

Table S3. The transcription factors identified in the *TRRUST* database using the 10 genes of the training set.

Transcription Factor			Transcription Factor			Transcription Factor			Transcription Factor		
Name	Frequency*		Name	Frequency1		Name	Frequency*		Name	Frequency*	
AATF	1		EGR1	4		HDAC2	2		MSX2	1	
ABL1	2		EHMT2	1		HDAC3	1		MTA1	1	
AR	6		ELF1	1		HDAC4	1		MXD1	1	
ARID1A	1		ELK1	1		HDAC7	1		MYB	4	
ATF1	2		ELL	1		HES1	1		MYC	6	
ATF2	1		EP300	3		HIF1A	3		MYCN	1	
ATF5	1		ERCC2	2		HIPK2	1		NCOA1	1	
ATF7	1		ERG	1		HNF4A	1		NCOA3	2	
ATM	2		ESR1	5		HOXA1	1		NELFCD	1	
BACH2	1		ESR2	1		HSF1	1		NFIA	1	
BCL6	1		ETS1	4		ING1	1		NFIB	1	
BRCA1	2		ETS2	1		ING2	1		NFIX	1	
CBX8	1		ETV4	3		ING4	2		NFKB1	8	
CDX2	1		ETV6	1		IRF1	3		NPM1	1	
CEBPA	1		EW'SR1	1		IRF2	1		NR1I2	1	
CEBPB	1		EZH2	3		IRF9	1		NR3C1	1	
CHD8	1		FHL2	1		JUN	2		NRF1	1	
CREB1	4		FLI1	2		JUNB	1		NUPR1	2	
CREB3	1		FOXA1	1		JUND	2		PARP1	2	
CREBBP	1		FOXG1	1		KAT2B	1		PAWR	1	
CTCF	1		FOXO1	1		KLF10	1		PAX2	1	
DBD2	1		FOXO3	1		KLF14	1		PAX3	1	
DEK	1		FOXP3	2		KLF16	1		PAX5	2	
DENND4A	1		FUBP1	1		KLF2	2		PER1	1	
DMAP1	1		GABPA	1		KLF4	2		PGR	3	
DNMT1	2		GATA4	1		KLF5	1		PML	1	
DNMT3A	1		GFI1	1		KLF6	2		POU5F1	1	
E2F1	5		GLI1	3		LCOR	1		PPARG	4	
E2F3	1		GLI2	1		MLLT10	1		PTMA	1	
EAPP	1		HBP1	1		MLLT3	1		PURA	1	
EBF3	1		HDAC1	2							

* The number of times given TF has been selected in the TRRUST database using the 10 genes of the training set.