

Supplementary table 2. Details of the combined epigenetic gene panel stratified for epigenetic mediated silencing and upregulation.

Silencing			RNA			H3K27-3M			H3K9-3M			DNA 5mC		
Gene	Symbol		EJ	RT112	NHU	EJ	RT112	NHU	EJ	RT112	NHU	EJ	RT112	NHU
NM_265	GLUL	-1	-1	1		1	1		1	1				
NM_24833	ZNF671	-1	-1			1	1		1	1				
NM_1759	CCND2	-1	-1	1	1									
NM_785	CYP27B1	-1	-1	1	1									
NM_1999	FBN2	-1	-1			1	1					1	1	
NM_13231	FLRT2	-1	-1	1	1				1	1				
NM_15478	L3MBTL1	-1	-1	1	1							1		
NM_633	LIPG	-1	-1	1	1				1	1				
NM_2462	MX1	-1	-1	1	1				1	1				
NM_2589	PCDH7	-1	-1	1	1				1	1				
NM_1693	ATP6V1B2	-1	-1	1	1							1	1	
NM_1814	BGL11A	-1	-1	1	1				1	1				
NM_16229	CYB5R2	-1	-1	1	1				1	1				
NM_64	DCTN2	-1	-1	1	1							1	1	
NM_146	EHD3	-1	-1	1	1				1	1				
NM_22726	ELOVL4	-1	-1	1	1				1	1				
NM_4265	FADS2	-1	-1	1	1							1	1	
NM_14164	FXD5	-1	-1					1				1	1	
NM_153	GALC	-1	-1	1	1				1	1				
NM_163	GHR	-1	-1	1	1							1	1	
NM_1894	GSPT2	-1	-1	1	1				1	1				
NM_5328	HAS2	-1	-1	1	1				1	1				
NM_565	IL6R	-1	-1	1	1							1	1	
NM_222	ISL1	-1	-1	1	1				1	1				
NM_2291	LAMB1	-1	-1	1	1			1	1					
NM_3915	LBH	-1	-1	1	1				1	1				
NM_13437	LRP12	-1	-1	1	1				1	1				
NM_24652	LRRK1	-1	-1	1	1				1	1				
NM_536	MAF	-1	-1	1	1				1	1				
NM_2442	METRN	-1	-1	1	1				1	1				
NM_17459	MFBP2	-1	-1	1	1				1	1				
NM_21242	MID1P1	-1	-1	1	1				1	1				
NM_2526	NTSE	-1	-1	1	1				1	1				
NM_4199	P4HA2	-1	-1	1	1				1	1				
NM_445	PLEC	-1	-1	1	1				1	1				
NM_6227	PLTP	-1	-1	1	1				1	1				
NM_6822	RAB4B	-1	-1	1	1				1	1				
NM_14	S1PK1	-1	-1	1	1				1	1				
NM_24628	SLC12A8	-1	-1	1	1				1	1				
NM_6517	SLC16A2	-1	-1	1	1				1	1				
NM_18676	THSD1	-1	-1	1	1							1	1	
NM_1812	ZNF334	-1	-1	1	1			1				1	1	
NM_3816	ADAM9	-1	-1						1	1				
NM_487	ARSA	-1	-1					1	1					
NM_4874	BAG4	-1	-1						1	1				
NM_5881	BCKDK	-1	-1						1	1				
NM_12	BMP2	-1	-1	1	1				1	1				
NM_153218	C13orf31	-1	-1	1	1							1	1	
NM_436	CDH1	-1	-1						1	1				
NM_6825	CKAP4	-1	-1						1	1				
NM_198	CTS8	-1	-1						1	1				
NM_12266	DNABJ5	-1	-1	1	1							1	1	
NM_17434	DUOX1	-1	-1						1	1				
NM_24712	ELMO3	-1	-1						1	1				
NM_1248	ENTPD3	-1	-1	1	1							1	1	
NM_22749	FAM16B2	-1	-1						1	1				
NM_513	FEZ1	-1	-1	1	1							1	1	
NM_635	FST	-1	-1	1	1							1	1	
NM_284	GPX3	-1	-1						1	1				
NM_177	GSN	-1	-1	1	1				1	1				
NM_853	GSTT1	-1	-1						1	1				
NM_585	IL15	-1	-1						1	1				
NM_418	IL4R	-1	-1					1	1					
NM_5569	LIMK2	-1	-1					1	1					
NM_2318	LOXL2	-1	-1						1	1				
NM_61	MANF	-1	-1						1	1				
NM_12215	MGEA5	-1	-1					1	1					
NM_7287	MME	-1	-1	1	1							1	1	
NM_14893	NLGN4Y	-1	-1						1	1				
NM_2581	NYNRIN	-1	-1	1	1							1	1	
NM_2616	PER1	-1	-1					1	1					
NM_16559	PEX5L	-1	-1						1	1				
NM_4572	PKP2	-1	-1	1	1							1	1	
NM_5167	PPM1J	-1	-1	1	1							1	1	
NM_2851	PTPRZ1	-1	-1	1	1							1	1	
NM_16321	RHCG	-1	-1						1	1				
NM_3666	SERPINB1	-1	-1	1	1							1	1	
NM_18418	SPATA7	-1	-1	1	1							1	1	
NM_7315	STAT1	-1	-1						1	1				
NM_3199	TCF4	-1	-1	1	1							1	1	
NM_18975	TERF2IP	-1	-1						1	1				
NM_3236	TGFA	-1	-1	1	1							1	1	
NM_4817	TJP2	-1	-1						1	1				
NM_14683	ULK2	-1	-1						1	1				
NM_376	VDR	-1	-1	1	1							1	1	
NM_13245	VPS4A	-1	-1						1	1				
NM_3385	VSNL1	-1	-1	1	1							1	1	
NM_14943	ZHX2	-1	-1	1	1							1	1	

Total of changes (%)

22% 19%

9% 7%

20% 23%

Upregulation			RNA			H3K27-3M			H3K9-3M			DNA 5mC		
Gene	Symbol		EJ	RT112	NHU	EJ	RT112	NHU	EJ	RT112	NHU	EJ	RT112	NHU
NM_14171	CRIPT	1	1	1	1				1	1				
NM_7358	MTF2	1	1	1	1							1	1	
NM_1613	SAR1B	1	1	1	1							1	1	
NM_2186	ACN9	1	1	1	1							1	1	
NM_17812	CHCHD3	1	1	1	1							1	1	
NM_1316	CSEIL	1	1	1	1							1	1	
NM_2548	DBI	1	1	1	1							1	1	
NM_16216	DBRI	1	1	1	1							1	1	
NM_584	DDX39A	1	1	1	1							1	1	
NM_5675	DGCR6	1	1	1	1							1	1	
NM_14597	DNTTIP2	1	1	1	1							1	1	
NM_4147	DRG1	1	1	1	1							1	1	
NM_1954	FAM35A	1	1	1	1							1	1	
NM_6547	IGF2BP3	1	1	1	1							1	1	
NM_17768	LRRC4	1	1	1	1							1	1	
NM_18353	MIS18BP1	1	1	1	1							1	1	
NM_4927	MIR49	1	1	1	1							1	1	
NM_2117	MRPS12	1	1	1	1							1	1	
NM_2519	MYO19	1	1	1	1							1	1	
NM_4546	NDUFB2	1	1	1	1							1	1	
NM_4146	NDUFB7	1	1	1	1							1	1	
NM_1823	NUP133	1	1	1	1							1	1	
NM_18492	PPK	1	1	1	1							1	1	
NM_2691	POLR1D	1	1	1	1							1	1	
NM_17917	PPP2R3C	1	1	1	1							1	1	
NM_3129	QTRT1	1	1	1	1							1	1	
NM_133	RRM1	1	1	1	1							1	1	
NM_17827	SARS2	1	1	1	1							1	1	
NM_3983	SLC7A6	1	1	1	1							1	1	
NM_3258	TKI	1	1	1	1							1	1	
NM_2091	TFR1	1	1	1	1							1	1	
NM_17917	PPP2R3C	1	1	1	1							1	1	
NM_1634	AMD1	1	1	1	1							1	1	
NM_1812	ARMC1	1	1	1	1							1	1	
NM_18154	ASF1B	1	1	1	1							1	1	
NM_24857	ATAD5	1	1	1	1							1	1	
NM_71	ATP5I	1	1	1	1							1	1	
NM_15878	AZIN1	1	1	1	1							1	1	
NM_18963	BRWD1	1	1	1	1							1	1	
NM_24631	C11orf61	1	1	1	1							1	1	
NM_4894	C14orf2	1	1	1	1							1	1	
NM_144597	C15orf4	1	1	1	1							1	1	
NM_2377	C1orf163	1	1	1	1							1	1	
NM_1884	C2orf24	1	1	1	1							1	1	
NM_16647	C6orf55	1	1	1	1							1	1	
NM_189	CENPA	1	1	1	1							1	1	