

Supplemental Table 1: Repeated sampling for construction of prognostic classifier

Replicate	Probe	Gene name	Risk	lasso-coefficient
1	cg22282405	TFAP2B	protective	
	cg13800209	MEIS2	protective	
	cg17945976	MEIS1	protective	-0.44087198
	cg23972738	MEIS1	protective	
	cg09462924	MEIS1	protective	-0.29896744
	cg16178603	MEIS1	protective	
	cg17107572	MEIS1	protective	
	cg22731271	MEIS1	protective	
	cg09671258	LHX4	protective	
	cg11433622	MEIS1	protective	
	cg02970836	TRNA_Pro	protective	
	cg22604316	DMBX1	protective	
	cg25622366	OTX1	risky	0.59880374
	cg27164770	GPC6	risky	0.30837935
	cg10122865	OTX1	risky	0.9964799
	cg20916523	VHL	risky	
	cg04244970	SLAMF7	risky	0.6591016
	cg19763461	OTX1	risky	
	cg03502002	GALR1	risky	0.70122593
	cg22691256	WBSCR17	risky	
	cg16925459	HDAC9	risky	
	cg16578085	INTU	risky	0.45291578
2	cg03405909	PAX6	protective	
	cg22282405	TFAP2B	protective	
	cg09462924	MEIS1	protective	
	cg23972738	MEIS1	protective	-0.00071655
	cg17945976	MEIS1	protective	-0.38921262
	cg16178603	MEIS1	protective	
	cg22731271	MEIS1	protective	
	cg27164770	GPC6	risky	
	cg04244970	SLAMF7	risky	0.33858511
	cg03502002	GALR1	risky	
	cg25622366	OTX1	risky	
	cg10122865	OTX1	risky	
	cg07974511	OTX1	risky	
	cg10255237	LOC338758	risky	0.14903129

	cg01572460	FBXL7	risky	
	cg16578085	INTU	risky	1.22025144
	cg17467525	PIK3CD	risky	
3	cg17945976	MEIS1	protective	-0.389212616
	cg09462924	MEIS1	protective	
	cg23972738	MEIS1	protective	
	cg22731271	MEIS1	protective	
	cg10122865	OTX1	risky	0.716554
	cg00582524	SALL1	risky	
	cg07974511	OTX1	risky	
	cg21472506	OTX1	risky	
	cg23229261	OTX1	risky	
	cg27364741	OTX1	risky	
	cg03502002	GALR1	risky	
	cg01532168	KCNK9	risky	
	cg19763461	OTX1	risky	
	cg04534765	GALR1	risky	
	cg05099508	SPAG6	risky	
	cg27164770	GPC6	risky	
	cg16578085	INTU	risky	1.22025144
	cg01572460	FBXL7	risky	
	cg10255237	LOC338758	risky	
4	cg22691256	WBSCR17	risky	
	cg04244970	SLAMF7	risky	
	cg17467525	PIK3CD	risky	0.14903129
	cg13784312	RAPGEF1	risky	0.338585112
	cg09462924	MEIS1	protective	-0.4423175
	cg23972738	MEIS1	protective	
	cg17945976	MEIS1	protective	
	cg11433622	MEIS1	protective	
	cg05877497	MEIS1	protective	
	cg22731271	MEIS1	protective	
	cg16178603	MEIS1	protective	

	cg04244970	SLAMF7	risky	0.3646767
	cg27164770	GPC6	risky	0.2093498
	cg16578085	INTU	risky	1.0880277
	cg10122865	OTX1	risky	0.437051
	cg03502002	GALR1	risky	0.2286467
5	cg17945976	MEIS1	protective	
	cg23972738	MEIS1	protective	
	cg09462924	MEIS1	protective	
	cg16178603	MEIS1	protective	
	cg22731271	MEIS1	protective	-0.2912206
	cg11433622	MEIS1	protective	
	cg05877497	MEIS1	protective	
	cg27164770	GPC6	risky	
	cg10122865	OTX1	risky	1.7170238
	cg13784312	RAPGEF1	risky	
	cg03502002	GALR1	risky	1.8290824
	cg04244970	SLAMF7	risky	0.1762511
	cg27364741	OTX1	risky	1.5646846
	cg16578085	INTU	risky	0.4746671
	cg05919685	APCS	risky	1.6448035
	cg22691256	WBSCR17	risky	1.0274163
6	cg23972738	MEIS1	protective	
	cg22731271	MEIS1	protective	-0.3391273
	cg16178603	MEIS1	protective	
	cg10122865	OTX1	risky	0.02761343
	cg19801921	LINC00466	risky	
	cg25622366	OTX1	risky	
	cg19760241	LHX1	risky	
	cg04244970	SLAMF7	risky	
	cg23619399	POU4F1	risky	0.10461197
	cg26751356	SOX1	risky	0.25061203
	cg07065111	SOX11	risky	0.35593774
	cg16578085	INTU	risky	0.16600471
	cg03502002	GALR1	risky	0.24326837
	cg27164770	GPC6	risky	0.12228677
	cg14754787	LHX1	risky	

	cg23229261	OTX1	risky	0.71077205
	cg24031355	SPAG6	risky	
	cg09305680	UTP23	risky	2.10287665
	cg05099508	SPAG6	risky	0.50777308
	cg13784312	RAPGEF1	risky	1.16702333
	cg10255237	LOC338758	risky	
7	cg17945976	MEIS1	protective	-0.03875245
	cg09462924	MEIS1	protective	
	cg05877497	MEIS1	protective	
	cg22731271	MEIS1	protective	
	cg27364741	OTX1	risky	
	cg19763461	OTX1	risky	
	cg10122865	OTX1	risky	
	cg23229261	OTX1	risky	
	cg07974511	OTX1	risky	
	cg03502002	GALR1	risky	
	cg25622366	OTX1	risky	0.44835243
	cg09696091	LOC285577	risky	
	cg21472506	OTX1	risky	0.29204349
	cg04244970	SLAMF7	risky	0.4449185
	cg27164770	GPC6	risky	1.08170948
	cg16578085	INTU	risky	
8	cg17945976	MEIS1	protective	
	cg09462924	MEIS1	protective	-0.47527283
	cg11433622	MEIS1	protective	
	cg16178603	MEIS1	protective	
	cg23972738	MEIS1	protective	
	cg22731271	MEIS1	protective	
	cg05877497	MEIS1	protective	
	cg14557064	MIR4277	risky	
	cg07418387	FMN2	risky	
	cg10216717	TMEM132C	risky	
	cg27164770	GPC6	risky	0.33564875
	cg21472506	OTX1	risky	
	cg03661929	LSAMP-AS3	risky	
	cg23229261	OTX1	risky	
	cg17372657	AK090593	risky	
	cg01712948	Ig kappa	risky	
	cg16925459	HDAC9	risky	

	cg09305680	UTP23	risky	
	cg09696091	LOC285577	risky	
	cg04244970	SLAMF7	risky	0.03614674
	cg20168964	TMEM132D	risky	
	cg10255237	LOC338758	risky	0.34414934
	cg22691256	WBSCR17	risky	
	cg25622366	OTX1	risky	0.39952944
	cg16578085	INTU	risky	0.42286426
	cg06035708	A2BP1	risky	
	cg10122865	OTX1	risky	
9	cg17945976	MEIS1	protective	-0.55876773
	cg09462924	MEIS1	protective	
	cg23972738	MEIS1	protective	
	cg11433622	MEIS1	protective	
	cg16178603	MEIS1	protective	
	cg22731271	MEIS1	protective	
	cg05877497	MEIS1	protective	-0.04098542
	cg10122865	OTX1	risky	
	cg27164770	GPC6	risky	
	cg19763461	OTX1	risky	1.19453981
	cg07974511	OTX1	risky	
	cg03502002	GALR1	risky	1.08471264
	cg10255237	LOC338758	risky	
	cg16578085	INTU	risky	1.2583566
	cg04244970	SLAMF7	risky	0.64382595
	cg25622366	OTX1	risky	1.16212012
10	cg09462924	MEIS1	protective	-0.2030043
	cg17945976	MEIS1	protective	
	cg23972738	MEIS1	protective	
	cg22731271	MEIS1	protective	-0.2712798
	cg11433622	MEIS1	protective	
	cg24031355	SPAG6	risky	
	cg02671880	SOX21	risky	0.9142339
	cg17911318	GALR1	risky	0.3349362
	cg19763461	OTX1	risky	1.131686
	cg10122865	OTX1	risky	0.6838386
	cg16578085	INTU	risky	
	cg22691256	WBSCR17	risky	
	cg25622366	OTX1	risky	2.1010153

	cg10255237	LOC338758	risky	
	cg27164770	GPC6	risky	0.3815782
	cg04244970	SLAMF7	risky	0.9422421

*Probes labeled as red are overlap with identified 19 probes in Table 2