

**Suppl Mat 4: Predicted gene targets of the 4 commonly regulated miRNAs by GAL and RL**

<b>miR-129-3p</b>	<b>miR-146b-5p</b>	<b>miR-550a</b>	<b>miR-543</b>
TMEM136	TRAF6	MEF2A	AASDHPPT
MEMO1	NOVA1	ADCY1	ABCA1
RCHY1	SRSF6	OSBPL8	ABCB11
HS2ST1	ZNF90	SAMD12	ABHD12B
CCP110	ZNF506	ZNF705A	ABHD13
EGLN3	ZNF253	BCL11B	ABRA
SLC24A2	RHOBTB3	BRD1	ACBD3
C10orf47	MRS2	ACBD3	ACTL6A
BAALC	KDM2B	MTMR7	ACTR10
PASK	IRAK1	SHISA2	ACVR1C
ENOSF1	EIF4G2	STK35	ACVR2A
LHFP	PTAR1	JRKL	ACVR2B
LHFPL2	WWC2	HTR5A	ACYP1
CDCA7L	ZBTB2	SLCO3A1	ACSL1
MYEF2	SMAD4	KL	ADAM12
USP25	ITCH	ATP1A2	ADAM9
DCUN1D3	STRBP	ZCCHC10	ADAMTSL1
TCF7	C9orf30	LRRC27	ADARB2
SH3TC2	TMEM185B	TIMP2	ADAT2
FAM155A	PSMD3	CX3CR1	ADCK3
AIF1L	DIS3L	CSNK1A1	AGFG1
STX6	ST7L	ADCYAP1	AGL
PTAR1	HDAC8	GPR39	AHCTF1
PDE10A	CLASP2	PCDH18	AK3
MYO1B	HNRNPD	TMEM151B	AKAP11
KPNA4	DDHD1	DPYSL5	AKAP5
HECTD1	MRCH1	PTGR2	AKAP6
ARAP2	SEC23IP	KCNQ5	AKAP7
NMNAT2	SYT14	MKRN1	ALG10B
RAB31	SPT14	LY75-CD302	ALG6
MAP2K4	PCDH1	WTAP	ALG9
HNRNPA3	FMNL3	CD302	AMFR
GGPS1	KIAA1244	CHST6	ANAPC16
XKR4	ZFAND5	CHD7	ANGPT2
CSRP1	MLLT1	ADPRH	ANKFY1
OSBPL10	MTPAP	KCNMB4	ANKRD13C
DGKI	TIMELESS	ZNF417	ANKRD20A3
FRYL	USP3	TSHZ3	ANKRD50
VPS13B	CRAMP1L	ZNF587	ANKS1B
NFATC2IP	ZDHHC13	KCNE1	ANO5
CHML	RAB8B	SYNPO2	ANP32A

SCD5	TRIM66	ESYT2	ARF6
BAG3	PRMT3	SCARA3	ARFGEF2
PIK3IP1	ACTBL2	MAN1A1	ARHGAP18
MEF2A	LCOR	GLIS3	ARHGAP26
SCN3B	ONECUT2	RGS6	ARHGAP29
RTN3	MED1	NT5DC3	ARHGEF26
MLLT6	ZNF354B	PSME1	ARHGEF3
DYRK3	ZNF257	RNF43	ARIH1
PKIA	TSPYL1	SOCS4	ARL4A
KLHL28	CCK	ZNF185	ARL5A
NRK	TDRKH	CCDC3	ARL5B
ACADM	YES1	STX16	ARL6IP6
PNISR	UPP2	MTCH2	ARNT2
MTHFD2L	ZNF540	ADAMTSL5	ARRDC4
MRPS25	PSMF1	OXNAD1	ASAP2
SYTL5	PID1	CD1C	ASPH
SNRPE	C16orf72	IL23R	ATG2B
KIAA0182	ARFGAP3	CDC42SE2	ATG4B
ARHGAP31	ARF6	TRIM44	ATG5
MAN1A1	STIL	SYT7	ATL2
RRM2B	PHKB	ADAMTS6	ATM
GABRG1	TOR1A	SUMO3	ATP11B
KIDINS220	TBX18	CRCP	ATP1B1
CYP27C1	TMEM19	MPPED2	ATP1B4
TOMM20	LRCH1	PDGFRA	ATP2B1
UNK	FOXR2	HUNK	ATP6V1A
KDM3B	CTAGE9	C5orf20	ATP6V1C2
POP1	C3orf38	TEC	ATRNL1
HSPH1	LANCL1	CLIC2	ATXN1
GFOD1	RACGAP1	DYRK1A	ATXN3
C2orf88	BCORL1	C22orf25	ATXN7
SCARF1	WDR7	GLT25D1	B3GALT
CBX6	IGSF1	EXPH5	B3GNT5
ELOVL2	ZNF555	CXCR1	B4GALT6
LMOD3	ARL17A	C1QTNF2	BACH2
C14orf28	C7orf57	DSTN	BAI3
FCRL5	USP47	BCCIP	BANK1
NPTN	LOC100294341	COL19A1	BAZ2B
BDKRB2	SLC19A3	CENPO	BEND7
TMEM161B	MARK1	ABCG4	BET1
CAMKK2	UMPS	DENND4C	BEX2
ACAP2	CCDC89	PAPOLA	BHMT2
CDS1	MS4A1	ZNF480	BIRC6
PPP6C	KLHL4	ARSB	BMP2K

CCR6	PPM1K	GP1BA	BRAP
GOLPH3L	SRPRB	NFIC	BRD1
GLT25D2	CTAGE4	NGEF	BRWD1
IL17A	UBR5	PAQR9	BTRC
ACAD8	TBC1D20	GHITM	BUB3
FAM120AOS	PLSCR4	HIF3A	C10orf112
E2F5	PHF20L1	ZNF24	C11orf53
HOMER2	IER5L	CXADR	C12orf34
SPCS3	CDS1	KRTAP20-3	C12orf66
STRN	CD96	P2RY14	C14orf129
LOC100289187	TRMT1L	CCDC69	C14orf135
JPH4	AGMAT	NPL	C14orf43
KLHL13	RFX7	FBXO18	C15orf2
EIF2AK3	FBXW2	FXN	C15orf29
RFX3	CASK	C3orf17	C15orf48
FAM206A	BZW1	HOOK3	C16orf72
POTEC	RUNDC3B	APOL6	C17orf39
GNRHR	DLGAP2	TTC39C	C17orf51
PLN	ENTPD1	ERBB2IP	C17orf57
FGFR10P2	CREBL2	SUZ12	C19orf12
DYNLL2	OR9Q1	GCNT4	C19orf42
ILDR2	THAP5	NAA38	C1orf27
CPSF2	LIN7C	EPGN	C1orf52
CAMLG	ZNF229	TBC1D2B	C20orf111
FAM36A	TBRG1	MYH2	C21orf91
KIAA1217	C9orf72	GSPT1	C2orf43
TDRD6	CCDC117	PTGDR2	C2orf66
TMF1	SLC1A1	ZAK	C2orf68
C17orf58	ERV3-1	RAP1GAP2	C2orf80
PRKCE	LRRTM2	MDGA2	C3orf55
VSIG10L	FTCD	C22orf46	C4orf43
LITAF	GCFC2	DDX52	C5AR1
ZNF639	ZC3H12B	PROSC	C5orf13
HHAT	ZNF605	ZNF704	C5orf30
MAP3K1	ZNF662	KIAA1549	C5orf41
ZNF507	RAC1	C8orf48	C5orf47
STARD4	TMX3	C3orf27	C7orf57
EIF3J	MTAP	WIPF3	C8orf59
F5	SRP72	BPGM	C8orf84
PDCD2	IQGAP3	SPATA13	C9
SUPT7L	CD80	PLD1	C9orf71
TNFRSF11A	BRK1	SYNJ2BP-COX16	CACHD1
RIMS1	CFH	COX16	CACNB2
PAIP1	SLC38A1	CCR2	CACNB4

RAB8B	PLEKHM3		CALB1
FAM185A	LOC644704		CAND1
ZNF350	LOC100287723		CAPRIN1
LARGE	CSE1L		CARD8
VPS53	PQLC3		CASK
GABRA1	POFUT2		CC2D2B
THEMIS	ESYT2		CCAR1
HNRNPU	TRAK2		CCBE1
RDH10	GJC1		CCDC117
KRT74	SIX4		CCDC126
TRIB1	MRPS14		CCDC165
ACSBG1	NSL1		CCDC42
FOPNL	TRIM5		CCDC75
UCHL5	ZNF331		CCDC88C
TMTC1	MOB1B		CCDC90A
PRPF39	WISP1		CCL22
MTF1	RAB7L1		CCNF
ZNF436	DTWD2		CCR6
BNIP3L	CNTF		CD163
HSPA9	SORT1		CD2AP
RFX7	TRIM37		CD302
RAP1B	KIAA1199		CDH2
NUCKS1	RBM11		CDH6
SMAD3	BHLHE41		CDK1
SNTN	JAZF1		CDK14
RHOA	ZNF813		CDK6
NFAT5	KCNJ16		CDS2
KL	FNBP4		CEBPG
GPD1	LOC400682		CEP85L
C1orf141	HMBOX1		CER1
PTGER4	ZNF117		CERS3
CAMK1G	RPL34		CGGBP1
CXCL6	OPALIN		CHCHD7
BIRC6	SLC16A14		CHML
C9orf69	SLC10A3		CHN1
USP13	FBXO3		CHN2
CEP63	AQP9		CLEC12A
GFRA1	KRTAP1-5		CLMN
GJA5	ARSB		CLOCK
CCDC102B	FZD3		CMPK1
C10orf118	DTNA		CNNM2
RCAN2	PPP2R5C		CNOT1
ARL6IP1	MPO		CNTN5
MCU	PMAIP1		CNTNAP3

ATP5G3	SPIN4		CNTNAP3B
HEATR1	ZNF138		COL16A1
TIAM1	PPBP		COL1A2
RNF8	FAM210A		COMMD2
CALN1	LOC100509263		COPS2
DIXDC1	DCAF5		COX11
GNA13	SCN3B		CP
C18orf42	FAM26E		CPD
KLHL20	C4orf3		CPEB2
CDK1	IBA57		CPSF6
AMFR	IQGAP1		CREB1
PFKFB2	NOTCH2		CREB5
MED1	IFIT3		CREBL2
MUTED	SDHC		CREBZF
GPD1L	SYNJ2		CRH
TRAF3IP1	VPS54		CRHBP
MCM8	ZNF558		CTBS
CHRNA2	KIAA1715		CTDSPL
GCOM1	FBXO4		CTNNA1
FADS1	BRCA2		CTTNBP2NL
PTPN3	PRKCE		CUL3
NPTXR	DPY19L2		CXorf23
ZCRB1	TRDMT1		CXorf30
USP32	CASR		CYB561D1
BEAN1	AMPH		CYB5R4
LPAR3	NRAS		CYP26B1
AK4	RHOXF2B		CYR61
SPEF2	PAQR9		CSGALNACT2
SHISA3	ZNF649		CSRNP3
VEZT	LRP2		DAD1
GOLT1B	PTPRE		DAZ1
GRIN2D	LPGAT1		DAZ2
PKN2	LRRC15		DAZ3
AFF1	FAF2		DAZ4
ALKBH1	RPS6KA6		DBX2
FAM210B	KIAA1161		DCAF11
HCN1	ZNF449		DCLK1
ADAM8	CLCN6		DCP2
	KIAA1826		DCUN1D1
	PLEKHA8		DDHD1
	RASGRP1		DDO
	DNAL1		DDX3X
	FAM122C		DDX3Y
	TIFA		DDX43

	SLC39A1		DDX46
	COPS8		DDX52
	ARID3A		DDX60
	SVIL		DEFB132
	SRSF12		DEK
	SPOPL		DEPTOR
	MINOS1		DGKE
	CLDN11		DHX33
	AEBP2		DIP2C
	PARK2		DIS3L
	TRIT1		DISC1
	RNF10		DKC1
	HEYL		DLGAP1
	SYT13		DLGAP2
	PTGS2		DLX1
	LOH12CR1		DMRT3
	GIPC2		DMXL2
	LARP6		DNAH8
	AAK1		DNAJC10
	GPX6		DNM3
	PMEPA1		DOCK7
	NOS1		DOPEY2
	FAM196A		DPY19L4
	IL17A		DSC3
	LPP		DSE
	PDGFRA		DTX4
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			INPP4A
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			KLHL5
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			MCTP2
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			MEGF10
			MEGF9
			MEIS2
			MERTK
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			METTLL10
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			NLN
			NMT2
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			NOLC1
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			PDK2
			PDP1
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			PER3
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			POLI
			POLR3G
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			RUFY3
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			SCAPER
			SCD5
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			SCP2
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			SKA2
			SKAP2
			SLAIN2
			SLC10A7



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			SLC28A3
			SLC2A13
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			SMC4
			SMC6
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			SNX13
			SNX30
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			SORD
			SP100
			SP3
			SPAG9
			SPATA5
			SPG21
			SPTLC1
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			SSR1
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			STRN
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			TCF4
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			TEX2
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			TIFA
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			TLL1
			TMCC3
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			TMEM133
			TMEM135
			TMEM167B
			TMEM181
			TMEM185A
			TMEM196
			TMEM202
			TMEM203
			TMEM229A
			TMEM87B
			TMF1
			TMOD3
			TMPRSS11D
			TMTC2
			TNFSF10
			TNFSF11
			TNKS
			TNPO1
			TNS3
			TOR1AIP2

			TOX
			TP53INP1
			TP63
			TPM3
			TRAK2
			TRAPPC6B
			TRDMT1
			TRDN
			TRIM13
			TRIM2
			TRIM39
			TRIM61
			TRIM9
			TRIP11
			TRMT2A
			TRPC1
			TRPS1
			TTC19
			TWF1
			TWIST1
			TWISTNB
			TXLNA
			TXLNB
			UBA6
			UBR3
			UBXN10
			UBXN2B
			UCHL5
			UFD1L
			UNC13C
			UNKL
			UPB1
			USP45
			USP46
			USP53
			UTP23
			UTY
			VANGL1
			VAX1
			VBP1
			VGLL3
			VIP
			VSIG10
			VTA1
			VTI1A
			WASF1
			WASL

			WHAMM
			WHSC1
			WNK3
			WNT16
			WWTR1
			YOD1
			YTHDC1
			ZBTB24
			ZBTB33
			ZBTB34
			ZBTB43
			ZBTB44
			ZC3H6
			ZCCHC14
			ZDHHC17
			ZDHHC21
			ZDHHC3
			ZFAND4
			ZFAND5
			ZFHX4
			ZFP91
			ZFX
			ZIC2
			ZNF148
			ZNF264
			ZNF277
			ZNF280D
			ZNF295
			ZNF320
			ZNF345
			ZNF367
			ZNF398
			ZNF436
			ZNF483
			ZNF512
			ZNF518B
			ZNF519
			ZNF544
			ZNF594
			ZNF598
			ZNF644
			ZNF649
			ZNF654
			ZNF675
			ZNF704
			ZNF720
			ZNF737

			ZNF74
			ZNF793
			ZNF814
			ZNF879
			ZRANB2
			ZXDC
			ZZZ3
			ZSWIM2