

Table S9: Validated miRNA and mRNA interactions

## 1. ATM Signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-215	CDKN1A	19074875	
hsa-miR-215	TP53	19074875	
hsa-miR-215	MDM2	20951946	
hsa-miR-192	TP53	20647341	
hsa-miR-192	CDKN1A	20647341	
hsa-miR-192	BRCA1	19205878	
hsa-miR-192	MDM2	20951946	
hsa-miR-194	MDM2	20951946	
hsa-miR-194	CDKN1A	19074875	
hsa-miR-194	JUN	19074548	
hsa-miR-194	TP53	19074875	
hsa-miR-203	ABL1	18538729	
hsa-miR-203	JUN	22205737	
hsa-miR-203	TP53	20216554	
hsa-miR-203	MAPK8	22205737	
hsa-miR-203	CDKN1A	20219920	
hsa-miR-196a	NFKB1	18408758	
hsa-miR-196a	CDKN1A	19773200	
hsa-miR-196b	JUN	19074548	
hsa-miR-1	MDM2	19229884	
hsa-miR-1	JUN	19074548	
hsa-miR-1	CDKN1A	18676839	
hsa-miR-1	TP53	19229884	
hsa-miR-1	RELA	15685193	
hsa-miR-192*	TP53	19088023	
hsa-miR-192*	CDKN1A	20647341	
hsa-miR-192*	BRCA1	19205878	
hsa-miR-192*	MDM2	20951946	
hsa-miR-146a	MAPK8	20859756	
hsa-miR-146a	RELA	20061417	
hsa-miR-146a	NFKB1	19021527	
hsa-miR-146a	BRCA1	19944095	
hsa-miR-146a	JUN	21773870	
hsa-miR-146a	TP53	20733155	
hsa-miR-146a	NFKBIA	19635561	
hsa-miR-146a	CDKN1A	20101223	
hsa-miR-145	TP53	20351064	
hsa-miR-145	JUN	19074548	
hsa-miR-145	CDKN1A	20716115	
hsa-miR-145	TP73	20485546	
hsa-miR-20a	CDKN1A	20190813	
hsa-miR-20a	TP53	20868483	
hsa-miR-20a	BRCA1	20167074	

hsa-miR-20a	JUN	19074548
hsa-miR-17	TP53	18728182
hsa-miR-17	CDKN1A	19782699
hsa-miR-17	BRCA1	23160909
hsa-miR-17	RELA	20144951
hsa-miR-17	ATM	19477219
hsa-miR-18a	TP53	21388952
hsa-miR-18a	ATM	23229340
hsa-miR-28-5p	CDKN1A	20190813
hsa-miR-28-5p	TP53	20923760
hsa-miR-378*	TP53	20078964
hsa-miR-20b	CDKN1A	18212054
hsa-miR-19a	TP53	20868483
hsa-miR-19a	CDKN1A	20851997
hsa-miR-19a	BRCA1	20167074
hsa-miR-19b	CDKN1A	20089119
hsa-miR-19b	TP53	18728182
hsa-miR-204	TP53	19074875
hsa-miR-204	CDKN1A	19074875
hsa-miR-127-3p	JUN	19396864
hsa-miR-377	CDKN1A	18716028
hsa-miR-214	CDKN1A	20716115
hsa-miR-214	JUN	20498046
hsa-miR-214	MAPK8	19859982
hsa-miR-199a-5p	NFKB1	18408758
hsa-miR-199a-5p	MAPK8	18456660
hsa-miR-381	BRCA1	20167074
hsa-miR-410	NFKB1	21170085
hsa-miR-410	TP53	21170085
hsa-miR-410	JUN	21170085
hsa-miR-218	NFKB1	20933503
hsa-miR-654-3p	CDKN1A	20190813
hsa-miR-154*	BRCA1	20167074
hsa-miR-99a	TP53	19843843
hsa-miR-99a	NFKB1	20497147
hsa-miR-99a	JUN	19074548
hsa-miR-199a-3p	NFKB1	18408758
hsa-miR-199a-3p	MAPK8	18456660
hsa-miR-100	TP53	20078964
hsa-miR-100	JUN	19074548
hsa-miR-125b	TP53	22245495
hsa-miR-125b	RELA	22581933
hsa-miR-125b	CDKN1A	20827722
hsa-miR-125b	NFKBIA	20435889
hsa-miR-125b	BRCA1	19048628
hsa-miR-125b	MDM2	20542030

hsa-miR-125b	ATM	18674748
hsa-miR-125b	JUN	19074548
hsa-miR-299-5p	CDKN1A	20190813
hsa-miR-154	BRCA1	20167074
hsa-miR-214*	CDKN1A	20716115
hsa-miR-214*	JUN	20498046
hsa-miR-214*	MAPK8	19859982
hsa-miR-379	JUN	19396864
hsa-miR-299-3p	JUN	19396864
hsa-miR-130a	RELA	20144951
hsa-miR-130a	TP53	19948396
hsa-miR-369-5p	BRCA1	20810544
hsa-miR-337-3p	CDKN1A	23137536
hsa-miR-337-3p	TP53	23137536
hsa-miR-125b-2*	BRCA1	19048628
hsa-miR-125b-2*	TP53	19818772
hsa-miR-433	NFKB1	20497147
hsa-miR-377*	CDKN1A	18716028

## 2. ATR Signalling

miRNA	mRNA	Pubmed id Reference
hsa-miR-192	RAD9A	19205878
hsa-miR-196a	MCM2	21293479
hsa-miR-196a	ERCC4	21293479
hsa-miR-1	PLK1	18668040
hsa-miR-1	MCM7	18676839
hsa-miR-192*	RAD9A	19205878
hsa-miR-146a	CCNA2	19944095
hsa-miR-146a	BRCA2	20810544
hsa-miR-145	FBXW11	15131085
hsa-miR-20a	CDK2	22731656
hsa-miR-17	MCM7	21538479
hsa-miR-17	CDK2	22731656
hsa-miR-17	BRCA2	20810544
hsa-miR-18a	CDK2	22731656
hsa-miR-19a	CDK2	22731656
hsa-miR-19b	CDK2	22731656
hsa-miR-100	PLK1	22246341
hsa-miR-100	CDC25C	19739117
hsa-miR-369-5p	BRCA2	20810544

### 3.DNA repair Signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-192	BRCA1	19205878	
hsa-miR-1	POLR2C	18668040	
hsa-miR-1	POLD2	18668040	
hsa-miR-1	MAD2L2	15685193	
hsa-miR-192*	BRCA1	19205878	
hsa-miR-146a	BRCA2	20810544	
hsa-miR-146a	BRCA1	19944095	
hsa-miR-145	POLD3	19626115	
hsa-miR-145	H2AFX	21849299	
hsa-miR-145	ERCC8	20089806	
hsa-miR-20a	H2AFX	19597473	
hsa-miR-20a	BRCA1	20167074	
hsa-miR-17	H2AFX	19597473	
hsa-miR-17	BRCA2	20810544	
hsa-miR-17	BRCA1	23160909	
hsa-miR-17	ATM	19477219	
hsa-miR-18a	ATM	23229340	
hsa-miR-19a	BRCA1	20167074	
hsa-miR-381	BRCA1	20167074	
hsa-miR-154*	BRCA1	20167074	
hsa-miR-125b	BRCA1	19048628	
hsa-miR-125b	ATM	18674748	
hsa-miR-154	BRCA1	20167074	
hsa-miR-130a	H2AFX	20505758	
hsa-miR-369-5p	BRCA2	20810544	
hsa-miR-369-5p	BRCA1	20810544	
hsa-miR-125b-2*	BRCA1	19048628	

#### 4.E2F Signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-215	CDKN1A	20647341	
hsa-miR-215	MCL1	19074875	
hsa-miR-215	PAK3	18810376	
hsa-miR-215	TYMS	20647341	
hsa-miR-192	BRCA1	19205878	
hsa-miR-192	CDKN1A	19088023	
hsa-miR-192	MCL1	19074875	
hsa-miR-192	PAK3	18798260	
hsa-miR-192	TFE3	21389977	
hsa-miR-192	TYMS	20647341	
hsa-miR-194	CDKN1A	19074875	
hsa-miR-194	EP300	19569050	
hsa-miR-194	MCL1	19074875	
hsa-miR-194	MYC	18451220	
hsa-miR-203	CDKN1A	20219920	
hsa-miR-203	CDKN2A	19396864	
hsa-miR-203	E2F3	19864316	
hsa-miR-203	MCL1	18381414	
hsa-miR-203	WASF1	21368580	hsa-miR-196a
hsa-miR-196a	CEBPA	21818844	
hsa-miR-1	CDKN1A	19229884	
hsa-miR-1	CEBPA	18818206	
hsa-miR-1	E2F1	18676839	
hsa-miR-1	E2F3	18519660	
hsa-miR-1	E2F7	22330340	
hsa-miR-1	MYC	23022474	
hsa-miR-1	TYMS	18668040	
hsa-miR-133b	CEBPA	20368543	
hsa-miR-133b	MCL1	20056941	
hsa-miR-133b	MYC	18451220	
hsa-miR-192*	BRCA1	19205878	
hsa-miR-192*	CDKN1A	18798260	
hsa-miR-192*	MCL1	19074875	
hsa-miR-192*	PAK3	18798260	
hsa-miR-192*	TFE3	21389977	
hsa-miR-192*	TYMS	20647341	
hsa-miR-146a	BRCA1	20810544	
hsa-miR-146a	CCNA2	19944095	
hsa-miR-146a	CDKN1A	20101223	
hsa-miR-146a	CDKN2A	22213426	
hsa-miR-146a	EP300	21885871	
hsa-miR-146a	PLAU	19585508	
hsa-miR-146a	SERPINE1	20053980	
hsa-miR-145	CDKN1A	20089806	

hsa-miR-145	E2F3	17891175
hsa-miR-145	MCL1	17891175
hsa-miR-145	MYC	23291449
hsa-miR-145	PAK3	20190813
hsa-miR-133a	CDKN2A	22037549
hsa-miR-133a	CEBPA	20368543
hsa-miR-133a	MCL1	20056941
hsa-miR-133a	MYC	18451220
hsa-miR-20a	BRCA1	20167074
hsa-miR-20a	CDK2	22731656
hsa-miR-20a	CDKN1A	20851997
hsa-miR-20a	CDKN2A	18719372
hsa-miR-20a	E2F1	18836483
hsa-miR-20a	E2F2	17135249
hsa-miR-20a	E2F3	17135249
hsa-miR-20a	MYC	20851997
hsa-miR-20a	PAK3	20190813
hsa-miR-20a	RB1	16461460
hsa-miR-17	ATM	19477219
hsa-miR-17	BRCA1	19048628
hsa-miR-17	CDK2	22731656
hsa-miR-17	CDKN1A	18212054
hsa-miR-17	CDKN1B	17586726
hsa-miR-17	CDKN2A	18765795
hsa-miR-17	E2F1	18644370
hsa-miR-17	E2F2	17135249
hsa-miR-17	E2F3	17135249
hsa-miR-17	MCL1	19347736
hsa-miR-17	MYC	18327259
hsa-miR-17	PAK3	19782699
hsa-miR-17	RB1	20643754
hsa-miR-17	RBL2	18287052
hsa-miR-18a	ATM	23229340
hsa-miR-18a	CDK2	22731656
hsa-miR-18a	E2F1	18025036
hsa-miR-18a	MYC	19706389
hsa-miR-18a	RB1	21388952
hsa-miR-28-5p	CDKN1A	20190813
hsa-miR-28-5p	CDKN2A	20923760
hsa-miR-28-5p	PAK3	20190813
hsa-miR-378*	MYC	21242960
hsa-miR-378*	SERPINE1	20353610
hsa-miR-378*	SULT2A1	20484008
hsa-miR-20b	CDKN1A	20190813
hsa-miR-20b	E2F1	15944709
hsa-miR-20b	MYC	19706389

hsa-miR-20b	PAK3	20190813
hsa-miR-19a	BRCA1	20167074
hsa-miR-19a	CDK2	22731656
hsa-miR-19a	CDKN1A	20851997
hsa-miR-19a	MYC	22731656
hsa-miR-19a	RB1	21388952
hsa-miR-19b	CDK2	22731656
hsa-miR-19b	CDKN1A	20851997
hsa-miR-19b	E2F1	18025036
hsa-miR-19b	MYC	21664042
hsa-miR-18b	E2F1	15944709
hsa-miR-18b	MYC	15944709
hsa-miR-18b	RBL2	21327300
hsa-miR-204	CDKN1A	19074875
hsa-miR-204	E2F3	19864316
hsa-miR-204	MCL1	19070389
hsa-miR-204	SIRT1	22364258
hsa-miR-127-3p	CDKN2A	19396864
hsa-miR-127-3p	E2F3	18942116
hsa-miR-127-3p	MYC	19530237
hsa-miR-377	CDKN1A	18716028
hsa-miR-214	CDKN1A	20534588
hsa-miR-214	CDKN2A	22037549
hsa-miR-214	MCL1	22418008
hsa-miR-214	MYC	20716115
hsa-miR-199a-5p	SIRT1	20193759
hsa-miR-381	BRCA1	20167074
hsa-miR-410	CDKN2A	21170085
hsa-miR-410	RB1	21170085
hsa-miR-654-3p	CDKN1A	20190813
hsa-miR-654-3p	PAK3	20190813
hsa-miR-154*	BRCA1	20167074
hsa-miR-154*	MYC	18451220
hsa-miR-99a	CDKN2A	17674361
hsa-miR-99a	MYC	18451220
hsa-miR-199a-3p	RB1	21049042
hsa-miR-136*	RB1	21049042
hsa-miR-100	MYC	18451220
hsa-miR-100	SIRT1	20439489
hsa-miR-125b	APAF1	21879257
hsa-miR-125b	ATM	18674748
hsa-miR-125b	BRCA1	19048628
hsa-miR-125b	CASP7	18056640
hsa-miR-125b	CDKN1A	21118985
hsa-miR-125b	CDKN2A	20347935
hsa-miR-125b	CEBPA	20806079

hsa-miR-125b	E2F1	20428827
hsa-miR-125b	E2F3	20049626
hsa-miR-125b	EP300	22245495
hsa-miR-125b	MCL1	22252650
hsa-miR-125b	MYC	18451220
hsa-miR-125b	RB1	20049626
hsa-miR-125b	SULT2A1	18230348
hsa-miR-299-5p	CDKN1A	20190813
hsa-miR-299-5p	PAK3	20190813
hsa-miR-154	BRCA1	20167074
hsa-miR-154	MYC	18451220
hsa-miR-214*	CDKN1A	20534588
hsa-miR-214*	CDKN2A	22037549
hsa-miR-214*	MCL1	22418008
hsa-miR-214*	MYC	20716115
hsa-miR-379	CDKN2A	19396864
hsa-miR-299-3p	CDKN2A	19396864
hsa-miR-369-5p	BRCA1	20810544
hsa-miR-337-3p	CDKN1A	23137536
hsa-miR-125b-2*	APAF1	21879257
hsa-miR-125b-2*	BRCA1	19048628
hsa-miR-125b-2*	CDKN2A	17674361
hsa-miR-125b-2*	E2F1	20428827
hsa-miR-125b-2*	E2F3	20428827
hsa-miR-125b-2*	RB1	20049626
hsa-miR-377*	CDKN1A	18716028
hsa-miR-196a	CDKN1A	19773200

## 5. Glucose metabolism Signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-1	ALDH9A1	15685193	
hsa-miR-1	GAPDH	21177382	
hsa-miR-1	PGM1	15685193	
hsa-miR-133b	PKM2	18464261	
hsa-miR-145	PGK1	20948521	
hsa-miR-133a	PKM2	18464261	

## 6. Insulin receptor repair and recycling Signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-192	AKT1	19543271	
hsa-miR-192	KRAS	19047896	
hsa-miR-192	PIK3CA	19047896	
hsa-miR-192	BRAF	19047896	
hsa-miR-194	AKT1	19074548	
hsa-miR-194	IRS1	21183973	
hsa-miR-194	JUN	19074548	
hsa-miR-203	AKT1	21248297	
hsa-miR-203	FOS	19759552	
hsa-miR-203	JUN	19396864	
hsa-miR-203	KRAS	20216554	
hsa-miR-203	NRAS	20216554	
hsa-miR-203	MAPK8	22205737	
hsa-miR-203	SOCS3	17622355	
hsa-miR-196a	AKT1	19418581	
hsa-miR-196a	IKBKB	18408758	
hsa-miR-196b	AKT1	19074548	
hsa-miR-196b	JUN	19074548	
hsa-miR-1	AKT1	19074548	
hsa-miR-1	FOXO1	22330340	
hsa-miR-1	FOS	21497762	
hsa-miR-1	FRAP1	20566686	
hsa-miR-1	GYS1	18668040	
hsa-miR-1	ARAF	15685193	
hsa-miR-1	JUN	18668040	
hsa-miR-1	PDE3A	18668040	
hsa-miR-1	PIK3CA	20959496	
hsa-miR-1	SHC3	15685193	
hsa-miR-1	PRKACA	19229884	
hsa-miR-1	PRKCI	18668040	
hsa-miR-1	PTPRF	18668040	
hsa-miR-1	RHEB	17234972	
hsa-miR-1	SREBF1	19720801	
hsa-miR-1	SRF	16380711	
hsa-miR-1	BRAF	21537871	
hsa-miR-1	TSC1	20978860	
hsa-miR-1	CALM1	22719074	
hsa-miR-133b	PIK3CA	20959496	
hsa-miR-133b	PKM2	18464261	
hsa-miR-133b	SLC2A4	19720047	
hsa-miR-133b	SRF	16380711	
hsa-miR-192*	AKT1	19543271	
hsa-miR-192*	KRAS	19047896	
hsa-miR-192*	PIK3CA	19047896	

hsa-miR-192*	BRAF	19047896
hsa-miR-146a	FASN	19596990
hsa-miR-146a	FOS	19635561
hsa-miR-146a	IKBKB	20525168
hsa-miR-146a	JUN	19635561
hsa-miR-146a	MAPK3	21060679
hsa-miR-146a	MAPK8	20525168
hsa-miR-146a	SOCS1	19635561
hsa-miR-146a	SOCS2	22524533
hsa-miR-146a	SOCS3	17622355
hsa-miR-145	EIF4EBP1	17891175
hsa-miR-145	AKT1	19074548
hsa-miR-145	FRAP1	20382746
hsa-miR-145	IRS1	17827156
hsa-miR-145	JUN	19074548
hsa-miR-145	KRAS	21159816
hsa-miR-145	NRAS	23201159
hsa-miR-145	PIK3CA	23104321
hsa-miR-145	MAPK3	23104321
hsa-miR-145	RPS6KB1	20382746
hsa-miR-145	SRF	19720868
hsa-miR-145	TSC2	20382746
hsa-miR-145	IRS2	22431718
hsa-miR-133a	PIK3CA	20959496
hsa-miR-133a	PKM2	18464261
hsa-miR-133a	RHEB	18827171
hsa-miR-133a	SLC2A4	19720047
hsa-miR-133a	SREBF1	19720801
hsa-miR-133a	SRF	16380711
hsa-miR-20a	SH2B2	21794077
hsa-miR-20a	AKT1	19074548
hsa-miR-20a	FRAP1	20022054
hsa-miR-20a	JUN	19074548
hsa-miR-20a	KRAS	20818338
hsa-miR-17	AKT1	20504959
hsa-miR-17	FRAP1	20022054
hsa-miR-17	IKBKB	20144951
hsa-miR-17	KRAS	16878133
hsa-miR-17	PIK3CA	17586726
hsa-miR-17	MAPK9	18700987
hsa-miR-17	SOCS1	17934639
hsa-miR-18a	AKT1	21402698
hsa-miR-18a	KRAS	19372139
hsa-miR-378*	KRAS	21922590
hsa-miR-19a	AKT1	20857258
hsa-miR-19a	PIK3CA	20505335

hsa-miR-19a	SOCS1	18728182
hsa-miR-194*	KRAS	22851141
hsa-miR-19b	SH2B2	21794077
hsa-miR-19b	PIK3CA	20505335
hsa-miR-19b	SOCS1	18728182
hsa-miR-18b	KRAS	20818338
hsa-miR-204	SOCS1	17934639
hsa-miR-204	SOCS2	22524533
hsa-miR-127-3p	JUN	19396864
hsa-miR-127-3p	KRAS	21922590
hsa-miR-127-3p	RASA1	21343399
hsa-miR-214	SH2B2	20498046
hsa-miR-214	AKT1	18199536
hsa-miR-214	IKBKB	20400975
hsa-miR-214	JUN	20498046
hsa-miR-214	KRAS	21543894
hsa-miR-214	NRAS	20534588
hsa-miR-214	MAPK8	19859982
hsa-miR-199a-5p	AKT1	18456660
hsa-miR-199a-5p	FASN	20814244
hsa-miR-199a-5p	IKBKB	18408758
hsa-miR-199a-5p	INSR	20193759
hsa-miR-199a-5p	MAPK1	18456660
hsa-miR-199a-5p	MAPK8	18456660
hsa-miR-199a-5p	MAPK9	18456660
hsa-miR-381	AKT1	21435336
hsa-miR-410	JUN	21170085
hsa-miR-410	PIK3R2	20844033
hsa-miR-218	CRK	19767772
hsa-miR-218	IKBKB	20933503
hsa-miR-218	KRAS	21543894
hsa-miR-218	PIK3R2	20844033
hsa-miR-218	SOCS1	17934639
hsa-miR-99a	AKT1	19074548
hsa-miR-99a	FASN	20497147
hsa-miR-99a	FRAP1	20484036
hsa-miR-99a	JUN	19074548
hsa-miR-199a-3p	AKT1	18456660
hsa-miR-199a-3p	FRAP1	20501828
hsa-miR-199a-3p	IKBKB	18408758
hsa-miR-199a-3p	PIK3CA	20643939
hsa-miR-199a-3p	MAPK1	18456660
hsa-miR-199a-3p	MAPK8	18456660
hsa-miR-199a-3p	MAPK9	18456660
hsa-miR-100	AKT1	18199536
hsa-miR-100	FRAP1	18596100

hsa-miR-100	JUN	19074548
hsa-miR-125b	EIF4EBP1	17891175
hsa-miR-125b	AKT1	18199536
hsa-miR-125b	FRAP1	21200031
hsa-miR-125b	IKBKB	20144951
hsa-miR-125b	JUN	19074548
hsa-miR-125b	KRAS	20216554
hsa-miR-125b	NRAS	20216554
hsa-miR-125b	MAPK3	21060679
hsa-miR-125b	SOCS1	19699171
hsa-miR-125b	SOCS3	17622355
hsa-miR-214*	SH2B2	20498046
hsa-miR-214*	AKT1	18199536
hsa-miR-214*	IKBKB	20400975
hsa-miR-214*	JUN	20498046
hsa-miR-214*	KRAS	21543894
hsa-miR-214*	NRAS	20534588
hsa-miR-214*	MAPK8	19859982
hsa-miR-495	FLOT2	21258409
hsa-miR-495	KRAS	20818338
hsa-miR-495	PIK3CA	20728239
hsa-miR-379	JUN	19396864
hsa-miR-382	AKT1	19401561
hsa-miR-376b	FRAP1	22248718
hsa-miR-299-3p	FOXO1	23380809
hsa-miR-299-3p	JUN	19396864
hsa-miR-130a	AKT1	22525256
hsa-miR-130a	FOS	21293178
hsa-miR-130a	FRAP1	21293178
hsa-miR-130a	IKBKB	20144951
hsa-miR-130a	PIK3CA	20505758
hsa-miR-130a	SREBF1	21293178
hsa-miR-337-3p	CSNK2A1	23137536
hsa-miR-337-3p	AKT1	21183973
hsa-miR-337-3p	IRS1	21183973
hsa-miR-337-3p	SOCS3	22894925
hsa-miR-125b-2*	MAPK3	21060679
hsa-miR-433	FASN	20497147
hsa-miR-433	GRB2	19531230

## 7. Interferon Signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-192	IFNG	21085987	
hsa-miR-192	TNF	21085987	
hsa-miR-194	TNF	22419229	
hsa-miR-203	IFNG	21093440	
hsa-miR-203	IL6	20981815	
hsa-miR-203	TNF	18419608	
hsa-miR-196a	IFNA1	19085952	
hsa-miR-196b	IFNA1	21070682	
hsa-miR-1	IFNA1	21070682	
hsa-miR-1	IL4	19342679	
hsa-miR-1	IL13	19342679	
hsa-miR-1	JAK2	19497108	
hsa-miR-192*	IFNG	21085987	
hsa-miR-192*	TNF	21085987	
hsa-miR-146a	IFNA1	19333922	
hsa-miR-146a	IFNG	18791161	
hsa-miR-146a	IL1A	20148189	
hsa-miR-146a	IL2	19965651	
hsa-miR-146a	IL6	18504431	
hsa-miR-146a	IL8	20053980	
hsa-miR-146a	IL10	20435894	
hsa-miR-146a	STAT1	20850013	
hsa-miR-146a	TNF	16885212	
hsa-miR-145	IFNA1	20382746	
hsa-miR-145	IFNG	20130213	
hsa-miR-145	JAK2	18508790	
hsa-miR-145	STAT1	20098684	
hsa-miR-133a	IL13	20953121	
hsa-miR-133a	JAK2	19497108	
hsa-miR-20a	IFNG	21085987	
hsa-miR-20a	IL6	19390056	
hsa-miR-20a	JAK2	18773208	
hsa-miR-20a	TNF	21085987	
hsa-miR-17	IL6	18728182	
hsa-miR-17	JAK2	18773208	
hsa-miR-17	TNF	19949084	
hsa-miR-18a	IL6	21953462	
hsa-miR-28-5p	IFNA1	21224041	
hsa-miR-28-5p	JAK2	20445018	
hsa-miR-378*	IFNA1	22649192	
hsa-miR-378*	IFNGR1	21655975	
hsa-miR-378*	IL1A	19917630	
hsa-miR-378*	JAK2	17976518	
hsa-miR-19a	IL6	18728182	

hsa-miR-19a	IL10	22043014
hsa-miR-19b	IL6	18728182
hsa-miR-204	IL8	22524533
hsa-miR-377	IFNG	21085987
hsa-miR-377	TNF	21085987
hsa-miR-99a	IFNA1	20497960
hsa-miR-99a	IL6	20497147
hsa-miR-199a-3p	TNF	19572984
hsa-miR-100	TNF	17640343
hsa-miR-125b	IFNA1	20497960
hsa-miR-125b	IL3	19890372
hsa-miR-125b	IL6	20347935
hsa-miR-125b	IL10	21060679
hsa-miR-125b	TNF	18419608
hsa-miR-323-3p	TNF	22562984
hsa-miR-130a	IL1A	17855557
hsa-miR-369-5p	TNF	18048652
hsa-miR-125b-2*	IL3	19890372
hsa-miR-125b-2*	IL10	21060679
hsa-miR-433	IL6	20497147
hsa-miR-377*	IFNG	21085987
hsa-miR-377*	TNF	21085987

## 8.p53 signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-215	CDKN1A	18810376	
hsa-miR-192	CDKN1A	18798260	
hsa-miR-192	CYCS	18798260	
hsa-miR-194	CDKN1A	19074875	
hsa-miR-203	CDK6	18381414	
hsa-miR-203	CDKN1A	20219920	
hsa-miR-196a	CDKN1A	19773200	
hsa-miR-196b	CCND1	19074548	
hsa-miR-1	CDK4	15685193	
hsa-miR-1	CDK6	15685193	
hsa-miR-133b	IGF1	19695767	
hsa-miR-133b	BCL2	19654003	
hsa-miR-192*	CDKN1A	18798260	
hsa-miR-192*	CYCS	18798260	
hsa-miR-146a	CDKN1A	20101223	
hsa-miR-146a	CDKN2A	21730286	
hsa-miR-145	CDK4	21092188	
hsa-miR-145	IGF1	19391107	
hsa-miR-133a	CDKN2A	22037549	
hsa-miR-133a	CCND1	19015276	
hsa-miR-20a	CDK2	22731656	
hsa-miR-20a	CDKN2A	18719372	
hsa-miR-17	CDK2	22731656	
hsa-miR-17	CDKN2A	18719372	
hsa-miR-18a	CDK2	22731656	
hsa-miR-18a	PTEN	19175831	
hsa-miR-28-5p	CDKN1A	20190813	
hsa-miR-28-5p	CDKN2A	20923760	
hsa-miR-378*	SERPINE1	20353610	
hsa-miR-378*	CCND1	21242960	
hsa-miR-20b	CDKN1A	18212054	
hsa-miR-20b	PTEN	19175831	
hsa-miR-19a	CDK2	22731656	
hsa-miR-19a	PTEN	14697198	
hsa-miR-19b	CDK2	22731656	
hsa-miR-19b	PTEN	20008935	
hsa-miR-18b	E2F1	15944709	
hsa-miR-18b	PTEN	19175831	
hsa-miR-204	CDKN1A	19074875	
hsa-miR-127-3p	CDK6	17581274	
hsa-miR-127-3p	BCL2	18942116	
hsa-miR-377	CDKN1A	18716028	
hsa-miR-214	CDKN1A	20534588	
hsa-miR-214	CDKN2A	22037549	

hsa-miR-199a-5p	MDM4	21719775
hsa-miR-199a-5p	CCND1	22362728
hsa-miR-410	CDKN2A	21170085
hsa-miR-410	RB1	21170085
hsa-miR-654-3p	CDKN1A	20190813
hsa-miR-154*	CCND2	21128228
hsa-miR-99a	CDKN2A	17674361
hsa-miR-99a	CCND1	19074548
hsa-miR-199a-3p	PTEN	20400975
hsa-miR-199a-3p	RB1	21049042
hsa-miR-136*	PTEN	21049042
hsa-miR-136*	RB1	21049042
hsa-miR-100	IGFBP3	20206398
hsa-miR-100	CCND1	19074548
hsa-miR-125b	CDK6	19414119
hsa-miR-125b	CDKN1A	20827722
hsa-miR-299-5p	CDKN1A	20190813
hsa-miR-154	CCND2	21128228
hsa-miR-214*	CDKN1A	20534588
hsa-miR-214*	CDKN2A	22037549
hsa-miR-495	MDM4	20371173
hsa-miR-379	CDKN2A	19396864
hsa-miR-299-3p	CDKN2A	19396864
hsa-miR-130a	PTEN	14697198
hsa-miR-130a	TP53	19948396
hsa-miR-485-3p	BCL2	21143953
hsa-miR-337-3p	CDKN1A	23137536
hsa-miR-125b-2*	CDKN2A	17674361
hsa-miR-125b-2*	E2F1	20049626
hsa-miR-433	IGF1	20497147
hsa-miR-433	CCND1	22362728
hsa-miR-377*	CDKN1A	18716028

### 9.p73 signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-215	PAK3	18810376	
hsa-miR-215	CDKN1A	19074875	
hsa-miR-192	PAK3	18798260	
hsa-miR-192	CDKN1A	18798260	
hsa-miR-194	MYC	18451220	
hsa-miR-194	EP300	19569050	
hsa-miR-194	CDKN1A	19074875	
hsa-miR-203	CDKN1A	20219920	
hsa-miR-203	CDK6	18381414	
hsa-miR-203	BAX	20219920	
hsa-miR-203	ABL1	18538729	
hsa-miR-196a	CDKN1A	19773200	
hsa-miR-196a	BAX	21293479	
hsa-miR-1	WT1	20368543	
hsa-miR-1	RELA	15685193	
hsa-miR-1	PLK1	18668040	
hsa-miR-1	MYC	23022474	
hsa-miR-1	MAPK14	15685193	
hsa-miR-1	CDKN1A	19229884	
hsa-miR-1	CDK6	15685193	
hsa-miR-1	CCNB1	23022474	
hsa-miR-1	BBC3	19229884	
hsa-miR-133b	WT1	20368543	
hsa-miR-133b	MYC	18451220	
hsa-miR-192*	PAK3	18798260	
hsa-miR-192*	CDKN1A	18798260	
hsa-miR-146a	SERPINE1	20053980	
hsa-miR-146a	RELA	19635561	
hsa-miR-146a	FASN	19965651	
hsa-miR-146a	EP300	21885871	
hsa-miR-146a	CDKN1A	20101223	
hsa-miR-146a	CCNA2	19944095	
hsa-miR-146a	BRCA2	20810544	
hsa-miR-145	WT1	18776121	
hsa-miR-145	PAK3	20190813	
hsa-miR-145	MYC	21803762	
hsa-miR-145	MAPK14	15131085	
hsa-miR-145	CDKN1A	20190813	
hsa-miR-133a	WT1	20368543	
hsa-miR-133a	MYC	18451220	
hsa-miR-20a	RB1	16461460	
hsa-miR-20a	PAK3	20190813	
hsa-miR-20a	MYC	18632605	
hsa-miR-20a	MAPK14	19559694	

hsa-miR-20a	CDKN1A	18941111
hsa-miR-20a	CDK2	22731656
hsa-miR-17	RELA	20144951
hsa-miR-17	RB1	20643754
hsa-miR-17	PAK3	19782699
hsa-miR-17	MYC	21717010
hsa-miR-17	MAPK14	19559694
hsa-miR-17	CDKN1A	18941111
hsa-miR-17	CDK2	22731656
hsa-miR-17	BRCA2	20810544
hsa-miR-18a	RB1	21388952
hsa-miR-18a	MYC	19706389
hsa-miR-18a	CDK2	22731656
hsa-miR-28-5p	PAK3	20190813
hsa-miR-28-5p	CDKN1A	20190813
hsa-miR-378*	SERPINE1	20353610
hsa-miR-378*	MYC	21242960
hsa-miR-20b	PAK3	20190813
hsa-miR-20b	MYC	15944709
hsa-miR-20b	CDKN1A	20190813
hsa-miR-19a	RB1	21388952
hsa-miR-19a	MYC	20008931
hsa-miR-19a	CDKN1A	20851997
hsa-miR-19a	CDK2	22731656
hsa-miR-19b	MYC	18632605
hsa-miR-19b	CDKN1A	20851997
hsa-miR-19b	CDK2	22731656
hsa-miR-18b	MYC	15944709
hsa-miR-204	SIRT1	22364258
hsa-miR-204	CDKN1A	19074875
hsa-miR-127-3p	MYC	19530237
hsa-miR-127-3p	CDK6	17581274
hsa-miR-377	CDKN1A	18716028
hsa-miR-214	MYC	20716115
hsa-miR-214	CDKN1A	20534588
hsa-miR-199a-5p	SIRT1	20193759
hsa-miR-199a-5p	MAPK14	18456660
hsa-miR-199a-5p	FASN	20814244
hsa-miR-410	RB1	21170085
hsa-miR-654-3p	PAK3	20190813
hsa-miR-654-3p	CDKN1A	20190813
hsa-miR-154*	MYC	18451220
hsa-miR-99a	MYC	18451220
hsa-miR-99a	FASN	20497147
hsa-miR-199a-3p	RB1	21049042
hsa-miR-199a-3p	MAPK14	18456660

hsa-miR-136*	RB1	21049042
hsa-miR-100	SIRT1	20439489
hsa-miR-100	PLK1	22246341
hsa-miR-100	MYC	18451220
hsa-miR-125b	RELA	20144951
hsa-miR-125b	RB1	20049626
hsa-miR-125b	PEA15	18347971
hsa-miR-125b	MYC	18451220
hsa-miR-125b	GATA1	20194440
hsa-miR-125b	EP300	22245495
hsa-miR-125b	CDKN1A	21118985
hsa-miR-125b	CDK6	19414119
hsa-miR-125b	BAX	23123599
hsa-miR-299-5p	PAK3	20190813
hsa-miR-299-5p	CDKN1A	20190813
hsa-miR-154	MYC	18451220
hsa-miR-214*	MYC	20716115
hsa-miR-214*	CDKN1A	20534588
hsa-miR-495	FLOT2	21258409
hsa-miR-130a	RELA	20144951
hsa-miR-369-5p	BRCA2	20810544
hsa-miR-337-3p	CDKN1A	23137536
hsa-miR-125b-2*	RB1	20428827
hsa-miR-125b-2*	GATA1	20194440
hsa-miR-125b-2*	BAX	21879257
hsa-miR-433	FASN	20497147
hsa-miR-377*	CDKN1A	18716028

## 10.phosphatidyl\_inositol signalling

miRNA	mRNA	Pubmed id	Reference
<b>hsa-miR-192</b>	PIK3CA	19047896	
hsa-miR-192	PTEN	19543271	
hsa-miR-203	PTEN	20216554	
hsa-miR-1	PTEN	20959496	
hsa-miR-1	PTPMT1	18668040	
hsa-miR-1	OCRL	15685193	
hsa-miR-1	PIK3CA	20959496	
hsa-miR-1	CALM1	22719074	
hsa-miR-1	CDIPT	18668040	
hsa-miR-133b	PTEN	20959496	
hsa-miR-133b	PIK3CA	20959496	
hsa-miR-192*	PIK3CA	19047896	
hsa-miR-192*	PTEN	19543271	
hsa-miR-146a	PTEN	21730286	
hsa-miR-145	PTEN	20716115	
hsa-miR-145	PIK3CA	23104321	
hsa-miR-133a	PTEN	20959496	
hsa-miR-133a	PIK3CA	20959496	
hsa-miR-20a	PTEN	19175831	
hsa-miR-17	PTEN	22659298	
hsa-miR-17	PIK3CA	22659298	
hsa-miR-18a	PTEN	19175831	
hsa-miR-378*	PTEN	19175831	
hsa-miR-20b	PTEN	19175831	
hsa-miR-19a	PTEN	20851997	
hsa-miR-19a	PIK3CA	20505335	
hsa-miR-19b	PIK3CA	20505335	
hsa-miR-19b	PTEN	20851997	
hsa-miR-18b	PTEN	19175831	
hsa-miR-214	PTEN	20716115	
hsa-miR-199a-5p	PTEN	20814244	
hsa-miR-410	PIK3R2	20844033	
hsa-miR-218	PIK3R2	20844033	
hsa-miR-199a-3p	PTEN	21049042	
hsa-miR-199a-3p	PIK3CA	20643939	
hsa-miR-136*	PTEN	21049042	
hsa-miR-100	PTEN	18199536	
hsa-miR-125b	PTEN	18199536	
hsa-miR-214*	PTEN	20716115	
hsa-miR-495	PIK3CA	20728239	
hsa-miR-130a	PTEN	22614869	
hsa-miR-130a	PIK3CA	22614869	

## 11.PPAR signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-192	CYP7A1	21085987	
hsa-miR-192	ILK	21984124	
hsa-miR-192	NOS2A	21085987	
hsa-miR-192	PIK3CA	19047896	
hsa-miR-192	TNF	21085987	
hsa-miR-194	EP300	19569050	
hsa-miR-194	JUN	19074548	
hsa-miR-194	MYC	18451220	
hsa-miR-194	TNF	22419229	
hsa-miR-203	NCOA2	18381414	
hsa-miR-203	JUN	19396864	
hsa-miR-203	NOS2A	21093440	
hsa-miR-203	PDGFA	19396864	
hsa-miR-203	TNF	18419608	
hsa-miR-196b	JUN	19074548	
hsa-miR-1	CYP27A1	18827405	
hsa-miR-1	FABP3	23141496	
hsa-miR-1	HSPA1A	18668040	
hsa-miR-1	JUN	18668040	
hsa-miR-1	LPL	18668040	
hsa-miR-1	MMP1	15685193	
hsa-miR-1	MYC	23022474	
hsa-miR-1	NOS2A	19213952	
hsa-miR-1	PIK3CA	20959496	
hsa-miR-1	PTGS2	18668040	
hsa-miR-1	RELA	15685193	
hsa-miR-1	SP1	15685193	
hsa-miR-1	UCP1	18937285	
hsa-miR-1	FADS2	18668040	
hsa-miR-133b	MYC	18451220	
hsa-miR-133b	PIK3CA	20959496	
hsa-miR-192*	CYP7A1	21085987	
hsa-miR-192*	ILK	21984124	
hsa-miR-192*	NOS2A	21085987	
hsa-miR-192*	PIK3CA	19047896	
hsa-miR-192*	TNF	21085987	
hsa-miR-146a	CREBBP	23229111	
hsa-miR-146a	EP300	21885871	
hsa-miR-146a	JUN	19635561	
hsa-miR-146a	NFKBIA	18504431	
hsa-miR-146a	NOS2A	18791161	
hsa-miR-146a	MAPK3	21060679	
hsa-miR-146a	PTGS2	20522791	
hsa-miR-146a	RELA	19635561	

hsa-miR-146a	TNF	16885212
hsa-miR-145	SLC27A4	22200372
hsa-miR-145	FABP4	20948521
hsa-miR-145	JUN	19074548
hsa-miR-145	MYC	19435428
hsa-miR-145	PIK3CA	23104321
hsa-miR-145	MAPK3	23104321
hsa-miR-133a	CYP27A1	18827405
hsa-miR-133a	MYC	18451220
hsa-miR-133a	PIK3CA	20959496
hsa-miR-133a	UCP1	18937285
hsa-miR-20a	CYP7A1	21085987
hsa-miR-20a	JUN	19074548
hsa-miR-20a	MYC	15944709
hsa-miR-20a	NOS2A	21085987
hsa-miR-20a	PPARG	21743293
hsa-miR-20a	RB1	16461460
hsa-miR-20a	TNF	21085987
hsa-miR-17	SLC27A4	19492978
hsa-miR-17	ME1	15183728
hsa-miR-17	MYC	15944709
hsa-miR-17	PIK3CA	17586726
hsa-miR-17	PPARA	17438130
hsa-miR-17	RB1	20049626
hsa-miR-17	RELA	20144951
hsa-miR-17	TNF	19949084
hsa-miR-18a	MYC	18632605
hsa-miR-18a	RB1	21388952
hsa-miR-28-5p	STAT5A	20445018
hsa-miR-28-5p	CD36	17379065
hsa-miR-378*	MYC	21242960
hsa-miR-378*	PPARG	20484008
hsa-miR-20b	MYC	15944709
hsa-miR-20b	PPARG	21042576
hsa-miR-19a	MYC	18632605
hsa-miR-19a	PIK3CA	20505335
hsa-miR-19a	RB1	21388952
hsa-miR-19b	ME1	15183728
hsa-miR-19b	MYC	18632605
hsa-miR-19b	PIK3CA	20505335
hsa-miR-18b	MYC	15944709
hsa-miR-204	SLC27A4	20634564
hsa-miR-376c	ME1	15183728
hsa-miR-127-3p	JUN	19396864
hsa-miR-127-3p	MYC	19530237
hsa-miR-127-3p	PDGFA	19396864

hsa-miR-127-3p	NR0B2	18776219
hsa-miR-377	CYP7A1	21085987
hsa-miR-377	NOS2A	21085987
hsa-miR-377	TNF	21085987
hsa-miR-214	JUN	20498046
hsa-miR-214	MYC	19435428
hsa-miR-199a-5p	MAPK1	18456660
hsa-miR-410	JUN	21170085
hsa-miR-410	RB1	21170085
hsa-miR-154*	ME1	15183728
hsa-miR-154*	MYC	18451220
hsa-miR-154*	CD36	17379065
hsa-miR-99a	JUN	19074548
hsa-miR-99a	MYC	18451220
hsa-miR-199a-3p	PIK3CA	20643939
hsa-miR-199a-3p	MAPK1	18456660
hsa-miR-199a-3p	RB1	21049042
hsa-miR-199a-3p	TNF	19572984
hsa-miR-136*	ME1	15183728
hsa-miR-136*	RB1	21049042
hsa-miR-136*	CD36	17379065
hsa-miR-100	JUN	19074548
hsa-miR-100	MYC	18451220
hsa-miR-100	TNF	17640343
hsa-miR-125b	EP300	22245495
hsa-miR-125b	JUN	19074548
hsa-miR-125b	MYC	18451220
hsa-miR-125b	NFKBIA	20435889
hsa-miR-125b	MAPK3	21060679
hsa-miR-125b	RB1	20049626
hsa-miR-125b	RELA	19997496
hsa-miR-125b	RXRA	20306291
hsa-miR-125b	NR2F1	20306291
hsa-miR-125b	TNF	18419608
hsa-miR-125b	NRIP1	21375733
hsa-miR-154	ME1	15183728
hsa-miR-154	MYC	18451220
hsa-miR-154	CD36	17379065
hsa-miR-214*	JUN	20498046
hsa-miR-214*	MYC	19435428
hsa-miR-495	PIK3CA	20728239
hsa-miR-379	JUN	19396864
hsa-miR-379	PDGFA	19396864
hsa-miR-299-3p	JUN	19396864
hsa-miR-299-3p	PDGFA	19396864
hsa-miR-323-3p	TNF	22562984

hsa-miR-130a	ME1	15183728
hsa-miR-130a	PIK3CA	20505758
hsa-miR-130a	RELA	20144951
hsa-miR-758	APOA1	21885853
hsa-miR-369-5p	FABP4	21136442
hsa-miR-369-5p	ME1	15183728
hsa-miR-369-5p	TNF	18048652
hsa-miR-369-5p	ADIPOQ	21136442
hsa-miR-125b-2*	MAPK3	21060679
hsa-miR-125b-2*	RB1	20049626
hsa-miR-433	NR0B2	18776219
hsa-miR-377*	CYP7A1	21085987
hsa-miR-377*	NOS2A	21085987
hsa-miR-377*	TNF	21085987

## 12.RB1 signalling

miRNA	mRNA	Pubmed id Reference
hsa-miR-215	TP53	19074876
hsa-miR-192	TP53	19074875
hsa-miR-194	TP53	22264233
hsa-miR-203	TP53	20216554
hsa-miR-1	CDK4	15685193
hsa-miR-1	TP53	19229884
hsa-miR-192*	TP53	22264233
hsa-miR-146a	TP53	18633110
hsa-miR-145	TP53	21349819
hsa-miR-145	CDK4	21092188
hsa-miR-20a	TP53	18941111
hsa-miR-20a	RB1	16461460
hsa-miR-20a	CDK2	22731656
hsa-miR-17	TP53	19347736
hsa-miR-17	ATM	19477219
hsa-miR-17	RB1	20643754
hsa-miR-17	CDK2	22731656
hsa-miR-18a	ATM	23229340
hsa-miR-18a	RB1	21388952
hsa-miR-18a	CDK2	22731656
hsa-miR-18a	TP53	21388952
hsa-miR-28-5p	TP53	20923760
hsa-miR-378*	TP53	20078964
hsa-miR-19a	TP53	21388952
hsa-miR-19a	RB1	21388952
hsa-miR-19a	CDK2	22731656
hsa-miR-19b	CDK2	22731656
hsa-miR-19b	TP53	18728182
hsa-miR-204	TP53	19074875
hsa-miR-410	CDC2	21170085
hsa-miR-410	RB1	21170085
hsa-miR-410	TP53	21170085
hsa-miR-99a	TP53	19843843
hsa-miR-199a-3p	RB1	21049042
hsa-miR-136*	RB1	21049042
hsa-miR-100	CDC25C	19739117
hsa-miR-100	TP53	20078964
hsa-miR-125b	TP53	21347262
hsa-miR-125b	RB1	20049626
hsa-miR-125b	ATM	18674748
hsa-miR-130a	TP53	19948396
hsa-miR-337-3p	TP53	23137536
hsa-miR-125b-2*	TP53	19890372
hsa-miR-125b-2*	RB1	20428827

### 13.WNT signalling

miRNA	mRNA	Pubmed id	Reference
hsa-miR-215	TP53	19074875	
hsa-miR-192	APC	19047896	
hsa-miR-192	CCND1	19205878	
hsa-miR-192	CCND2	21128228	
hsa-miR-192	CTNNB1	19047896	
hsa-miR-192	SMAD2	20488955	
hsa-miR-192	SMAD3	20488955	
hsa-miR-192	TP53	19047896	
hsa-miR-194	CCND1	19074548	
hsa-miR-194	EP300	19569050	
hsa-miR-194	FZD6	21887698	
hsa-miR-194	JUN	19074548	
hsa-miR-194	MYC	18451220	
hsa-miR-194	RAC1	19892940	
hsa-miR-194	TP53	19074875	
hsa-miR-203	JUN	19396864	
hsa-miR-203	LEF1	19015519	
hsa-miR-203	MAPK8	22205737	
hsa-miR-203	PPP2R1B	21248297	
hsa-miR-203	TP53	18483491	
hsa-miR-196b	CCND1	19074548	
hsa-miR-196b	JUN	19074548	
hsa-miR-1	APC	19136465	
hsa-miR-1	CCND1	19074548	
hsa-miR-1	CCND2	20054351	
hsa-miR-1	CHP	15685193	
hsa-miR-1	CSNK1D	18668040	
hsa-miR-1	CTNNB1	18668040	
hsa-miR-1	CXXC4	16908844	
hsa-miR-1	DVL2	15685193	
hsa-miR-1	JUN	18668040	
hsa-miR-1	MYC	23022474	
hsa-miR-1	PPP3CA	18668040	
hsa-miR-1	PPP3R1	18668040	
hsa-miR-1	PRKACA	19229884	
hsa-miR-1	RHOA	17468766	
hsa-miR-1	TP53	19229884	
hsa-miR-1	WNT5A	18668040	
hsa-miR-133b	APC	19136465	
hsa-miR-133b	LRP5	23143922	
hsa-miR-133b	MYC	18451220	
hsa-miR-133b	NFATC4	20173049	
hsa-miR-133b	RHOA	17468766	
hsa-miR-192*	APC	19047896	

hsa-miR-192*	CCND1	19205878
hsa-miR-192*	CCND2	21128228
hsa-miR-192*	CTNNB1	19047896
hsa-miR-192*	SMAD2	20488955
hsa-miR-192*	SMAD3	20488955
hsa-miR-192*	TP53	19047896
hsa-miR-146a	CREBBP	23229111
hsa-miR-146a	EP300	21885871
hsa-miR-146a	JUN	19635561
hsa-miR-146a	LEF1	21211043
hsa-miR-146a	MAPK8	20525168
hsa-miR-146a	ROCK1	18174313
hsa-miR-146a	SMAD3	22307526
hsa-miR-146a	SMAD4	20577838
hsa-miR-146a	TP53	18633110
hsa-miR-145	CCND1	17616664
hsa-miR-145	CTNNB1	19996288
hsa-miR-145	FBXW11	15131085
hsa-miR-145	JUN	19074548
hsa-miR-145	LEF1	21211043
hsa-miR-145	MYC	19435428
hsa-miR-145	PPP2R1B	21248297
hsa-miR-145	PPP3CA	19915607
hsa-miR-145	SMAD2	21723890
hsa-miR-145	SMAD3	21712382
hsa-miR-145	SMAD4	21712382
hsa-miR-145	TP53	18172508
hsa-miR-145	VANGL1	20098684
hsa-miR-133a	APC	19136465
hsa-miR-133a	CCND1	19015276
hsa-miR-133a	CCND2	20054351
hsa-miR-133a	MYC	18451220
hsa-miR-133a	NFATC4	20173049
hsa-miR-133a	RHOA	17468766
hsa-miR-133a	SMAD2	23102905
hsa-miR-20a	CCND1	18695042
hsa-miR-20a	JUN	19074548
hsa-miR-20a	MYC	15944709
hsa-miR-20a	TP53	18941111
hsa-miR-17	APC	19136465
hsa-miR-17	CCND1	18695042
hsa-miR-17	MAPK9	18700987
hsa-miR-17	MYC	15944709
hsa-miR-17	SMAD4	20940405
hsa-miR-17	TP53	16878133
hsa-miR-18a	MYC	18632605

hsa-miR-18a	SMAD2	21402698
hsa-miR-18a	SMAD3	23249750
hsa-miR-18a	TP53	21388952
hsa-miR-28-5p	TP53	20923760
hsa-miR-378*	CCND1	21242960
hsa-miR-378*	LEF1	21211043
hsa-miR-378*	MYC	21242960
hsa-miR-378*	TP53	20078964
hsa-miR-20b	MYC	15944709
hsa-miR-19a	CCND1	19538740
hsa-miR-19a	MYC	18632605
hsa-miR-19a	TP53	18728182
hsa-miR-19b	MYC	18632605
hsa-miR-19b	TP53	18728182
hsa-miR-18b	MYC	15944709
hsa-miR-204	CTNNBIP1	22736612
hsa-miR-204	TP53	19074875
hsa-miR-127-3p	JUN	19396864
hsa-miR-127-3p	MYC	19530237
hsa-miR-376a	PPP2R2A	20237410
hsa-miR-214	APC	19701500
hsa-miR-214	CCND1	22362728
hsa-miR-214	CCND2	20498046
hsa-miR-214	CTNNB1	19701500
hsa-miR-214	JUN	20498046
hsa-miR-214	MAPK8	19859982
hsa-miR-214	MYC	19435428
hsa-miR-199a-5p	CCND1	22362728
hsa-miR-199a-5p	MAPK8	18456660
hsa-miR-199a-5p	MAPK9	18456660
hsa-miR-410	JUN	21170085
hsa-miR-410	SFRP2	23154418
hsa-miR-410	TP53	21170085
hsa-miR-410	WNT5A	23154418
hsa-miR-154*	CCND2	21128228
hsa-miR-154*	MYC	18451220
hsa-miR-99a	CCND1	19074548
hsa-miR-99a	JUN	19074548
hsa-miR-99a	MYC	18451220
hsa-miR-99a	TP53	19843843
hsa-miR-199a-3p	MAPK8	18456660
hsa-miR-199a-3p	MAPK9	18456660
hsa-miR-136*	PPP2R2A	20237410
hsa-miR-100	CCND1	19074548
hsa-miR-100	JUN	19074548
hsa-miR-100	MYC	18451220

hsa-miR-100	TP53	19843843
hsa-miR-125b	CCND1	19074548
hsa-miR-125b	EP300	22245495
hsa-miR-125b	JUN	19074548
hsa-miR-125b	MAP3K7	20306291
hsa-miR-125b	MYC	18451220
hsa-miR-125b	TP53	17962954
hsa-miR-154	CCND2	21128228
hsa-miR-154	MYC	18451220
hsa-miR-214*	APC	19701500
hsa-miR-214*	CCND1	22362728
hsa-miR-214*	CCND2	20498046
hsa-miR-214*	CTNNB1	19701500
hsa-miR-214*	JUN	20498046
hsa-miR-214*	MAPK8	19859982
hsa-miR-214*	MYC	19435428
hsa-miR-379	JUN	19396864
hsa-miR-299-3p	AXIN2	23380809
hsa-miR-299-3p	JUN	19396864
hsa-miR-130a	TP53	19948396
hsa-miR-337-3p	CCND1	22894925
hsa-miR-337-3p	CSNK2A1	23137536
hsa-miR-337-3p	TP53	23137536
hsa-miR-125b-2*	TP53	19818772
hsa-miR-433	CCND1	22362728
hsa-miR-433	SFRP2	23154418
hsa-miR-433	WNT5A	23154418