM_021578.2
ACTA2	F: TCCTGGCTTCTCTATCTACCTT R: CATTTGCGGTGGACAAT	88	NM_031004.2
GAPDH	F: CATCTTCTTGTGCAGTGCC R: ACCAGCTTCCCATTCTCAG	217	NM_017008.4

Table S2. Interaction details of the five Model Genes and related genes derived from GeneMANIA PPI network analysis

Organism: H. sapiens

Application version: 3.6.0

Database version: 13 August 2021 00:00:00

Network generated on: 19 April 2024

Author: GeneMANIA (genemania.org)

Notes: Network weight reflects the data source relevance for predicting the function of interest

Entity 1	Entity 2	Weight	Network group	Network
HIF1A	TLR2	0.007176884	Co-expression	Wang-Maris-2006
TLR1	TLR2	0.006705208	Co-expression	Wang-Maris-2006
CD14	TLR2	0.005876249	Co-expression	Wang-Maris-2006
CD14	TLR1	0.008016074	Co-expression	Wang-Maris-2006
LILRB1	HLA-G	0.009448675	Co-expression	Wang-Maris-2006
HLA-A	HLA-G	0.00926525	Co-expression	Wang-Maris-2006
ARNT	MAX	0.01940941	Co-expression	Mallon-McKay-2013
HIF1AN	ARNT	0.009413635	Co-expression	Mallon-McKay-2013
TLR6	TLR1	0.011128579	Co-expression	Mallon-McKay-2013
HLA-A	HLA-G	0.007307007	Co-expression	Mallon-McKay-2013
HLA-A	TLR1	0.005727788	Co-expression	Mallon-McKay-2013
TLR1	TLR2	0.012731481	Co-expression	Roth-Zlotnik-2006
RB1	TLR1	0.013139159	Co-expression	Roth-Zlotnik-2006
LILRB1	TLR6	0.013388729	Co-expression	Roth-Zlotnik-2006
ADM	MYC	0.014605892	Co-expression	Roth-Zlotnik-2006
ADM	EDN2	0.017070726	Co-expression	Roth-Zlotnik-2006
HLA-A	HLA-G	0.004047521	Co-expression	Roth-Zlotnik-2006
HLA-A	SIGIRR	0.006535588	Co-expression	Roth-Zlotnik-2006
EDN2	EDN1	0.005369219	Co-expression	Ramaswamy-Golub-2001
CD14	EDN2	0.004789141	Co-expression	Ramaswamy-Golub-2001
LILRB1	EDN2	0.007111257	Co-expression	Ramaswamy-Golub-2001
ADM	HIF1A	0.013858953	Co-expression	Ramaswamy-Golub-2001
TLR6	TLR1	0.027806386	Co-expression	Innocenti-Brown-2011
HLA-A	HLA-G	0.043821227	Co-expression	Innocenti-Brown-2011
HLA-A	HLA-G	0.022424145	Co-expression	Alizadeh-Staudt-2000
LILRB1	HLA-G	0.008344	Co-expression	Dobbin-Giordano-2005
LILRB1	TLR1	0.006351413	Co-expression	Dobbin-Giordano-2005
HLA-A	HLA-G	0.023657413	Co-expression	Dobbin-Giordano-2005
TLR6	TLR1	0.019431539	Co-expression	Rieger-Chu-2004
RB1	HIF1A	0.013881514	Co-expression	Rieger-Chu-2004
HLA-A	HLA-G	0.026554748	Co-expression	Rieger-Chu-2004
TLR1	TLR2	0.020994026	Co-expression	Bild-Nevins-2006 B
RB1	MYC	0.019850679	Co-expression	Bild-Nevins-2006 B
CD14	TLR2	0.01570679	Co-expression	Bild-Nevins-2006 B
CD14	TLR1	0.021744175	Co-expression	Bild-Nevins-2006 B
ADM	HIF1A	0.016613511	Co-expression	Bild-Nevins-2006 B
HLA-A	HLA-G	0.017002253	Co-expression	Bild-Nevins-2006 B
TLR6	TLR1	0.03120952	Co-expression	Burington-Shaughnessy-2008
CD14	TLR2	0.009194902	Co-expression	Burington-Shaughnessy-2008
HLA-A	HLA-G	0.021450266	Co-expression	Burington-Shaughnessy-2008
CD14	TLR1	0.006772789	Co-expression	Boldrick-Relman-2002
LILRB1	TLR1	0.009546828	Co-expression	Boldrick-Relman-2002
LILRB1	CD14	0.005978846	Co-expression	Boldrick-Relman-2002
HLA-A	HLA-G	0.005746223	Co-expression	Boldrick-Relman-2002
TLR1	TLR2	0.004271375	Co-expression	Arijs-Rutgeerts-2009
CD14	TLR1	0.00488408	Co-expression	Arijs-Rutgeerts-2009
LILRB1	TLR2	0.006617375	Co-expression	Arijs-Rutgeerts-2009
LILRB1	TLR1	0.004646249	Co-expression	Arijs-Rutgeerts-2009
ADM	HIF1A	0.002695769	Co-expression	Arijs-Rutgeerts-2009
MAX	HIF1A	0.011480239	Co-expression	Jiang-de Kok-2017
ADM	EGLN1	0.013686905	Co-expression	Jiang-de Kok-2017
SIGIRR	CD14	0.021738805	Co-expression	Jiang-de Kok-2017
HLA-A	HLA-G	0.005994229	Co-expression	Jiang-de Kok-2017

ARNT	EDN1	0.019304842	Co-expression	Perou-Botstein-2000
EDNRB	EDN3	0.010306634	Co-expression	Perou-Botstein-2000
HLA-A	TLR2	0.013839315	Co-expression	Perou-Botstein-2000
HLA-A	HLA-G	0.036192786	Co-expression	Wang-Cheung-2015
RB1	HIF1A	0.009794412	Co-expression	Wu-Garvey-2007
LILRB1	TLR1	0.008414858	Co-expression	Wu-Garvey-2007
EDNRB	HIF1A	0.004658453	Co-expression	Wu-Garvey-2007
ADM	CD14	0.012333411	Co-expression	Wu-Garvey-2007
HLA-A	HLA-G	0.033150207	Co-expression	Wu-Garvey-2007
TLR1	HIF1A	0.017700728	Co-expression	Rosenwald-Staudt-2001
LILRB1	HLA-G	0.021053288	Co-expression	Rosenwald-Staudt-2001
HLA-A	HLA-G	0.019405307	Co-expression	Rosenwald-Staudt-2001
HLA-A	TLR1	0.017380431	Co-expression	Rosenwald-Staudt-2001
CD14	MYC	0.016304534	Co-expression	Ross-Perou-2001
RB1	EDN1	0.018277094	Co-localization	Schadt-Shoemaker-2004
KIR2DL4	HLA-G	0.01579285	Co-localization	Johnson-Shoemaker-2003
EGLN1	HIF1AN	0.009303393	Co-localization	Johnson-Shoemaker-2003
ARNT	EDN1	0.001159738	Genetic Interactions	Lin-Smith-2010
EDNRB	TLR1	0.00116417	Genetic Interactions	Lin-Smith-2010
EDNRB	VHL	0.000727616	Genetic Interactions	Lin-Smith-2010
EDNRB	EDNRA	0.000575562	Genetic Interactions	Lin-Smith-2010
HIF1A	EDN1	0.004847255	Pathway	Wu-Stein-2010
KIR2DL4	HLA-G	0.13239016	Pathway	Wu-Stein-2010
MAX	MYC	0.010412731	Pathway	Wu-Stein-2010
ARNT	EDN1	0.015202338	Pathway	Wu-Stein-2010
ARNT	HIF1A	0.007684283	Pathway	Wu-Stein-2010
HIF1AN	HIF1A	0.15730569	Pathway	Wu-Stein-2010
TLR6	TLR2	0.06546124	Pathway	Wu-Stein-2010
EGLN1	HIF1A	0.040818445	Pathway	Wu-Stein-2010
VHL	HIF1A	0.020420773	Pathway	Wu-Stein-2010
VHL	ARNT	0.06404523	Pathway	Wu-Stein-2010
EDNRA	EDN1	0.019980676	Pathway	Wu-Stein-2010
EDNRA	EDN3	0.11955179	Pathway	Wu-Stein-2010
EDNRA	EDN2	0.11955179	Pathway	Wu-Stein-2010
CD14	TLR2	0.051164616	Pathway	Wu-Stein-2010
CD14	TLR6	0.056607615	Pathway	Wu-Stein-2010
EDNRB	EDN1	0.027712626	Pathway	Wu-Stein-2010
EDNRB	EDN3	0.1658149	Pathway	Wu-Stein-2010
EDNRB	EDN2	0.1658149	Pathway	Wu-Stein-2010
EGLN2	HIF1A	0.042542685	Pathway	Wu-Stein-2010
EGLN2	ARNT	0.1334257	Pathway	Wu-Stein-2010
ADM	HIF1A	0.097852536	Pathway	Wu-Stein-2010
TIRAP	TLR2	0.056678437	Pathway	Wu-Stein-2010
TIRAP	TLR6	0.062708005	Pathway	Wu-Stein-2010
TIRAP	CD14	0.049012683	Pathway	Wu-Stein-2010
SIGIRR	TLR2	0.08429284	Pathway	Wu-Stein-2010
SIGIRR	TLR6	0.093260095	Pathway	Wu-Stein-2010
SIGIRR	TIRAP	0.08074757	Pathway	Wu-Stein-2010
HIF1A	EDN1	0.011804683	Pathway	NCI_NATURE
MAX	MYC	0.001431495	Pathway	NCI_NATURE
ARNT	EDN1	0.010478937	Pathway	NCI_NATURE
ARNT	HIF1A	0.003974167	Pathway	NCI_NATURE
TLR1	TLR2	0.052540693	Pathway	NCI_NATURE
TLR6	TLR2	0.14862677	Pathway	NCI_NATURE
TLR6	TLR1	0.14141026	Pathway	NCI_NATURE
EGLN1	ARNT	0.17301655	Pathway	NCI_NATURE
VHL	HIF1A	0.030400984	Pathway	NCI_NATURE
EDNRA	EDN1	0.035674002	Pathway	NCI_NATURE
EDNRA	EDN3	0.21077213	Pathway	NCI_NATURE
EDNRA	EDN2	0.1789078	Pathway	NCI_NATURE
CD14	TLR1	0.07124456	Pathway	NCI_NATURE
CD14	TLR6	0.20153615	Pathway	NCI_NATURE

EDNRB	EDN1	0.070241556	Pathway	NCI_NATURE
EDNRB	EDN3	0.41500705	Pathway	NCI_NATURE
EDNRB	EDN2	0.35226667	Pathway	NCI_NATURE
ADM	HIF1A	0.114624456	Pathway	NCI_NATURE
ADM	ARNT	0.10175136	Pathway	NCI_NATURE
TIRAP	TLR2	0.06350213	Pathway	NCI_NATURE
TIRAP	TLR1	0.06041881	Pathway	NCI_NATURE
KIR2DL4	HLA-G	0.79478693	Pathway	REACTOME
SIGIRR	TIRAP	0.46383142	Pathway	REACTOME
MYC	HIF1A	0.028668808	Physical Interactions	Li-Fu-2017
ARNT	HIF1A	0.049511164	Physical Interactions	Li-Fu-2017
ARNT	MYC	0.01905453	Physical Interactions	Li-Fu-2017
RB1	MYC	0.2793154	Physical Interactions	Li-Fu-2017
ARNT	HIF1A	0.09205746	Physical Interactions	Perez-Perri-Espinosa-2016
VHL	HIF1A	0.09205746	Physical Interactions	Perez-Perri-Espinosa-2016
KIR2DL4	HLA-G	0.27254227	Physical Interactions	IREF-reactome
MAX	MYC	0.38703653	Physical Interactions	IREF-reactome
ARNT	HIF1A	0.08347845	Physical Interactions	IREF-reactome
HIF1AN	HIF1A	0.24961378	Physical Interactions	IREF-reactome
TLR6	TLR2	0.077149875	Physical Interactions	IREF-reactome
EGLN1	HIF1A	0.095662735	Physical Interactions	IREF-reactome
VHL	HIF1A	0.0550165	Physical Interactions	IREF-reactome
VHL	EGLN1	0.14923228	Physical Interactions	IREF-reactome
EDNRA	EDN1	0.010043423	Physical Interactions	IREF-reactome
EDNRA	EDN3	0.010043423	Physical Interactions	IREF-reactome
EDNRA	EDN2	0.010043423	Physical Interactions	IREF-reactome
CD14	TLR2	0.02874218	Physical Interactions	IREF-reactome
CD14	TLR6	0.03136977	Physical Interactions	IREF-reactome
EDNRB	EDN1	0.010043423	Physical Interactions	IREF-reactome
EDNRB	EDN3	0.010043423	Physical Interactions	IREF-reactome
EDNRB	EDN2	0.010043423	Physical Interactions	IREF-reactome
EGLN2	HIF1A	0.095662735	Physical Interactions	IREF-reactome
EGLN2	VHL	0.14923228	Physical Interactions	IREF-reactome
TIRAP	TLR2	0.068688065	Physical Interactions	IREF-reactome
TIRAP	TLR6	0.074967496	Physical Interactions	IREF-reactome
TIRAP	CD14	0.027929131	Physical Interactions	IREF-reactome
SIGIRR	TLR2	0.12568557	Physical Interactions	IREF-reactome
SIGIRR	TLR6	0.13717566	Physical Interactions	IREF-reactome
SIGIRR	CD14	0.051104784	Physical Interactions	IREF-reactome
SIGIRR	TIRAP	0.12213022	Physical Interactions	IREF-reactome
KIR2DL4	HLA-G	0.27254227	Physical Interactions	Vastrik-Stein-2007
MAX	MYC	0.38703653	Physical Interactions	Vastrik-Stein-2007
ARNT	HIF1A	0.08347845	Physical Interactions	Vastrik-Stein-2007
HIF1AN	HIF1A	0.24961378	Physical Interactions	Vastrik-Stein-2007
TLR6	TLR2	0.077149875	Physical Interactions	Vastrik-Stein-2007
EGLN1	HIF1A	0.095662735	Physical Interactions	Vastrik-Stein-2007
VHL	HIF1A	0.0550165	Physical Interactions	Vastrik-Stein-2007
VHL	EGLN1	0.14923228	Physical Interactions	Vastrik-Stein-2007
EDNRA	EDN1	0.010043423	Physical Interactions	Vastrik-Stein-2007
EDNRA	EDN3	0.010043423	Physical Interactions	Vastrik-Stein-2007
EDNRA	EDN2	0.010043423	Physical Interactions	Vastrik-Stein-2007
CD14	TLR2	0.02874218	Physical Interactions	Vastrik-Stein-2007
CD14	TLR6	0.03136977	Physical Interactions	Vastrik-Stein-2007
EDNRB	EDN1	0.010043423	Physical Interactions	Vastrik-Stein-2007
EDNRB	EDN3	0.010043423	Physical Interactions	Vastrik-Stein-2007
EDNRB	EDN2	0.010043423	Physical Interactions	Vastrik-Stein-2007
EGLN2	HIF1A	0.095662735	Physical Interactions	Vastrik-Stein-2007
EGLN2	VHL	0.14923228	Physical Interactions	Vastrik-Stein-2007
TIRAP	TLR2	0.068688065	Physical Interactions	Vastrik-Stein-2007
TIRAP	TLR6	0.074967496	Physical Interactions	Vastrik-Stein-2007
TIRAP	CD14	0.027929131	Physical Interactions	Vastrik-Stein-2007
SIGIRR	TLR2	0.12568557	Physical Interactions	Vastrik-Stein-2007

SIGIRR	TLR6	0.13717566	Physical Interactions	Vastrik-Stein-2007
SIGIRR	CD14	0.051104784	Physical Interactions	Vastrik-Stein-2007
SIGIRR	TIRAP	0.12213022	Physical Interactions	Vastrik-Stein-2007
MAX	MYC	0.069504805	Physical Interactions	Koch-Hermeking-2007
MAX	MYC	0.027246844	Physical Interactions	Heidelberger-Beli-2018
RB1	MYC	0.027246844	Physical Interactions	Heidelberger-Beli-2018
MAX	MYC	0.010423007	Physical Interactions	Hein-Mann-2015
ARNT	HIF1A	0.34436202	Physical Interactions	Hein-Mann-2015
VHL	HIF1A	0.13423844	Physical Interactions	Hein-Mann-2015
KIR2DL4	HLA-G	0.38322222	Physical Interactions	IREF-quickgo
MAX	MYC	0.3283377	Physical Interactions	IREF-quickgo
ARNT	HIF1A	0.06968078	Physical Interactions	IREF-quickgo
HIF1AN	HIF1A	0.047046978	Physical Interactions	IREF-quickgo
TLR1	TLR2	0.5433741	Physical Interactions	IREF-quickgo
TLR6	TLR2	0.30633834	Physical Interactions	IREF-quickgo
EGLN1	HIF1A	0.120674044	Physical Interactions	IREF-quickgo
VHL	HIF1A	0.044318896	Physical Interactions	IREF-quickgo
VHL	HIF1AN	0.0503537	Physical Interactions	IREF-quickgo
LILRB1	HLA-G	0.19516812	Physical Interactions	IREF-quickgo
EDNRB	EDN1	0.57735026	Physical Interactions	IREF-quickgo
EDNRB	EDN3	0.57735026	Physical Interactions	IREF-quickgo
EDNRB	EDN2	0.57735026	Physical Interactions	IREF-quickgo
TIRAP	TLR2	0.2223009	Physical Interactions	IREF-quickgo
HLA-A	LILRB1	0.2502042	Physical Interactions	IREF-quickgo
MAX	MYC	0.32742384	Physical Interactions	IREF-intcomplex
MAX	MYC	0.034309972	Physical Interactions	IREF-dip
ARNT	HIF1A	0.17012475	Physical Interactions	IREF-dip
HIF1AN	HIF1A	0.029610908	Physical Interactions	IREF-dip
EGLN1	HIF1A	0.33078855	Physical Interactions	IREF-dip
VHL	HIF1A	0.070539705	Physical Interactions	IREF-dip
CD14	TLR2	0.45508987	Physical Interactions	IREF-dip
ARNT	HIF1A	0.17701322	Physical Interactions	Rosenbluh-Hahn-2016
MAX	MYC	0.09759001	Physical Interactions	Agrawal-Sedivy-2010
MAX	MYC	0.70035213	Physical Interactions	IREF-uniprotpp
MYC	HIF1A	0.0017983	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
KIR2DL4	HLA-G	0.36965466	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
MAX	HIF1A	0.005296167	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
MAX	MYC	0.006482723	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
ARNT	HIF1A	0.003282506	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
HIF1AN	HIF1A	0.006606067	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
TLR1	TLR2	0.29661766	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
EGLN1	HIF1A	0.006680203	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
RB1	HIF1A	0.001667808	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
RB1	MYC	0.002041465	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
RB1	ARNT	0.003726364	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
VHL	HIF1A	0.001137216	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
VHL	MYC	0.001391998	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
VHL	HIF1AN	0.005113515	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
VHL	EGLN1	0.005170901	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
EDNRA	EDN1	0.6954737	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
CD14	TLR2	0.17295219	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
LILRB1	HLA-G	0.17955932	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
EDNRB	EDN3	0.7859538	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
EGLN2	HIF1A	0.007803963	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
TIRAP	TLR2	0.064707294	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
HLA-A	HIF1AN	0.028062416	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
HLA-A	LILRB1	0.07454076	Physical Interactions	BIOGRID-SMALL-SCALE-STUDIES
ARNT	HIF1A	0.06583531	Physical Interactions	IREF-innatedb
HIF1AN	HIF1A	0.07035085	Physical Interactions	IREF-innatedb
HIF1AN	ARNT	0.11008647	Physical Interactions	IREF-innatedb
EGLN1	HIF1A	0.074832015	Physical Interactions	IREF-innatedb
EGLN1	ARNT	0.11709869	Physical Interactions	IREF-innatedb

EGLN1	HIF1AN	0.1251303	Physical Interactions	IREF-innatedb
EGLN2	HIF1A	0.12122601	Physical Interactions	IREF-innatedb
EGLN2	ARNT	0.18969697	Physical Interactions	IREF-innatedb
EGLN2	EGLN1	0.21561994	Physical Interactions	IREF-innatedb
ARNT	HIF1A	0.30882323	Physical Interactions	IREF-mppi
ARNT	HIF1A	0.077247255	Physical Interactions	Huttlin-Harper-2017
TLR6	TLR1	0.29001838	Physical Interactions	Huttlin-Harper-2017
VHL	HIF1A	0.042122167	Physical Interactions	Huttlin-Harper-2017
HLA-A	HLA-G	0.19342579	Physical Interactions	Huttlin-Harper-2017
ARNT	HIF1A	0.70710677	Physical Interactions	Behrends-Harper-2010
MAX	MYC	0.03315699	Physical Interactions	Li-Chen-2015
MAX	MYC	0.06703236	Physical Interactions	IREF-mint
HIF1AN	HIF1A	0.053015046	Physical Interactions	IREF-mint
EGLN1	HIF1A	0.17249349	Physical Interactions	IREF-mint
VHL	HIF1A	0.052123554	Physical Interactions	IREF-mint
LILRB1	HLA-G	0.8915082	Physical Interactions	IREF-mint
EGLN2	HIF1A	0.3041856	Physical Interactions	IREF-mint
MAX	MYC	0.70710677	Physical Interactions	IREF-corum
ARNT	HIF1A	0.49258572	Physical Interactions	IREF-corum
TLR1	TLR2	1	Physical Interactions	IREF-corum
EDNRA	EDN1	1	Physical Interactions	IREF-corum
MAX	MYC	0.17279495	Physical Interactions	Hauri-Beisel-2016
MAX	MYC	0.12504984	Physical Interactions	Ewing-Figeys-2007
HLA-A	HLA-G	0.45008054	Physical Interactions	Ewing-Figeys-2007
MAX	MYC	0.048779443	Physical Interactions	IREF-bind-translation
ARNT	HIF1A	0.06810811	Physical Interactions	IREF-bind-translation
EGLN1	HIF1A	0.24157855	Physical Interactions	IREF-bind-translation
RB1	HIF1A	0.01572652	Physical Interactions	IREF-bind-translation
VHL	HIF1A	0.05825472	Physical Interactions	IREF-bind-translation
ARNT	HIF1A	0.21118829	Physical Interactions	IREF-bind
VHL	HIF1A	0.12306746	Physical Interactions	IREF-bind
EDNRA	EDN3	0.70710677	Physical Interactions	Rual-Vidal-2005
CD14	TLR2	0.6616198	Physical Interactions	Rual-Vidal-2005
LILRB1	HLA-G	0.5246476	Physical Interactions	Rual-Vidal-2005
EGLN1	HIF1A	0.11207738	Physical Interactions	IREF-matrixdb
EDNRA	EDN1	0.602453	Physical Interactions	IREF-matrixdb
CD14	TLR2	0.18574299	Physical Interactions	IREF-matrixdb
LILRB1	HLA-G	0.5292238	Physical Interactions	IREF-matrixdb
EDNRB	EDN1	0.602453	Physical Interactions	IREF-matrixdb
EGLN2	HIF1A	0.17962417	Physical Interactions	IREF-matrixdb
HLA-A	HLA-G	0.5081335	Physical Interactions	IREF-matrixdb
EDNRA	EDN1	0.463076	Physical Interactions	Lim-Zoghbi-2006
EDNRB	EDN1	0.463076	Physical Interactions	Lim-Zoghbi-2006
ADM	EDN1	0.463076	Physical Interactions	Lim-Zoghbi-2006
HIF1AN	HIF1A	0.051010825	Physical Interactions	Rodriguez-von Kriegsheim-2016
HIF1AN	ARNT	0.051010825	Physical Interactions	Rodriguez-von Kriegsheim-2016
EGLN1	HIF1A	0.1463181	Physical Interactions	IREF-spike
RB1	HIF1A	0.011566171	Physical Interactions	IREF-spike
RB1	ARNT	0.016378034	Physical Interactions	IREF-spike
EDNRA	EDN1	0.1690554	Physical Interactions	IREF-spike
EDNRA	EDN3	0.7196473	Physical Interactions	IREF-spike
CD14	TLR2	0.329525	Physical Interactions	IREF-spike
LILRB1	HLA-G	0.6310537	Physical Interactions	IREF-spike
EDNRB	EDN1	0.2564261	Physical Interactions	IREF-spike
EGLN2	HIF1A	0.13129455	Physical Interactions	IREF-spike
ADM	EDN1	0.5199507	Physical Interactions	IREF-spike
MAX	MYC	0.11042225	Physical Interactions	Wang-Yang-2011
MAX	MYC	0.8561348	Physical Interactions	IREF-huri
MYC	HIF1A	0.000484995	Physical Interactions	IREF-biogrid
KIR2DL4	HLA-G	0.35686305	Physical Interactions	IREF-biogrid
HIF1AN	HIF1A	0.001884701	Physical Interactions	IREF-biogrid
TLR1	TLR2	0.1466132	Physical Interactions	IREF-biogrid

TLR6	TLR1	0.32484698	Physical Interactions	IREF-biogrid
EGLN1	HIF1A	0.007950011	Physical Interactions	IREF-biogrid
RB1	HIF1A	0.002367169	Physical Interactions	IREF-biogrid
RB1	MYC	0.000718284	Physical Interactions	IREF-biogrid
VHL	HIF1A	0.001577029	Physical Interactions	IREF-biogrid
VHL	MYC	0.000478528	Physical Interactions	IREF-biogrid
VHL	HIF1AN	0.001859569	Physical Interactions	IREF-biogrid
VHL	EGLN1	0.007844001	Physical Interactions	IREF-biogrid
EDNRA	EDN1	0.5338312	Physical Interactions	IREF-biogrid
CD14	TLR2	0.091846175	Physical Interactions	IREF-biogrid
EGLN2	HIF1A	0.010496401	Physical Interactions	IREF-biogrid
TIRAP	TLR2	0.07112529	Physical Interactions	IREF-biogrid
MAX	HIF1A	0.049231526	Predicted	Wu-Stein-2010
TLR1	TLR2	0.2164787	Predicted	Wu-Stein-2010
RB1	MYC	0.008459635	Predicted	Wu-Stein-2010
LILRB1	HLA-G	0.088106416	Predicted	Wu-Stein-2010
ADM	EDN1	0.34493297	Predicted	Wu-Stein-2010
HLA-A	LILRB1	0.23053324	Predicted	Wu-Stein-2010
MYC	HIF1A	0.07463213	Predicted	I2D-IntAct-Mouse2Human
ARNT	HIF1A	0.10487096	Predicted	I2D-IntAct-Mouse2Human
MAX	MYC	0.16992411	Predicted	I2D-INNATEDB-Mouse2Human
ARNT	HIF1A	0.33186558	Predicted	I2D-INNATEDB-Mouse2Human
TLR6	TLR2	0.36292243	Predicted	I2D-INNATEDB-Mouse2Human
VHL	HIF1A	0.254007	Predicted	I2D-BioGRID-Rat2Human
MAX	MYC	0.07173411	Predicted	I2D-BioGRID-Mouse2Human
EGLN1	HIF1A	0.45874354	Predicted	I2D-BioGRID-Mouse2Human
VHL	HIF1A	0.10428342	Predicted	I2D-BioGRID-Mouse2Human
EGLN2	HIF1A	0.45874354	Predicted	I2D-BioGRID-Mouse2Human
MAX	MYC	0.6339746	Predicted	I2D-IntAct-Rat2Human
VHL	HIF1A	0.5246476	Predicted	I2D-BIND-Mouse2Human
ARNT	HIF1A	0.3426492	Predicted	I2D-MGI-Mouse2Human
MAX	MYC	0.6125741	Predicted	I2D-MINT-Rat2Human
MAX	HIF1A	0.023565846	Shared protein domains	INTERPRO
MAX	MYC	0.010072163	Shared protein domains	INTERPRO
ARNT	HIF1A	0.015577665	Shared protein domains	INTERPRO
ARNT	MAX	0.011323216	Shared protein domains	INTERPRO
TLR1	TLR2	0.02589887	Shared protein domains	INTERPRO
TLR6	TLR2	0.02589887	Shared protein domains	INTERPRO
TLR6	TLR1	0.026646517	Shared protein domains	INTERPRO
EDN3	EDN1	0.5	Shared protein domains	INTERPRO
EDN2	EDN1	0.5	Shared protein domains	INTERPRO
EDN2	EDN3	0.5	Shared protein domains	INTERPRO
EDNRB	EDNRA	0.13791588	Shared protein domains	INTERPRO
EGLN2	EGLN1	0.045126375	Shared protein domains	INTERPRO
TIRAP	TLR2	0.027889008	Shared protein domains	INTERPRO
TIRAP	TLR1	0.028694738	Shared protein domains	INTERPRO
TIRAP	TLR6	0.028694738	Shared protein domains	INTERPRO
SIGIRR	TLR2	0.01951014	Shared protein domains	INTERPRO
SIGIRR	TLR1	0.020073805	Shared protein domains	INTERPRO
SIGIRR	TLR6	0.020073805	Shared protein domains	INTERPRO
SIGIRR	TIRAP	0.03868368	Shared protein domains	INTERPRO
HLA-A	HLA-G	0.031216836	Shared protein domains	INTERPRO
MAX	MYC	0.011317233	Shared protein domains	PFAM
ARNT	HIF1A	0.019222124	Shared protein domains	PFAM
ARNT	MAX	0.021184202	Shared protein domains	PFAM
TLR1	TLR2	0.01885059	Shared protein domains	PFAM
TLR6	TLR2	0.01885059	Shared protein domains	PFAM
TLR6	TLR1	0.022713138	Shared protein domains	PFAM
EDN3	EDN1	0.5	Shared protein domains	PFAM
EDN2	EDN1	0.5	Shared protein domains	PFAM
EDN2	EDN3	0.5	Shared protein domains	PFAM
EDNRB	EDNRA	0.003531299	Shared protein domains	PFAM

EGLN2	EGLN1	0.045561824	Shared protein domains	PFAM
TIRAP	TLR2	0.019856427	Shared protein domains	PFAM
TIRAP	TLR1	0.0239266	Shared protein domains	PFAM
TIRAP	TLR6	0.0239266	Shared protein domains	PFAM
SIGIRR	TLR2	0.019856427	Shared protein domains	PFAM
SIGIRR	TLR1	0.0239266	Shared protein domains	PFAM
SIGIRR	TLR6	0.0239266	Shared protein domains	PFAM
SIGIRR	TIRAP	0.0653021	Shared protein domains	PFAM
HLA-A	HLA-G	0.027679805	Shared protein domains	PFAM

Table S3. ChIPBase-derived transcription factors regulating the Model Genes.

mRNA	TF
EDN1	NRF1
EDN1	REST
EDN1	TAL1
EDN1	CTCF
EDN1	ERG
EDN1	FOXA1
EDN1	FOXA2
EDN1	GATA1
EDN1	GATA2
HIF1A	MAX
HIF1A	MNT
HIF1A	MXI1
HIF1A	MYC
HIF1A	NFYA
HIF1A	NFYB
HIF1A	RELA
HIF1A	USF1
HIF1A	USF2
HIF1A	YY1
HIF1A	BHLHE40
HIF1A	E2F1
HIF1A	E2F6
HIF1A	EGR1
MYC	E2F1
MYC	E2F4
MYC	FOXA1
MYC	FOXA2
MYC	POLR2A
MYC	RAD21
MYC	TBP
TLR2	MAX

Table S4. StarBase-derived miRNAs targeting the Model Genes.

miRNA	mRNA
hsa-let-7a-5p	EDN1
hsa-let-7b-5p	EDN1
hsa-let-7c-5p	EDN1
hsa-let-7d-5p	EDN1
hsa-let-7e-5p	EDN1
hsa-let-7f-5p	EDN1
hsa-miR-98-5p	EDN1
hsa-let-7g-5p	EDN1
hsa-let-7i-5p	EDN1
hsa-miR-130a-3p	EDN1
hsa-miR-301a-3p	EDN1
hsa-miR-130b-3p	EDN1
hsa-miR-376c-3p	EDN1
hsa-miR-379-5p	EDN1
hsa-miR-33b-5p	EDN1
hsa-miR-454-3p	EDN1
hsa-miR-340-5p	EDN1
hsa-miR-301b-3p	EDN1
hsa-miR-17-5p	HIF1A
hsa-miR-18a-5p	HIF1A
hsa-miR-20a-5p	HIF1A
hsa-miR-93-5p	HIF1A
hsa-miR-106a-5p	HIF1A
hsa-miR-199a-5p	HIF1A
hsa-miR-106b-5p	HIF1A
hsa-miR-18b-5p	HIF1A
hsa-miR-20b-5p	HIF1A
hsa-miR-582-5p	HIF1A