

Additional File 4A

ID	Gene Target	Source
hsa-mir-1 (seed GGAAUGU)	ABHD11	TarBase
hsa-mir-1 (seed GGAAUGU)	ACPL2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ADAR	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ADPGK	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	AGMAT	TarBase
hsa-mir-1 (seed GGAAUGU)	AGRN	TarBase
hsa-mir-1 (seed GGAAUGU)	ANKIB1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ANKRD29	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ANP32B	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	ANPEP	TarBase
hsa-mir-1 (seed GGAAUGU)	ANXA2	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	AP3B1	TarBase
hsa-mir-1 (seed GGAAUGU)	AP3D1	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	ARCN1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ARF3	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ARF4	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	ARHGAP29	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	ARHGEF18	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ARID1A	TarBase
hsa-mir-1 (seed GGAAUGU)	ARID2	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	ASH2L	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	ATP6VOA1	TarBase
hsa-mir-1 (seed GGAAUGU)	ATP6V1B2	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	AXL	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	BCKDHB	TarBase
hsa-mir-1 (seed GGAAUGU)	BCL2	miRecords
hsa-mir-1 (seed GGAAUGU)	BDNF	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	BLCAP	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	BRI3BP	TarBase
hsa-mir-1 (seed GGAAUGU)	C12orf49	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	C1orf56	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	C1orf96	TarBase,TargetScan

		Human,miRecords
hsa-mir-1 (seed GGAAUGU)	Calm1	miRecords
hsa-mir-1 (seed GGAAUGU)	CAND1	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	CAP1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CDCP1	TarBase
hsa-mir-1 (seed GGAAUGU)	CDK14	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CDK9	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CERS2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CHST11	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CHSY1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CLCN3	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CNN3	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	CNOT6	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	COIL	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	CORO1C	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	CPOX	TarBase
hsa-mir-1 (seed GGAAUGU)	CSRP1	TarBase
hsa-mir-1 (seed GGAAUGU)	CTSC	TarBase
hsa-mir-1 (seed GGAAUGU)	DDX5	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	DHX15	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	DNAJB1	TarBase
hsa-mir-1 (seed GGAAUGU)	EGFR	TarBase
hsa-mir-1 (seed GGAAUGU)	EHMT1	TarBase
hsa-mir-1 (seed GGAAUGU)	EHMT2 (includes EG:10919)	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	EML4	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	EPB41L4B	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	ESR1	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	F2	TarBase
hsa-mir-1 (seed GGAAUGU)	FAM57A	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	FAM81A	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	FBLN2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	FERMT2	TarBase

hsa-mir-1 (seed GGAAUGU)	FOXP1	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	FSTL1	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	G6PD	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	GAK	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	GCFC2	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	GCH1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	GJA1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	GNPDA2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	GNPNAT1	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	GOLGA7	TarBase
hsa-mir-1 (seed GGAAUGU)	GPD2	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	H3F3A/H3F3B	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	HAND2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	HCN2	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	HCN4	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	HDAC4	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	HIST1H3A	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	HPS4	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	HSPA1A/HSPA1B	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	HSPD1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	IFT52	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	IGF1	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	INPP5F	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	IP6K2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	IQGAP3	TarBase
hsa-mir-1 (seed GGAAUGU)	IRX5	miRecords
hsa-mir-1 (seed GGAAUGU)	ISY1	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	ITGB4	TarBase
hsa-mir-1 (seed GGAAUGU)	KCNE1	miRecords
hsa-mir-1 (seed GGAAUGU)	KCNJ2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	KCNQ1	TarBase
hsa-mir-1 (seed GGAAUGU)	KIAA1598	TarBase,miRecords

hsa-mir-1 (seed GGAAUGU)	KIF2A	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	KLHDC5	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	LARP4	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	LASP1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	LIN7C	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	LRP1	TarBase
hsa-mir-1 (seed GGAAUGU)	LRRC8A	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	LZTFL1	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	MEF2A	miRecords
hsa-mir-1 (seed GGAAUGU)	MET	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	MGC27345	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	MMD	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	MOV10	TarBase
hsa-mir-1 (seed GGAAUGU)	MRC2	TarBase
hsa-mir-1 (seed GGAAUGU)	MTHFD2	TarBase
hsa-mir-1 (seed GGAAUGU)	MTMR12	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	MTX1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	MXD4	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	NETO2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	NOTCH2	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	NOTCH3	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	NRP1	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	OAT	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	OSBPL7	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	PDCD4	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	PDLIM7	TarBase
hsa-mir-1 (seed GGAAUGU)	PGM2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	PICALM	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	PIM1	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	PLEKHB2	TarBase,miRecords

hsa-mir-1 (seed GGAAUGU)	PLEKHG2	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	PNP	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	POGK	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	POLA1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	POLA2	TarBase
hsa-mir-1 (seed GGAAUGU)	POLR2K	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	POM121	miRecords
hsa-mir-1 (seed GGAAUGU)	POM121C	TarBase
hsa-mir-1 (seed GGAAUGU)	PPIB	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	PREX1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	PRSS21	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	PTBP1	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	PTBP2	TarBase
hsa-mir-1 (seed GGAAUGU)	PTMA	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	PTPLAD1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	PTPLB	TarBase
hsa-mir-1 (seed GGAAUGU)	PTPRF	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	PWP1	TarBase
hsa-mir-1 (seed GGAAUGU)	RAB11FIP2	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	RABGAP1L	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	RABL2A	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	RABL2B	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	RBM47	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	RFT1	TarBase
hsa-mir-1 (seed GGAAUGU)	RNF138	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SAC3D1	TarBase
hsa-mir-1 (seed GGAAUGU)	SDC4	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	SEC23IP	TarBase
hsa-mir-1 (seed GGAAUGU)	SERP1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SERPINB5	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	SFXN1	TarBase
hsa-mir-1 (seed GGAAUGU)	SH2D4A	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SH3BGRL3	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	SH3PXD2B	TarBase,TargetScan

		Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SLC16A9	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	SLC25A1	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	SLC25A22	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	SLC25A30	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SLC44A1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SNX6	TarBase
hsa-mir-1 (seed GGAAUGU)	SRSF9	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SRXN1	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	SSNA1	TarBase
hsa-mir-1 (seed GGAAUGU)	SYNE1	TarBase
hsa-mir-1 (seed GGAAUGU)	TAC1	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	TAGLN2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TDP1 (includes EG:104884)	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TH1L	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	THBS1	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	TIMP3	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TMSB10/TMSB4X	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TNS4	TarBase,miRecords
hsa-mir-1 (seed GGAAUGU)	TPM1 (includes EG:396366)	TarBase
hsa-mir-1 (seed GGAAUGU)	TPM2	TarBase
hsa-mir-1 (seed GGAAUGU)	TPM3	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	TPM4	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TPPP	TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TRAPPC3	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TRIM2	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TSPAN4	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	TWF1 (includes EG:19230)	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	UHMK1	TarBase,TargetScan Human,miRecords

hsa-mir-1 (seed GGAAUGU)	UHRF1	TarBase
hsa-mir-1 (seed GGAAUGU)	UNC93B1	TarBase
hsa-mir-1 (seed GGAAUGU)	UST	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	UTRN	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	WDFY1	TarBase,TargetScan Human
hsa-mir-1 (seed GGAAUGU)	WDR11	TarBase
hsa-mir-1 (seed GGAAUGU)	XPNPEP3	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	XPO6	TarBase,TargetScan Human,miRecords
hsa-mir-1 (seed GGAAUGU)	YWHAQ	TarBase
hsa-mir-1 (seed GGAAUGU)	ZNF264	TarBase,TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	ABTB1	TarBase,TargetScan Human
hsa-mir-125b (seed CCCUGAG)	ADAMTS1	miRecords
hsa-mir-125b (seed CCCUGAG)	AJUBA	TarBase
hsa-mir-125b (seed CCCUGAG)	ANAPC16	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	APLN	TarBase
hsa-mir-125b (seed CCCUGAG)	ARID3A	TarBase,TargetScan Human
hsa-mir-125b (seed CCCUGAG)	ARID3B	TarBase,TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	ATP6AP1L	miRecords
hsa-mir-125b (seed CCCUGAG)	B3GALT4	miRecords
hsa-mir-125b (seed CCCUGAG)	BAK1	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	BMF	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	BMPR1B	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	C9orf86	TarBase,TargetScan Human
hsa-mir-125b (seed CCCUGAG)	CASP6	miRecords
hsa-mir-125b (seed CCCUGAG)	CASP7	miRecords

hsa-mir-125b (seed CCCUGAG)	CBLN2	miRecords
hsa-mir-125b (seed CCCUGAG)	CBX7	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	CCR5	TargetScan Human
hsa-mir-125b (seed CCCUGAG)	CDC25A	miRecords
hsa-mir-125b (seed CCCUGAG)	CDK6	miRecords
hsa-mir-125b (seed CCCUGAG)	CDKN2A	miRecords
hsa-mir-125b (seed CCCUGAG)	CEBPG	miRecords
hsa-mir-125b (seed CCCUGAG)	CYP1A1	miRecords
hsa-mir-125b (seed CCCUGAG)	DDX19B	TarBase
hsa-mir-125b (seed CCCUGAG)	DICER1	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	DIO3	miRecords
hsa-mir-125b (seed CCCUGAG)	DUS1L	TarBase,TargetScan Human
hsa-mir-125b (seed CCCUGAG)	E2F3	TargetScan Human
hsa-mir-125b (seed CCCUGAG)	ELAVL1	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	ENTPD4	TarBase,TargetScan Human
hsa-mir-125b (seed CCCUGAG)	ERBB2	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	ERBB3	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	FAM19A1	miRecords
hsa-mir-125b (seed CCCUGAG)	GPR160	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	H3F3A/H3F3B	miRecords
hsa-mir-125b (seed CCCUGAG)	HIST1H4A (includes others)	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	ID1	miRecords
hsa-mir-125b (seed CCCUGAG)	ID2	miRecords

hsa-mir-125b (seed CCCUGAG)	ID3	miRecords
hsa-mir-125b (seed CCCUGAG)	IGFBP3	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	IL1RN	miRecords
hsa-mir-125b (seed CCCUGAG)	JARID2	miRecords
hsa-mir-125b (seed CCCUGAG)	KRT19 (includes EG:16669)	miRecords
hsa-mir-125b (seed CCCUGAG)	LIN28A	TarBase,TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	MAN1A1	miRecords
hsa-mir-125b (seed CCCUGAG)	MAP2K7	TarBase,TargetScan Human
hsa-mir-125b (seed CCCUGAG)	ODZ2	miRecords
hsa-mir-125b (seed CCCUGAG)	PCDHB10	miRecords
hsa-mir-125b (seed CCCUGAG)	PERP	miRecords
hsa-mir-125b (seed CCCUGAG)	PIGR	miRecords
hsa-mir-125b (seed CCCUGAG)	PPT2	TarBase
hsa-mir-125b (seed CCCUGAG)	RBM8A	miRecords
hsa-mir-125b (seed CCCUGAG)	RHEBL1	TarBase
hsa-mir-125b (seed CCCUGAG)	SGPL1	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	SMO	miRecords
hsa-mir-125b (seed CCCUGAG)	ST18	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	TOR2A	TarBase,TargetScan Human
hsa-mir-125b (seed CCCUGAG)	TP53	TargetScan Human,miRecords
hsa-mir-125b (seed CCCUGAG)	TSPAN8	miRecords
hsa-mir-125b (seed CCCUGAG)	UBE2I	miRecords
hsa-mir-125b (seed CCCUGAG)	UGT2B15	miRecords

hsa-mir-125b (seed CCCUGAG)	UGT2B17	miRecords
hsa-mir-125b (seed CCCUGAG)	UGT2B28	miRecords
hsa-mir-125b (seed CCCUGAG)	ZNF385A	TarBase,TargetScan Human
hsa-mir-133a (seed UUGGUCC)	BCL2L2	TargetScan Human
hsa-mir-133a (seed UUGGUCC)	CASP9	TarBase,miRecords
hsa-mir-133a (seed UUGGUCC)	CDC42	miRecords
hsa-mir-133a (seed UUGGUCC)	CTGF	TargetScan Human
hsa-mir-133a (seed UUGGUCC)	FSCN1	TargetScan Human,miRecords
hsa-mir-133a (seed UUGGUCC)	HCN2	TarBase,miRecords
hsa-mir-133a (seed UUGGUCC)	HCN4	TarBase
hsa-mir-133a (seed UUGGUCC)	IGF1R	TargetScan Human,miRecords
hsa-mir-133a (seed UUGGUCC)	KCNE1	TarBase
hsa-mir-133a (seed UUGGUCC)	KCNH2	miRecords
hsa-mir-133a (seed UUGGUCC)	KCNQ1	miRecords
hsa-mir-133a (seed UUGGUCC)	KLF15	miRecords
hsa-mir-133a (seed UUGGUCC)	KRT7	miRecords
hsa-mir-133a (seed UUGGUCC)	MCL1	TargetScan Human
hsa-mir-133a (seed UUGGUCC)	NFATC4	miRecords
hsa-mir-133a (seed UUGGUCC)	PITX3	miRecords
hsa-mir-133a (seed UUGGUCC)	PKM	TarBase,miRecords
hsa-mir-133a (seed UUGGUCC)	PTBP2	TarBase,TargetScan Human,miRecords
hsa-mir-133a (seed UUGGUCC)	RHOA	miRecords
hsa-mir-133a (seed UUGGUCC)	RUNX2	miRecords

hsa-mir-133a (seed UUGGUCC)	SRF	TarBase,miRecords
hsa-mir-133a (seed UUGGUCC)	TAGLN2	TargetScan Human
hsa-mir-133a (seed UUGGUCC)	WHSC2	TargetScan Human,miRecords
hsa-mir-196a (seed AGGUAGU)	ANXA1	miRecords
hsa-mir-196a (seed AGGUAGU)	HOXA7	TarBase,TargetScan Human,miRecords
hsa-mir-196a (seed AGGUAGU)	HOXB8	TarBase,TargetScan Human,miRecords
hsa-mir-196a (seed AGGUAGU)	HOXC8	TarBase,TargetScan Human,miRecords
hsa-mir-196a (seed AGGUAGU)	HOXD8	TarBase,miRecords
hsa-mir-196a (seed AGGUAGU)	IKBKB	miRecords
hsa-mir-196a (seed AGGUAGU)	KRT5	TargetScan Human,miRecords
hsa-mir-196a (seed AGGUAGU)	S100A9	miRecords
hsa-mir-196a (seed AGGUAGU)	SPRR2C	miRecords
hsa-mir-196a (seed AGGUAGU)	ALOX5AP	miRecords
hsa-mir-196a (seed AGGUAGU)	HIF1A	TargetScan Human,miRecords
hsa-mir-196a (seed AGGUAGU)	LAMC2	TarBase,miRecords
hsa-mir-196a (seed AGGUAGU)	SET	miRecords
hsa-mir-196a (seed AGGUAGU)	SIRT1	TargetScan Human,miRecords
hsa-mir-511 (seed UGUCUUU)	TLR4	TargetScan Human
hsa-mir-7 (seed GGAAGAC)	EGFR	TargetScan Human,miRecords
hsa-mir-7 (seed GGAAGAC)	FOS	TarBase,miRecords
hsa-mir-7 (seed GGAAGAC)	IRS1	TargetScan Human,miRecords
hsa-mir-7 (seed GGAAGAC)	IRS2	TargetScan Human,miRecords
hsa-mir-7 (seed GGAAGAC)	PAK1	TargetScan Human,miRecords
hsa-mir-7 (seed GGAAGAC)	RAF1	TargetScan Human,miRecords
hsa-mir-7 (seed GGAAGAC)	SLC17A7	miRecords
hsa-mir-7 (seed GGAAGAC)	SLC3A2	TargetScan Human,miRecords
hsa-mir-7 (seed GGAAGAC)	SNCA	TargetScan Human,miRecords

Additional File 4B

Gene Ontology Term Enrichment Analysis		
Term	Genes	FDR Corrected p value
GO:0042981 regulation of apoptosis	MCL1, ERBB3, PREX1, ERBB2, SNCA, BCL2L2, TLR4, HSPA1A, TIMP3, GCH1, IGF1R, CASP6, BAK1, PLEKHG2, BDNF, CDKN2A, CASP9, BCL2, DDX19B, CHST11, RHOA, THBS1, BMF, IP6K2, EGFR, PTPRF, CEBPG, ARHGEF18, PIM1, ANXA1, TP53, ESR1, IGF1, SIRT1, NOTCH2, SMO, F2, ID3, HSPD1, IKBKB, PERP, IGFBP3	2.79E-05
GO:0043066 negative regulation of apoptosis	EGFR, MCL1, ERBB3, ERBB2, SNCA, PIM1, TP53, ESR1, ANXA1, IGF1, BCL2L2, HSPA1A, NOTCH2, SMO, IGF1R, BDNF, BCL2, CHST11, RHOA, HSPD1, THBS1, IKBKB	0.01
GO:0045597 positive regulation of cell differentiation	SH3PXD2B, PTPRF, PDLIM7, SRF, PNP, SMO, BDNF, HIF1A, ID2, BCL2, RHOA, AP3D1, BMPR1B, IGFBP3, RUNX2, AP3B1	0.02