

**Table 4. List of CpG islands hypermethylated in stage I SCCs**

HG18 Coordinates			Positive in tumor					Total no. positive	Location relative to known genes*			
Chr	Start	End	1	2	3	4	5		Upstream	Promoter	Intragenic	Downstream
chr1	1099178	1100008				+		1		TLL10		
chr1	11483954	11484743	+			+		2				
chr1	13782194	13782429			+			1	PDPN			
chr1	16036340	16036710	+	+	+	+		4				
chr1	16924079	16924478	+					1				
chr1	18839839	18840706				+		1			PAX7	
chr1	18844317	18844684		+		+		2			PAX7	
chr1	35815020	35816031	+	+				2			TFAP2E	
chr1	37556199	37556845				+		1				
chr1	40371096	40371796				+		1				
chr1	47672249	47672972	+					1	FOXD2			
chr1	47682300	47683607	+	+	+	+	+	5				FOXD2
chr1	50286232	50286907	+					1				
chr1	50654472	50654690	+			+		2				
chr1	50656816	50664059	+		+			2				
chr1	54594579	54594921			+			1			SSBP3	
chr1	57660552	57663225				+		1			DAB1	
chr1	63554983	63563059	+	+	+	+	+	5			FOXD3	
chr1	63567952	63568728			+	+		2				FOXD3
chr1	65504000	65504437	+		+			2			DNAJC6	
chr1	71284813	71286392				+		1		PTGER3		
chr1	75368402	75368750	+		+	+		3			LHX8	
chr1	75373263	75374003				+		1			LHX8	
chr1	78729213	78730104				+	+	2		PTGFR		
chr1	79244870	79245125	+		+	+	+	4				
chr1	85236473	85236755					+	1	MCOLN2			
chr1	85854289	85854656				+		1				
chr1	87390281	87390574				+	+	2				
chr1	88700872	88701348			+			1				
chr1	90955098	90955445	+	+	+	+	+	5		BARHL2		
chr1	90955734	90957128	+		+	+		3	BARHL2			

chr1	90961728	90961988			+	+			2	BARHL2			
chr1	90963078	90965392	+	+	+	+	+		5	BARHL2			
chr1	91073568	91074479	+	+	+				3				
chr1	92718496	92725197			+		+		2		GFI1		
chr1	106424917	106425377			+				1				
chr1	110411789	110414826	+	+	+	+	+		5			ALX3	
chr1	110428052	110429007			+	+			2				
chr1	113087856	113088695			+		+		2				
chr1	114498410	114498708			+	+			2	SYT6			
chr1	115198972	115199465			+				1		SYCP1		
chr1	116181883	116183887		+	+				2			NHLH2	
chr1	116878566	116878822			+				1			CD58	
chr1	119328306	119328715	+	+	+	+			4			TBX15	
chr1	119331343	119332235			+				1			TBX15	
chr1	119333515	119333719	+	+	+	+			4		TBX15		
chr1	119337190	119337510	+	+	+	+			4	TBX15			
chr1	119344580	119344977	+	+		+	+		4				
chr1	119350668	119352843	+	+	+	+	+		5				
chr1	120240537	120240743	+		+	+			3		ADAM30		
chr1	144801705	144801928			+				1				
chr1	145018953	145019201	+		+				2				
chr1	146184781	146185539			+	+			2				
chr1	146241846	146242208			+				1				
chr1	146248691	146249097	+			+			2				
chr1	146292792	146293012			+				1				
chr1	147404167	147405023	+			+			2				
chr1	147422731	147423295	+			+			2				
chr1	149370310	149372724	+		+				2			SEMA6C	
chr1	150346622	150348329	+	+					2				
chr1	150427946	150428552	+	+		+			3				
chr1	154312968	154314008	+	+	+				3			MEX3A	RAB25
chr1	154527824	154528049	+						1			TMEM79	C1orf85
chr1	154671785	154672974	+		+				2	C1orf61			
chr1	162812165	162812541				+			1			PBX1	
chr1	163353381	163353650				+			1				
chr1	163471126	163472131			+				1			LMX1A	

chr1	163590111	163590435	+		+	+			3			LMX1A	
chr1	163590816	163592952			+				1		LMX1A		
chr1	165357200	165357634		+					1			DUSP27	
chr1	167663246	167663493	+			+	+		3		C1orf114		
chr1	171905286	171905668			+				1		ANKRD45		
chr1	178464743	178471598	+		+	+			3		LHX4		
chr1	179719330	179719696			+				1		CACNA1E		
chr1	181652624	181654287				+			1			NMNAT2	
chr1	182899847	182900286	+						1				
chr1	196153712	196154414						+	1			LHX9	
chr1	196157102	196157447	+	+	+				3			LHX9	
chr1	198271098	198271556			+	+			2			NR5A2	
chr1	204085522	204085814			+				1			FLJ32569	
chr1	206198951	206199740	+		+				2				
chr1	212225350	212225703	+		+	+	+		4	PROX1			
chr1	212427231	212427588				+			1				
chr1	215374368	215375802				+	+		2				
chr1	215377373	215377801	+			+			2				
chr1	216164935	216165288	+		+	+	+		4				
chr1	216586911	216587129						+	1			TGFB2	RRP15
chr1	217413733	217414195	+						1		LYPLAL1		
chr1	219117072	219117487				+			1	HLX1			
chr1	219122116	219122423	+	+		+	+		4			HLX1	
chr1	219131513	219132223	+		+				2				HLX1
chr1	219134071	219134808	+		+	+			3				HLX1
chr1	222002966	222003667	+						1			CAPN2	
chr1	222872032	222872476			+				1			CNIH3	
chr1	223183844	223184404				+			1				
chr1	223931692	223931951	+	+		+			3				
chr1	226260720	226263135	+						1		WNT3A		
chr1	226711820	226713057			+				1		HIST3H2A	HIST3H2BB	
chr1	227633830	227637307	+			+			2		ACTA1		NUP133
chr1	237616732	237617962				+			1				
chr1	238227461	238228239			+				1				
chr1	241713018	241713511		+					1			SDCCAG8	AKT3
chr1	242147164	242147716			+				1				

chr1	242161379	242161740	+			+			2				
chr1	245748023	245748574				+	+		2				
chr2	253401	255238		+					1	SH3YL1	ACP1		
chr2	457850	458659	+						1				
chr2	1523280	1523496	+						1			TPO	
chr2	3620423	3620626	+						1		COLEC11		
chr2	11842435	11842704				+	+		2			LPIN1	
chr2	19415217	19415442				+			1			OSR1	
chr2	19416639	19416913				+			1			OSR1	
chr2	19419271	19421884	+	+	+	+	+		5		OSR1		
chr2	19424445	19425131	+	+	+	+	+		4	OSR1			
chr2	20733488	20734761	+	+	+	+	+		5			GDF7	
chr2	24251150	24251698	+	+	+	+	+		5		FLJ30851		
chr2	24251918	24252173		+	+				2			FLJ30851	
chr2	25237444	25238267	+	+					2			POMC	
chr2	25353268	25353933				+			1			DNMT3A	
chr2	30307071	30309159					+		1		LBH		
chr2	43181441	43181841	+						1				
chr2	45008700	45010553				+	+		2				
chr2	45013398	45013616	+	+				+	3	SIX3			
chr2	45014932	45016562		+					1	SIX3			
chr2	45032869	45033898						+	1				SIX3
chr2	45081149	45082287	+	+				+	3				SIX2
chr2	45084716	45084986	+						1				SIX2
chr2	45085286	45086054	+	+				+	3			SIX2	
chr2	45249374	45251690					+		1				
chr2	50427550	50428321				+		+	2			NRXN1	
chr2	63127980	63132934				+	+	+	3		OTX1		EHBP1
chr2	63134539	63134851	+	+	+	+	+	+	5			OTX1	EHBP1
chr2	66525936	66527140	+	+	+	+	+	+	5			MEIS1	
chr2	66662073	66662908	+	+	+	+	+	+	5				MEIS1
chr2	70029354	70029718	+						1				MXD1
chr2	70984709	70985764	+	+	+	+			4			VAX2	
chr2	70988094	70988300	+	+	+	+			4			VAX2	
chr2	72996564	73001768	+	+	+				3		EMX1		
chr2	73004709	73005568	+						1			EMX1	

chr2	74578548	74580546			+			1			LBX2	PCGF1
chr2	74728637	74729070	+		+			2	SEMA4F	LOC130951		
chr2	80383189	80384357	+	+	+	+	+	5			LRRTM1	
chr2	80384879	80385230				+		1		LRRTM1	CTNNA2	
chr2	85213468	85216104	+	+		+		3		TCF7L1		
chr2	86890112	86890512	+	+	+		+	4				CD8B
chr2	91033167	91035292			+			1				
chr2	95054585	95056158				+		1		MAL		
chr2	96868947	96869327	+					1			ANKRD23	ANKRD39
chr2	98329306	98330619			+	+		2			CNGA3	
chr2	104825560	104828202			+	+		2				
chr2	104835284	104839920			+	+		2			POU3F3	
chr2	104850186	104850858				+		1				
chr2	110327142	110327511	+					1	NPHP1			
chr2	111591678	111597436	+		+			2		BCL2L11		
chr2	113749830	113750087	+			+		2			PAX8	
chr2	113751065	113752511	+					1			PAX8	
chr2	115635208	115637235				+		1		DPP10	DPP10	
chr2	118698240	118698936		+				1				
chr2	119248536	119248785			+			1				
chr2	119329502	119332035	+	+	+	+		4	EN1			
chr2	121061021	121061811		+				1				
chr2	124498723	124499725			+	+		2		CNTNAP5		
chr2	130061514	130061826			+			1				
chr2	136590557	136592250				+		1	CXCR4	CXCR4		
chr2	142604195	142605023				+		1			LRP1B	
chr2	144989927	144991848				+		1			ZFHX1B	
chr2	149362007	149362304				+		1			KIF5C	
chr2	154042696	154043704				+		1		RPRM		
chr2	154437860	154438164				+	+	2			GALNT13	
chr2	156893804	156894601	+		+			2			NR4A2	
chr2	161981541	161981971				+		1			TBR1	PSMD14
chr2	161983408	161983842			+	+	+	3			TBR1	PSMD14
chr2	162638480	162639125				+		1			DPP4	
chr2	163912987	163913285	+					1				
chr2	170044128	170044702		+				1		BBS5		

chr2	171378357	171378795				+			1	GAD1			
chr2	171384799	171385226	+		+	+			3			GAD1	
chr2	171386793	171388604	+		+	+			3			GAD1	
chr2	172654158	172654458			+				1	DLX1			MAP1D
chr2	172656090	172656446	+	+					2	DLX1			MAP1D
chr2	172659536	172660405						+	1			DLX1	MAP1D
chr2	172681051	172681488		+	+				2	DLX2			
chr2	174899113	174900369			+				1				
chr2	174913090	174915799	+						1				CIR
chr2	174916662	174917322	+	+					2				CIR
chr2	176639822	176640909	+	+	+				3				
chr2	176641378	176641695	+	+	+				3				
chr2	176644493	176645055			+				1				EVX2
chr2	176652334	176656692	+	+	+	+	+		5	HOXD13		EVX2	
chr2	176657758	176658041			+				1	HOXD13			
chr2	176658240	176658582	+	+	+	+			4	HOXD13			
chr2	176672309	176673755	+	+	+	+	+		5	HOXD11		HOXD12	HOXD13
chr2	176685531	176685786		+					1	HOXD10			HOXD11
chr2	176689012	176689669	+	+	+	+	+		5	HOXD10			HOXD11
chr2	176690354	176690648	+	+	+	+	+		5	HOXD9		HOXD10	HOXD11
chr2	176694671	176696537	+	+	+	+	+		5	HOXD8	HOXD9		HOXD10
chr2	176701197	176701432		+					1	HOXD8			HOXD9
chr2	176701726	176703803	+	+	+		+		4		HOXD8		HOXD9
chr2	176723195	176723460	+			+			2	HOXD4			
chr2	176737660	176738187	+	+	+	+	+		5			HOXD3	
chr2	176744501	176745459	+						1			HOXD3	
chr2	176750998	176751690			+				1	HOXD1			HOXD3
chr2	177063318	177063771	+						1				
chr2	182229467	182230172					+		1		CERKL		
chr2	186311638	186312155	+	+	+				3	FSIP2			
chr2	188864662	188865964				+			1		GULP1		
chr2	198357997	198359844	+	+	+	+			4		BOLL		
chr2	200028748	200037926	+		+				2		SATB2		
chr2	200041933	200042417			+				1	SATB2			
chr2	200043743	200044658	+		+				2				
chr2	202744297	202744541	+		+				2				

chr2	207215020	207215667	+		+		2					
chr2	222867970	222868731			+		1	FLJ32447		PAX3		
chr2	222876898	222877252			+		1	PAX3		FLJ32447		
chr2	222878731	222879384			+		1	PAX3			FLJ32447	
chr2	222884738	222885759			+	+	2				FLJ32447	
chr2	228754202	228754797	+		+		2		SKIP			
chr2	232186604	232188169	+				1					
chr2	233474094	233474363	+		+		2			NGEF		
chr2	236736534	236743501			+		1		GBX2			
chr2	238059801	238060980		+			1		MLPH			
chr3	325661	325893			+		1			CHL1		
chr3	27729342	27729743				+	2				EOMES	
chr3	27731217	27731426				+	1				EOMES	
chr3	27740201	27740679	+		+	+	3	EOMES				
chr3	32833199	32835510				+	1		LIN41			
chr3	35655514	35656632			+	+	2	ARPP-21				
chr3	38055633	38056191		+			1	PLCD1	DLEC1			
chr3	42281154	42282524	+		+		2		CCK			
chr3	42702089	42702920			+		1			KBTBD5	GUP1	
chr3	44011412	44016108				+	1					
chr3	44038319	44038841			+		1					
chr3	44701933	44702241			+		1					
chr3	47025491	47026613			+		1				SETD2	
chr3	58547519	58547943				+	1	FAM107A				
chr3	61521366	61524706			+		1		PTPRG			
chr3	62329329	62330049	+		+	+	3				ZNF312	
chr3	62331157	62331415	+		+	+	3			ZNF312		
chr3	62331811	62332352	+		+		2			ZNF312		
chr3	62332677	62334811			+	+	2		ZNF312			
chr3	62337648	62338119	+		+		2	ZNF312				
chr3	65317241	65317921	+				1			MAGI1	MAGI1	
chr3	69063471	69064722				+	1		FAM19A4			
chr3	79898326	79898587			+		1					
chr3	106555217	106555649	+		+		3					
chr3	114642987	114643328	+			+	2		WDR52		CCDC52	
chr3	126558603	126559168				+	1			ZNF148		

chr3	127191754	127192139	+					1				ROPN1B
chr3	128150947	128151207				+		1			CHCHD6	
chr3	129116681	129117354	+	+				2	KLHDC6			
chr3	129688183	129694961		+	+	+		3		GATA2		
chr3	134239673	134240582				+		1		TMEM108		
chr3	134985249	134985650				+		1				TF
chr3	138234029	138234370				+		1				
chr3	138965652	138967141				+		1			SOX14	
chr3	138970117	138970708				+		1				SOX14
chr3	138971739	138972096	+			+		2				SOX14
chr3	139211682	139211893	+			+		2		CLDN18		
chr3	139635957	139637308					+	1		FAM62C		
chr3	140139315	140141794					+	1				FOXL2
chr3	140161932	140162266				+		1				
chr3	140245377	140246800	+					1		FLJ46210		
chr3	142998743	142999326	+	+		+	+	4			GRK7	
chr3	144163825	144165955				+		1		PAQR9		
chr3	147669796	147670397		+			+	2			PLSCR2	
chr3	148559803	148560359	+			+		2				
chr3	148591199	148594390	+	+	+	+	+	5			ZIC4	
chr3	148596296	148597166	+			+		2			ZIC4	
chr3	148598452	148599108	+			+		2			ZIC4	
chr3	148609676	148611686	+		+	+		3	ZIC4	ZIC1		
chr3	148613030	148613264	+		+	+	+	4	ZIC4		ZIC1	
chr3	148613754	148614020	+		+	+		3	ZIC4		ZIC1	
chr3	148619591	148620015	+		+	+		3				ZIC1
chr3	148621604	148622251	+					1				ZIC1
chr3	149898130	149898619				+		1		AGTR1		
chr3	151251142	151251356				+		1				
chr3	155629039	155629656			+	+	+	3			GPR149	
chr3	157491683	157492011			+	+		2			KCNAB1	
chr3	158320675	158321042	+					1				
chr3	158743358	158743915				+		1				
chr3	159294745	159295455	+	+	+	+		4				SHOX2
chr3	159303924	159304295	+					1	RSRC1		SHOX2	
chr3	161649876	161650891	+	+		+	+	4		TRIM59		



chr3	172228764	172228983					+	1	SLC2A2			
chr3	182895706	182896713	+	+			+	3				
chr3	182919876	182920169					+	1				SOX2
chr3	187394036	187394919	+	+			+	3			DGKG	
chr3	187561402	187562802					+	1		DGKG		
chr3	188870606	188870867	+				+	2			SST	
chr3	193608513	193610685					+	+	2	FGF12		
chr3	193714764	193715828					+	+	2		FGF12	
chr3	195070044	195070580	+					1				
chr3	195598888	195600274	+	+			+	+	4		GP5	
chr3	195688344	195690071						+	1			
chr3	197097983	197098360	+				+		2		TNK2	
chr3	197418607	197418840		+	+	+	+	4	OSTalpha		ZDHHC19	
chr4	1293491	1293835	+				+		2		MAEA	
chr4	1386292	1391730	+	+	+	+	+	5				FLJ34443
chr4	4910534	4911092	+	+	+	+	+	5	MSX1			
chr4	6716573	6716990					+		1			
chr4	10067228	10068451					+		1		KIAA1729	
chr4	10071931	10072787	+				+		2	KIAA1729		
chr4	13133161	13133718	+				+		3			
chr4	13135652	13135868	+				+		3			
chr4	13152661	13155592	+						1		BAPX1	
chr4	19862375	19865966					+	+	+	3	SLIT2	
chr4	24699205	24699608	+	+			+	+	4			
chr4	30330303	30333940	+	+	+				3		PCDH7	
chr4	36921646	36923374					+		1			
chr4	41341050	41341339					+		1		DKFZP686A01247	
chr4	41443942	41444568					+		1		PHOX2B	
chr4	41562143	41562343	+						1			
chr4	41570203	41570551	+				+	+	3			
chr4	41574982	41575257					+		1			
chr4	41575935	41576175	+				+		2			
chr4	41577208	41577721	+				+		2			
chr4	46689886	46690629					+		1		GABRA4	
chr4	46729185	46729697					+	+	2		GABRB1	
chr4	48682548	48683565					+		1		FLJ21511	

chr4	52612146	52613037			+			1		SPATA18		
chr4	54660921	54662820			+			1		GSH2		
chr4	54670145	54670959	+		+			2				GSH2
chr4	54790943	54795088			+			1			PDGFRA	
chr4	56354384	56354901	+		+			2				
chr4	56874983	56875440			+			1				
chr4	57216379	57217460			+			1		HOP	HOP	
chr4	57756509	57756872			+			1				
chr4	62065609	62065843			+			1			LPHN3	
chr4	66217789	66218215				+		1		EPHA5		
chr4	77726102	77726363					+	1			SHROOM3	
chr4	81104869	81105172	+					1			ANTXR2	
chr4	81337162	81337627	+					1			PRDM8	
chr4	81347254	81347715	+					1				PRDM8
chr4	85622855	85623548	+					1				NKX6-1
chr4	85624011	85624276			+			1				NKX6-1
chr4	85633022	85633898			+	+		2			NKX6-1	
chr4	85641954	85642214			+			1	NKX6-1			
chr4	94974810	94975333			+			1				ATOH1
chr4	99283626	99283828			+			1	MGC46496			
chr4	102930853	102931222	+					1			BANK1	
chr4	108176005	108176902			+			1		DKK2		
chr4	110442420	110443706				+		1		COL25A1		
chr4	111752097	111752840			+	+	+	3				PITX2
chr4	111758678	111758932	+		+			2			PITX2	
chr4	111761512	111763913			+			1		PITX2		
chr4	111769329	111769652	+		+	+	+	4			PITX2	
chr4	111772529	111773659				+		1			PITX2	
chr4	113552391	113552772	+					1			ALPK1	
chr4	113651275	113652045	+			+		2				NEUROG2
chr4	122521018	122521740			+		+	2		GPR103		
chr4	123090863	123092632				+		1				
chr4	124646231	124646607	+				+	2				
chr4	126455346	126458380				+	+	2		FAT4		
chr4	134288613	134289892		+		+		2	PCDH10			
chr4	134291113	134293078			+	+		2			PCDH10	

chr4	140420515	140420899			+			1			OSAP	NDUFC1
chr4	141638458	141638954		+		+	+	3				
chr4	147778639	147781351	+			+		2		POU4F2		
chr4	151720214	151720749	+					1	MAB21L2		LRBA	
chr4	151723462	151724535	+					1			MAB21L2	
chr4	155473581	155474053	+		+			2			DCHS2	
chr4	155881129	155881434	+					1	LRAT			
chr4	155884270	155885283				+		1		LRAT		
chr4	156348619	156349659				+		1		NPY2R		
chr4	156517052	156517544				+		1			ASAP	
chr4	158362747	158363503					+	1			GRIA2	
chr4	164472405	164472921				+		1			NPY1R	
chr4	164484272	164485222			+			1		NPY5R		
chr4	165523779	165524627			+			1				
chr4	172970310	172971693			+	+		2		GALNT17		
chr4	174657923	174658134			+			1				
chr4	174658600	174659018	+		+			2				
chr4	174664467	174664767	+					1				
chr4	174674490	174674921	+		+	+		3				HAND2
chr4	174679941	174680523				+		1				HAND2
chr4	174684909	174685420	+					1			HAND2	
chr4	174686622	174688044	+	+	+	+	+	5		HAND2		
chr4	174688404	174689537	+		+	+	+	4	HAND2			
chr4	183299273	183299475	+					1				
chr4	183300391	183303364			+			1				
chr4	183964544	183965347	+					1				ODZ3
chr4	184255825	184258373	+					1		FLJ30277		
chr4	186174237	186174744	+					1	HELT			
chr4	186176217	186179741			+			1			HELT	
chr4	187713274	187713838		+				1		MTNR1A		
chr5	103806	104899	+		+	+		3				
chr5	222579	222798	+					1			KIAA1909	
chr5	1927908	1932032	+		+			2			IRX4	
chr5	1932690	1932928	+	+				2			IRX4	
chr5	1934925	1940743	+		+			2		IRX4		
chr5	2791954	2794237	+	+	+	+	+	5				IRX2

chr5	2801369	2810024		+		+			2		IRX2	CEI	
chr5	3643645	3645000	+		+	+	+		4	IRX1			
chr5	3647468	3656054	+	+	+	+	+		5			IRX1	
chr5	3659489	3660135	+		+				2				IRX1
chr5	5192442	5193941	+		+	+			3		ADAMTS16		
chr5	13863127	13863333			+				1			DNAH5	
chr5	37870429	37870885	+	+					2		GDNF	GDNF	
chr5	37872505	37876483				+			1		GDNF		
chr5	39460650	39461077			+	+			2		DAB2		
chr5	40715260	40717838		+					1		PTGER4		
chr5	41545541	41545923				+			1			PLCXD3	
chr5	42460096	42460804			+				1			GHR	
chr5	42986834	42988167			+				1				
chr5	43027791	43028712			+				1				
chr5	43030384	43030693	+		+	+			3				
chr5	43036101	43036548	+						1				
chr5	43053726	43054425			+				1				
chr5	43073017	43073277	+						1				LOC389289
chr5	43076103	43076390			+	+			2	LOC389289			
chr5	43077865	43079234			+				1	LOC389289			
chr5	50300843	50301494				+			1				
chr5	50714390	50715132			+				1		ISL1		
chr5	50730742	50731109	+		+	+			3				ISL1
chr5	54215121	54215928					+		1				
chr5	54554812	54555385	+	+	+	+	+		5				UNG2
chr5	55153331	55153723			+				1				DDX4
chr5	57914483	57914934				+			1		RAB3C		
chr5	63290801	63291163			+				1				HTR1A
chr5	72561960	72562253			+				1				
chr5	72564856	72565732	+	+					2				
chr5	72629904	72631564	+	+	+	+	+		5				
chr5	72711877	72714177	+		+	+			3				
chr5	72751164	72751753			+				1				
chr5	72767578	72767817	+		+	+			3				
chr5	72775808	72776556			+	+			2				FOXD1
chr5	76285192	76286284			+				1			CRHBP	

chr5	76968074	76969279			+	+		2			OTP	
chr5	76970338	76971052			+	+		2	OTP			
chr5	77176299	77176670			+			1				
chr5	77182755	77183541			+	+		2				
chr5	77304107	77304543			+			1				
chr5	83713894	83714150				+		1			EDIL3	
chr5	83715341	83716476				+		1		EDIL3		
chr5	87991395	87991620			+			1				
chr5	88004392	88004663	+	+	+	+		4				
chr5	88005717	88007826			+	+		2				
chr5	88215623	88216014		+		+	+	3	MEF2C			
chr5	92931996	92934631			+	+		2				
chr5	92955025	92955245			+			1			NR2F1	
chr5	92956286	92956586			+			1				NR2F1
chr5	100264467	100264854				+		1			ST8SIA4	
chr5	110102505	110103122			+			1		LOC91137		
chr5	113418971	113419904				+		1				
chr5	113724416	113727094				+		1		KCNN2		
chr5	114542616	114544119		+	+		+	3			TRIM36	
chr5	115179248	115180612	+		+			2		CDO1		
chr5	115325507	115325992			+			1	FLJ90650			
chr5	115939901	115940283				+		1	SEMA6A			
chr5	122458576	122459342			+			1				
chr5	122461778	122463450	+		+	+		3				
chr5	127899858	127900162				+		1			FBN2	
chr5	132110773	132111810	+					1	KIF3A	FLJ16793		
chr5	134390992	134393045			+			1			PITX1	
chr5	134853298	134854395	+	+		+	+	4				
chr5	140147276	140148323			+			1	PCDHA2	PCDHA1		
chr5	140154758	140155072	+		+	+		3	PCDHA3	PCDHA2		
chr5	140166977	140167452			+			1	PCDHA5	PCDHA4		
chr5	140217047	140218075			+			1	PCDHA11	PCDHA10		
chr5	140222258	140223191			+			1	PCDHA11		PCDHA10	
chr5	140285897	140287377				+		1		PCDHAC1		
chr5	140326290	140327115				+		1		PCDHAC2	PCDHAC1	
chr5	140601049	140601882	+		+			2	PCDHB15			

chr5	140691982	140692726			+			1	PCDHGA2	PCDHGA1		
chr5	140699314	140699527			+			1	PCDHGA3	PCDHGA2		
chr5	140703733	140704084			+			1	PCDHGB1	PCDHGA3		
chr5	140705236	140706075			+			1	PCDHGB1	PCDHGA3		
chr5	140714905	140715212	+		+	+		3	PCDHGB2	PCDHGA4		
chr5	140724146	140724826	+		+	+		3	PCDHGB3	PCDHGA5		
chr5	140730235	140730448	+		+	+		3	PCDHGA6	PCDHGB3		
chr5	140731483	140732067	+		+			2	PCDHGA6	PCDHGB3		
chr5	140742586	140742952			+	+		2	PCDHGB4	PCDHGA7		
chr5	140744486	140744864			+			1	PCDHGB4	PCDHGA7		
chr5	140752570	140752866			+	+		2	PCDHGB5	PCDHGA8		
chr5	140754040	140754625			+			1	PCDHGB5	PCDHGA8		
chr5	140759198	140759843	+		+			2	PCDHGA9	PCDHGB5		
chr5	140769279	140769946	+		+			2	PCDHGA10	PCDHGB6		
chr5	140778942	140779543	+		+			2	PCDHGA11	PCDHGB7		
chr5	140780945	140781256	+		+	+		3	PCDHGA12	PCDHGA11		
chr5	140790679	140792801	+	+	+	+	+	5		PCDHGA12		
chr5	140801413	140801872			+			1		PCDHGA12		
chr5	140851249	140852519	+		+			2		PCDHGC5		
chr5	140873098	140873373			+			1				DIAPH1
chr5	145698483	145700288	+			+		2			POU4F3	
chr5	145702661	145703118				+		1				POU4F3
chr5	150264579	150264828	+		+			2		ZNF300		
chr5	150306098	150306387			+			1				
chr5	158464873	158465080	+					1	EBF			
chr5	158466136	158466578				+		1	EBF			
chr5	170667775	170672468			+		+	2			TLX3	RANBP17
chr5	170674209	170675356	+			+		2				TLX3
chr5	170675784	170676712	+					1				TLX3
chr5	172591656	172594834		+	+			2			NKX2-5	
chr5	172596223	172597190	+					1	NKX2-5			
chr5	172603436	172604430			+			1	NKX2-5			
chr5	172604918	172605577			+			1				
chr5	174091287	174092335	+			+		2				MSX2
chr6	1323445	1324317	+	+	+		+	4				
chr6	1324693	1325013			+			1				

chr6	1326743	1330210	+		+			2	FOXF2			
chr6	1338049	1339169	+	+		+	+	4			FOXF2	
chr6	1469153	1469542			+			1				
chr6	1546624	1547137			+			1	FOXC1			
chr6	1549606	1560865			+		+	2			FOXC1	GMDS
chr6	1569185	1570467			+		+	2			GMDS	
chr6	5941185	5941485	+		+	+		3				NRN1
chr6	5942027	5942413	+		+	+	+	4				NRN1
chr6	5944149	5944786				+		1			NRN1	
chr6	5947471	5950124	+	+	+	+		4			NRN1	
chr6	5951689	5952042			+			1			NRN1	
chr6	9507080	9507585	+					1				
chr6	10489545	10490340	+	+	+	+	+	5				
chr6	10492952	10493478	+		+	+	+	4				
chr6	10498025	10498551	+	+	+	+	+	5				TFAP2A
chr6	10498875	10499084	+					1				TFAP2A
chr6	10518096	10518676			+			1			TFAP2A	
chr6	10519381	10521843			+			1		TFAP2A		
chr6	10523005	10523304			+			1		TFAP2A		
chr6	10525371	10525828			+			1	TFAP2A		T	
chr6	10530308	10530634	+	+	+	+	+	5	TFAP2A			MGC40222
chr6	10989833	10990037	+					1	LOC221711		GCM2	
chr6	10995171	10995608				+	+	2	GCM2		LOC221711	
chr6	17210289	17210518					+	1				
chr6	19799890	19800284	+			+	+	3				
chr6	25760360	25760688				+		1		SCGN		
chr6	25840672	25840936			+			1	HIST1H2AA			HIST1H2BA
chr6	26280013	26280377			+			1				HIST1H2BD
chr6	26305050	26305516			+			1	HIST1H4D		HIST1H3D	HIST1H2AD
chr6	26312744	26313192			+			1	HIST1H2AD	HIST1H4E		HIST1H2BF
chr6	26325191	26325500			+			1	HIST1H3E		HIST1H2AE	
chr6	26348677	26348930	+		+			2	HIST1H1D		HIST1H4F	HIST1H4G
chr6	26358416	26358806			+			1	HIST1H2BH		HIST1H3F	HIST1H4F
chr6	26380450	26380675			+			1	HIST1H2BI			
chr6	26721993	26722830	+		+			2				
chr6	27172608	27172983				+	+	2				

chr6	27336080	27336343	+		+	+	+	4					PRSS16
chr6	27571156	27571358	+		+	+	+	4					
chr6	27590868	27591068			+			1					
chr6	27706667	27707125				+		1					
chr6	27755773	27755984	+		+			2					
chr6	27763323	27763686				+		1					
chr6	28283262	28283584			+	+		2					
chr6	28334959	28335462	+		+			2	ZNF187	C6orf194			
chr6	28475104	28475630				+		1					
chr6	28662843	28663103				+		1		ZNF452			
chr6	28691914	28692268	+		+	+		3					
chr6	28710833	28711274				+		1					
chr6	29064086	29064557	+		+			2					ZNF311
chr6	29092398	29092665				+		1					
chr6	29629090	29629812	+					1					
chr6	41636245	41636878			+			1			FOXP4		
chr6	43720693	43721344				+		1		C6orf206			MAD2L1BP
chr6	45738965	45739792		+		+	+	3					
chr6	46205654	46205912				+		1		ENPP4			
chr6	50790294	50791173	+					1			TFAP2D		
chr6	50800109	50800334				+		1			TFAP2D		
chr6	50899070	50899532			+			1			TFAP2B		
chr6	50921274	50921658			+			1			TFAP2B		
chr6	50926140	50926390			+	+		2					TFAP2B
chr6	55147130	55147351			+			1			HCRTR2		
chr6	55551692	55552051				+		1		HMGCLL1			
chr6	63053815	63054187				+		1		KHDRBS2			
chr6	71048762	71049633			+	+		2		COL9A1	COL9A1		
chr6	72354996	72355249	+		+			2					
chr6	74065542	74066177	+					1					
chr6	74076150	74076774					+	1					
chr6	74081124	74081741	+	+	+	+		4					
chr6	75851601	75851808				+		1			COL12A1		
chr6	75968300	75968853		+		+		2			COL12A1		
chr6	84474317	84476097				+		1		SNAP91			
chr6	84619540	84620477			+			1	CYB5R4	C6orf159			



chr6	85529422	85530851			+	+		2		TBX18		
chr6	85539289	85541437			+	+		2	TBX18			
chr6	94182994	94186398				+		1		EPHA7		
chr6	100157740	100158693			+		+	2	PRDM13			
chr6	100161408	100161709			+			1			PRDM13	
chr6	100173127	100173998	+			+	+	3				PRDM13
chr6	101001729	101001967	+		+			2			SIM1	
chr6	101002495	101002783	+		+			2			SIM1	
chr6	101003802	101004342	+		+	+		3			SIM1	
chr6	101010213	101010434	+			+		2			SIM1	
chr6	101015932	101016165			+			1			SIM1	
chr6	101018793	101020058	+		+	+		3	SIM1			
chr6	101022324	101022604			+			1	SIM1			
chr6	101023927	101024244			+			1	SIM1			
chr6	101953488	101953856	+	+	+	+	+	5		GRIK2		
chr6	101956528	101957695	+			+	+	3			GRIK2	
chr6	105507571	105507842	+			+		2	LIN28B			
chr6	106535805	106536465		+	+		+	3				
chr6	106540678	106541152				+		1				
chr6	106548680	106549605			+			1				
chr6	108544692	108547901			+	+		2				
chr6	108585217	108586251			+			1	NR2E1			
chr6	108592365	108597232	+	+	+	+	+	5		NR2E1		
chr6	108602348	108602679	+	+	+		+	4			NR2E1	
chr6	117192433	117193635				+		1		C6orf189		
chr6	117693176	117693849			+	+		2		VGLL2		
chr6	118348041	118348262				+		1			SLC35F1	
chr6	127705886	127706448					+	1		ECHDC1		
chr6	133603780	133605279			+	+		2		EYA4		
chr6	134258613	134258973				+	+	2				TCF21
chr6	137851036	137851897	+					1				OLIG3
chr6	137859861	137861065			+			1	OLIG3			
chr6	142451167	142451805			+	+		2		NMBR		
chr6	146392216	146392473			+	+		2			GRM1	
chr6	146797169	146797594				+	+	2			GRM1	
chr6	146961728	146961938				+		1				

chr6	151856674	151857220					+		1		C6orf97		
chr6	152664973	152665173			+				1			SYNE1	
chr6	154402280	154402701				+			1			OPRM1	
chr6	159573224	159575387			+	+			2			FNDC1	
chr6	166321517	166322649				+			1			LOC441177	
chr6	166341882	166342231			+	+			2				
chr6	166499964	166503413			+				1		T		
chr7	1230023	1230890			+				1	UNCX4.1		LOC641901	
chr7	1235692	1249390			+				1			UNCX4.1	
chr7	1503148	1504015			+				1			INTS1	
chr7	2026434	2026657			+				1			MAD1L1	
chr7	2082894	2083307			+				1			MAD1L1	
chr7	2740971	2741181			+				1			GNA12	
chr7	4753288	4753513			+				1			FOXK1	
chr7	4867863	4868279	+	+					2		PAPOLB	FLJ10324	
chr7	8439665	8441724				+			1		NXPH1		
chr7	8448500	8449287	+		+	+	+		4			NXPH1	
chr7	8449658	8450236	+			+			2			NXPH1	
chr7	12409689	12410230				+			1				
chr7	16592674	16593056			+				1				
chr7	19112398	19112781	+			+	+		3				TWIST1
chr7	19113449	19113833			+	+	+		3				TWIST1
chr7	19118492	19118872	+		+	+	+		4				TWIST1
chr7	20782765	20783065	+		+				2				SP8
chr7	20789833	20792187			+				1			SP8	
chr7	20797093	20797342			+				1	SP8			
chr7	23212082	23212686	+	+					2				NUPL2
chr7	25864763	25865296	+	+	+	+			4				
chr7	27094026	27094893	+	+	+	+			4				HOXA1
chr7	27100623	27100828	+						1			HOXA1	HOXA2
chr7	27101868	27103261			+				1		HOXA1		HOXA2
chr7	27112595	27113125	+	+	+	+			4	HOXA2		HOXA3	
chr7	27121525	27121951	+						1	HOXA3		HOXA3	
chr7	27149139	27152087		+	+	+			3		HOXA5	HOXA6	HOXA7
chr7	27164708	27165039			+				1	HOXA7			HOXA9
chr7	27170441	27172987	+	+	+	+	+		5	HOXA7	HOXA9		HOXA10

chr7	27178942	27180921			+			1	HOXA9	HOXA10		HOXA11
chr7	27191576	27192154			+			1	HOXA11			
chr7	27198331	27199622	+	+				2	HOXA11			HOXA13
chr7	27211056	27211822		+		+	+	3	HOXA13			
chr7	27219207	27220360	+	+	+	+	+	5				
chr7	27226627	27226992	+	+				2				
chr7	27245471	27245994		+	+		+	3	EVX1			
chr7	27251165	27252762	+					1			EVX1	
chr7	27257645	27258722	+		+			2				EVX1
chr7	29572353	29572815				+		1			LOC222171	
chr7	30687898	30688970			+			1		CRHR2		
chr7	35259511	35261199			+	+		2		TBX20		
chr7	35263447	35264743	+		+	+		3	TBX20			
chr7	35267676	35268256	+		+			2	TBX20			
chr7	35460739	35461227	+		+	+		3				
chr7	38982069	38982454				+		1				
chr7	39615779	39616035		+	+			2				
chr7	42234072	42234348	+			+		2			GLI3	
chr7	44315637	44316241		+			+	2			CAMK2B	
chr7	45579912	45582029			+			1		ADCY1		
chr7	49783555	49786298			+			1		VWC2		
chr7	54579819	54580052	+		+			2			MGC33530	
chr7	55484366	55484743	+					1				
chr7	56264927	56265156	+		+	+		3				
chr7	57274790	57275406			+			1				
chr7	62151951	62152418			+			1				
chr7	62998562	62998928			+	+		2				
chr7	63986860	63987586	+					1				
chr7	64349649	64350221				+		1				
chr7	75983333	75983717	+	+				2			UPK3B	
chr7	77507607	77507993	+					1			MAGI2	
chr7	78920885	78921786				+		1	MAGI2			
chr7	87067488	87067826				+		1			ABCB1	
chr7	87094895	87096380				+		1		RPIB9	ABCB1	
chr7	88226425	88227219				+		1		FLJ32110		
chr7	94122795	94124463			+			1		PEG10		

chr7	95063440	95064130				+			1		PDK4		
chr7	96469320	96469736	+	+	+	+			4	DLX6			
chr7	96472559	96472851			+				1	DLX6			
chr7	96488158	96489487	+	+	+	+			4			DLX5	DLX6
chr7	96489900	96490182			+	+			2			DLX5	
chr7	97199069	97200954	+		+	+			3		TAC1		
chr7	97638717	97638966			+				1			LMTK2	
chr7	97672580	97673129			+				1	BHLHB8		LMTK2	
chr7	98083742	98085695			+				1		NPTX2		
chr7	98388737	98389029			+				1			TRRAP	
chr7	98390683	98390898			+				1			TRRAP	
chr7	98417376	98417576			+				1			TRRAP	
chr7	98446930	98447158			+				1			TRRAP	
chr7	98447606	98447995			+				1			TRRAP	
chr7	98471028	98471240			+				1			SMURF1	
chr7	100056448	100056659			+				1			TFR2	MOSPD3
chr7	100322362	100322587			+				1			ARS2	UFSP1
chr7	101346123	101346345			+				1			CUTL1	
chr7	101625452	101626317			+				1			CUTL1	
chr7	101669315	101669715			+				1			CUTL1	
chr7	104411574	104412084			+				1				
chr7	116750078	116752039				+			1		WNT2		
chr7	121727243	121727884	+	+	+		+		4				LOC389549
chr7	121737486	121738163		+	+	+	+		4	LOC389549			CADPS2
chr7	121743780	121744577	+	+	+	+	+		5				CADPS2
chr7	126678537	126681441			+				1	GRM8			
chr7	127698097	127698498	+	+		+	+		4				
chr7	129205523	129209745			+				1				
chr7	129210234	129210591	+	+	+		+		4				
chr7	136204395	136206734				+			1		CHRM2	CHRM2	
chr7	143213059	143213543	+		+				2			KIAA0738	
chr7	147667428	147667781				+			1			CNTNAP2	
chr7	149020588	149020909	+		+	+			3				
chr7	151694768	151695013	+						1			MLL3	
chr7	152222392	152222639				+			1				
chr7	153214251	153216599	+	+	+	+	+		5		DPP6		

chr7	154492731	154493007				+			1	HTR5A			
chr7	154493614	154494178	+			+			2			HTR5A	
chr7	154857319	154860615	+	+	+	+	+		5				
chr7	154951589	154954164	+						1				EN2
chr7	154995015	154995919	+		+	+			3				
chr7	155018573	155019118				+			1				
chr7	155288454	155292175	+	+					2			SHH	
chr7	156488117	156492155			+				1			HLXB9	
chr7	156503334	156507354	+		+	+			3	HLXB9			
chr7	157061882	157062155				+			1			PTPRN2	
chr7	157689404	157689788	+		+	+			3			PTPRN2	
chr8	676831	679496			+				1	ERICH1			
chr8	1100466	1101480	+		+	+			3				
chr8	2406343	2406867	+						1				
chr8	4836377	4840043			+				1		CSMD1		
chr8	8617962	8618624			+				1				
chr8	9798161	9799053			+	+			2				
chr8	9800072	9802158			+	+			2				
chr8	10624715	10628519	+	+					2		SOX7		
chr8	11574177	11576370	+	+					1				
chr8	11595262	11595661	+		+				2	GATA4			
chr8	11597006	11600365				+			1		GATA4		
chr8	11602627	11604621	+		+				2			GATA4	
chr8	13033752	13034006				+			1			DLC1	
chr8	13034462	13035285				+			1		DLC1		
chr8	23618421	23621120	+	+	+	+			4				
chr8	23622801	23623623	+	+	+	+			4				
chr8	23627868	23628153			+				1				
chr8	24855619	24856062		+		+			1				NEFL
chr8	25955253	25955609	+		+	+			3			EBF2	
chr8	25956480	25961759	+		+	+			3		EBF2		
chr8	25965210	25965603	+	+		+			3	EBF2			
chr8	26777560	26780483		+	+	+			2		ADRA1A		
chr8	38627457	38627905	+		+				2				
chr8	38950750	38951510	+	+					2		HTRA4		
chr8	39084171	39084580		+					1		ADAM32		ADAM9

chr8	41285010	41286297			+			1		SFRP1		
chr8	41543499	41544457	+					1				
chr8	47648155	47648539			+			1				
chr8	53640098	53641180				+		1		UNQ9433		
chr8	54014255	54016979			+	+	+	3			NPBWR1	
chr8	54732221	54732563	+	+		+		3				
chr8	55528734	55530181			+	+		2	SOX17			
chr8	55532724	55535078	+		+	+		3		SOX17		
chr8	55541482	55542739			+			1				SOX17
chr8	55545193	55545742	+			+		2				SOX17
chr8	57188101	57189097			+	+	+	3		MOS		
chr8	57192751	57193438	+		+			2	MOS			
chr8	57520681	57521969			+	+		2		PENK		
chr8	58217500	58218154	+		+	+		3				
chr8	58218515	58218798	+					1				
chr8	59220722	59221968				+		1			C8orf72	
chr8	63323153	63324618				+		1		FAM77D		
chr8	65653638	65653873				+		1	BHLHB5			
chr8	65662303	65662699	+		+	+		3				CYP7B1
chr8	67507052	67507543				+	+	2		ADHFE1		RRS1
chr8	68035943	68038154	+		+			2				
chr8	68103246	68103551		+	+		+	3		LOC286187		
chr8	71109445	71109853	+		+	+		3				
chr8	71144428	71147442	+		+	+	+	4		PRDM14		
chr8	72631115	72632115	+	+	+	+		4				
chr8	72916429	72917309	+		+	+	+	4			MSC	
chr8	73326173	73326745			+	+		2				
chr8	82705354	82706030		+				1				
chr8	85259315	85259802	+		+			2			LOC138046	
chr8	86538018	86538448	+		+			2			CA3	
chr8	87150770	87151162	+		+	+		3		PSKH2		
chr8	89409082	89409597			+			1	MMP16			
chr8	92066407	92067082			+			1				TMEM55A
chr8	93183233	93185155				+		1	RUNX1T1			
chr8	96154446	96154923	+		+			2				
chr8	97240982	97241198			+			1			GDF6	

chr8	98857012	98858050					+	1			LAPTM4B	
chr8	100053761	100054248	+		+	+		3				
chr8	100054910	100056159	+	+	+	+	+	5				
chr8	104452586	104453285	+					1		CTHRC1		
chr8	105411390	105411734	+			+		2	TM7SF4			
chr8	105448743	105449162	+					1				
chr8	109163662	109165025			+			1		RSPO2		
chr8	114514003	114514261			+			1			CSMD3	
chr8	116729607	116729921	+					1			TRPS1	
chr8	120033128	120033359					+	1			TNFRSF11B	
chr8	120033571	120033818					+	1	TNFRSF11B			
chr8	121206281	121207102				+	+	2		COL14A1		
chr8	127637859	127640055			+			1		FAM84B		
chr8	132121386	132123931			+	+		2		ADCY8		
chr8	141628347	141628550			+			1			EIF2C2	
chr8	144403741	144404118			+			1			ZFP41	
chr8	144963726	144964014			+			1			SCRIB	SIAHBP1
chr8	145175274	145180015			+			1			OPLAH	SPATC1
chr8	145235057	145237455	+					1	SHARPIN			MAF1
chr8	145608774	145609990	+					1	CPSF1		SLC39A4	VPS28
chr8	145909302	145910517			+			1				
chr9	697022	697420					+	1			ANKRD15	
chr9	959530	963276	+	+	+	+	+	5	DMRT3			DMRT1
chr9	1035542	1036394	+	+	+		+	4	DMRT2			
chr9	6705977	6706503				+		1				
chr9	14338685	14339074	+				+	2				
chr9	19778216	19779288				+		1	SLC24A2			
chr9	21021514	21021823					+	1		PTPLAD2		
chr9	21392502	21393058			+		+	2	IFNA8			
chr9	21955097	21955747					+	1				CDKN2A
chr9	21958359	21958728			+	+	+	3			CDKN2A	
chr9	21979774	21980108				+		1			CDKN2A	
chr9	23810692	23812135			+		+	2			ELAVL2	
chr9	23812413	23812667			+			1			ELAVL2	
chr9	23840911	23841522				+		1				
chr9	29204697	29204934			+	+		2				

chr9	32945652	32946278	+					1					
chr9	36992490	36992957	+		+	+		3				PAX5	
chr9	37777075	37777609	+		+			2	EXOSC3				RG9MTD3
chr9	78818731	78819213	+		+	+		3	LOC442425				
chr9	78819686	78819904	+	+		+		3	LOC442425				
chr9	78820789	78821569	+		+	+		3	LOC442425				
chr9	78827635	78827989	+		+	+		3					LOC442425
chr9	86472999	86475524			+			1			NTRK2		
chr9	87327430	87327805		+				1					
chr9	92919547	92920439	+					1					
chr9	92995322	92996241		+				1					
chr9	93688475	93688785	+	+				2				ROR2	
chr9	93702387	93702639	+					1				ROR2	
chr9	95753148	95758007	+					1			BARX1		
chr9	95760408	95763010		+				1	BARX1				
chr9	99650518	99651338				+		1	FOXE1				
chr9	99659806	99660013				+		1					FOXE1
chr9	99889521	99890213	+					1				TRIM14	NANS
chr9	102830434	102831585				+		1			PRG-3		
chr9	119215075	119217317				+		1			ASTN2		
chr9	119547049	119547463				+		1					
chr9	121170908	121172035				+		1			DBC1		
chr9	125813068	125820774	+	+	+	+	+	5			LHX2		
chr9	128024685	128025102				+		1					
chr9	128425934	128429052				+	+	2				LMX1B	
chr9	131239183	131239805				+		1					
chr9	132402712	132402917		+				1					
chr9	138377664	138378896				+		1			LOC728489	CARD9	GPSM1
chr10	2533464	2534121				+		1					
chr10	7489383	7495345	+	+	+	+		4			SFMBT2		
chr10	8117836	8118384				+	+	2					
chr10	8131381	8138335	+			+		2			GATA3		
chr10	11247185	11247986				+		1				CUGBP2	
chr10	16601611	16603828				+		1				C1QL3	PTER
chr10	21823205	21826426	+					1			C10orf114		
chr10	21828640	21829594	+	+	+			3	C10orf114				



chr10	22663357	22665881	+	+	+		+	4	SPAG6			PCGF4
chr10	22804715	22807056	+		+		+	3				
chr10	23502231	23503895	+		+			2				
chr10	23523904	23524504	+		+	+		3				PTF1A
chr10	25503763	25505645				+		1		GPR158		
chr10	26540614	26541132	+		+	+		3	GAD2		MYO3A	
chr10	28070189	28075217	+		+	+		3		IRXL1		
chr10	37980429	37980680			+			1				
chr10	38109593	38109952			+			1				
chr10	42568530	42570918			+			1				
chr10	42713483	42714423				+		1				
chr10	42748174	42749466	+					1				
chr10	43482857	43483537			+			1				
chr10	43505046	43506138				+		1				
chr10	45039719	45040209			+			1				
chr10	50272996	50276789				+		1	LOC644168			
chr10	62882502	62883015				+	+	2			TMEM26	
chr10	76825135	76839606	+					1		ZNF503	LOC439985	
chr10	85987090	85987407			+			1	RGR		LRRC21	
chr10	88139247	88139718			+			1				
chr10	88286151	88286599	+		+			2				
chr10	93637033	93637373			+			1				
chr10	94170296	94170734	+	+	+	+	+	5				
chr10	94441310	94441717	+		+			2			HHEX	
chr10	94442181	94442408			+			1			HHEX	
chr10	94810017	94813242			+			1	CYP26A1	CYP26C1		EXOC6
chr10	94823263	94825246			+	+		2		CYP26A1		
chr10	101271172	101272106				+		1				
chr10	101280016	101280328	+		+			2	NKX2-3			
chr10	101280616	101281168			+			1	NKX2-3			
chr10	101283006	101283228			+	+		2			NKX2-3	
chr10	101284434	101287253	+		+			2			NKX2-3	
chr10	102269153	102269720			+			1		SEC31L2		NDUFB8
chr10	102409138	102409658	+		+	+		3				
chr10	102493904	102496136			+			1		PAX2		
chr10	102497473	102499636				+		1			PAX2	

chr10	102886333	102886655	+					1	TD1		TLX1	
chr10	102972293	102973618	+					1				LBX1
chr10	102974173	102980053			+			1		LBX1		
chr10	106389558	106392802			+	+		2		SORCS3		
chr10	112392944	112394318			+			1				
chr10	118020723	118024220				+		1		GFRA1		
chr10	118358570	118359414				+		1			PNLIPRP1	
chr10	118882152	118882629	+	+	+	+	+	5			VAX1	
chr10	118883518	118884422			+			1			VAX1	
chr10	118889238	118890319	+		+			2	VAX1			
chr10	119291312	119295358			+			1		EMX2		
chr10	119301195	119302094				+		1				EMX2
chr10	119484484	119484981	+		+	+		3				
chr10	120343683	120345811	+		+	+		3		PRLHR		
chr10	122698501	122698889	+		+			2				
chr10	124568117	124568433			+			1				
chr10	124628734	124629783					+	1		FAM24B		
chr10	124889695	124890067			+			1	HMX2			
chr10	124895625	124896151	+	+		+	+	4	HMX2			
chr10	124897274	124901025	+		+			2	BUB3		HMX2	
chr10	125722211	125722833				+	+	2				
chr10	129424401	129427356			+			1		FLJ46831		
chr10	130229517	130229767				+		1				
chr10	131587070	131587402	+			+		2			EBF3	
chr10	131651160	131661686			+	+		2		EBF3		
chr10	134447348	134452639		+		+		2		NKX6-2		INPP5A
chr11	6297022	6298485	+					1		PRKCDBP		
chr11	6904097	6904788				+		1		ZNF215		OR2D3
chr11	8146803	8147247			+			1		RIC3		
chr11	14883048	14884346	+					1				
chr11	14950029	14950237				+		1			CALCA	
chr11	15919459	15919799	+		+	+		3				
chr11	18433875	18434332			+			1		LDHAL6A		LDHC
chr11	18683897	18684303				+		1			IGSF22	TMEM86A
chr11	20574774	20576496			+			1	SLC6A5			
chr11	22170749	22171896				+		1		TMEM16E		

chr11	22319439	22319953	+		+	+		3			SLC17A6	
chr11	22410877	22411094			+			1				
chr11	24474801	24475314				+		1		LUZP2		
chr11	27700049	27701140				+		1	BDNF			
chr11	30562135	30562376			+		+	2	MPPED2			
chr11	30562581	30564704			+			1	MPPED2			
chr11	31776637	31777992	+		+	+	+	4			PAX6	
chr11	31782320	31783543	+		+	+	+	4			PAX6	
chr11	31784273	31784497			+			1			PAX6	
chr11	31788197	31795614	+		+	+	+	4		PAX6		
chr11	31795940	31796389			+			1	PAX6			
chr11	31797892	31798579	+		+	+		3	PAX6			
chr11	31803709	31804534			+			1				
chr11	32404838	32406320			+			1	WIT1		WT1	
chr11	32408721	32409284			+			1	WIT1	WT1		
chr11	32411451	32413887	+	+	+	+		4	WIT1	WT1		
chr11	32415999	32416454			+			1	WT1	WIT1		
chr11	32417163	32417580	+		+	+		3	WT1		WIT1	
chr11	43553567	43553912				+		1				
chr11	43559122	43559791			+	+		2				
chr11	44281452	44281663				+		1			ALX4	
chr11	44282234	44283093	+		+			2			ALX4	
chr11	44283817	44284508				+		1			ALX4	
chr11	50213832	50214348			+			1				
chr11	60376501	60377687		+				1			GPR44	CCDC86
chr11	62233347	62234057			+			1	BSCL2			HNRPUL2
chr11	63731406	63731624			+			1			URP2	STIP1
chr11	64289513	64290339			+			1	PYGM		SF1	SF1
chr11	66167502	66168163			+			1			RBM4	
chr11	68274244	68274755	+	+				2			MTL5	CPT1A
chr11	69160318	69167777					+	1		CCND1		
chr11	69392087	69392348	+					1				
chr11	76428341	76429426	+					1			B3GNT6	
chr11	92342438	92343082	+					1			MTNR1B	
chr11	94141015	94142344					+	1		AMOTL1		
chr11	114878785	114881091				+		1		IGSF4		

chr11	115955870	115957122				+			1				
chr11	118732307	118732968		+					1	MFRP		USP2	
chr11	119118216	119118731				+			1				
chr11	122352705	122353818	+		+	+			3			BSX1	
chr11	124240280	124241675			+				1		ROBO3		
chr11	127924409	127924723	+		+				2				
chr12	1844001	1845219	+		+				2			CACNA2D4	
chr12	2209424	2209876			+				1			CACNA1C	
chr12	3470228	3473269				+			1		PRMT8		
chr12	4888847	4891432			+	+			2		KCNA1		
chr12	5411472	5413234						+	1				
chr12	6037135	6037519			+				1			VWF	
chr12	6599510	6600571	+						1			GPR92	
chr12	6728235	6728518			+				1			MLF2	
chr12	15366586	15367168			+				1		PTPRO		
chr12	21571676	21572249				+			1			C12orf39	GYS2
chr12	21985222	21986624			+	+			2	ABCC9			
chr12	24946867	24947513	+		+			+	3			BCAT1	
chr12	24992875	24993340						+	1			BCAT1	
chr12	37586737	37586947				+			1	CPNE8			
chr12	37824651	37825767	+		+	+			3				
chr12	49522901	49523191			+				1		TMPRSS12		
chr12	50401678	50401946	+						1			SCN8A	
chr12	50686735	50687963		+					1		GRASP		ACVR1B
chr12	50930250	50930678	+		+				2				KRT7
chr12	50938286	50939010	+						1				KRT7
chr12	51281040	51281579	+	+		+			3		K6IRS2		K6IRS3
chr12	52357321	52357532		+		+	+		3	ATP5G2			
chr12	52607569	52607988	+		+	+			3				
chr12	52625029	52625435	+			+			2	HOXC12		HOXC13	
chr12	52646642	52646927	+	+	+	+			4	HOXC11			
chr12	52653083	52655370			+				1	HOXC10	HOXC11		
chr12	52685680	52685921				+			1	HOXC8			HOXC9
chr12	52694694	52694980	+		+	+			3	HOXC6			HOXC8
chr12	52713293	52714976	+			+			2			HOXC5	HOXC6
chr12	52726910	52727810	+	+	+	+	+		5	HOXC4		HOXC4	

chr12	52732144	52732380			+				1	HOXC4		HOXC4	
chr12	54326256	54326604	+						1				OR10P1
chr12	55905037	55905669	+						1	SHMT2		NXPH4	
chr12	56307562	56308304	+	+				+	3			B4GALNT1	SLC26A10
chr12	60871036	60872535	+	+	+	+	+		5			FAM19A2	
chr12	61829904	61831234					+		1			AVPR1A	
chr12	62501767	62502257	+	+	+	+			4				
chr12	64409056	64409595	+		+				2				
chr12	70951951	70953818				+			1		TRHDE		
chr12	79626166	79626847			+				1	MYF5		MYF6	
chr12	79995701	79996250				+			1		FLJ21963		
chr12	84198010	84198831	+		+	+	+		4		CART1		
chr12	100560385	100560592	+			+			2			MYBPC1	
chr12	102413279	102413973				+			1		C12orf42		
chr12	103221479	103222114	+		+				2		EID3	TXNRD1	
chr12	105503560	105505216				+			1			RFX4	
chr12	111497483	111497912				+			1				
chr12	112401778	112402490	+		+	+			3	LHX5			
chr12	113322696	113323272				+			1			TBX5	
chr12	113325237	113326112	+						1		TBX5		
chr12	113327406	113327993				+			1		TBX5		
chr12	113330245	113332033	+		+	+			3		TBX5		
chr12	113366033	113366320	+		+	+			3				
chr12	113369489	113369801				+	+		2				
chr12	113593887	113594444	+						1			TBX3	
chr12	113609113	113609535	+			+			2	TBX3			
chr12	113620309	113620733	+		+				2				
chr12	113657998	113659205				+			1				
chr12	117696494	117696776				+			1				
chr12	124075523	124075768				+			1			BRI3BP	
chr12	125778233	125778482	+		+	+	+		4				
chr12	126331230	126331468					+		1				
chr12	127316995	127319104					+		1				
chr12	128953563	128955092				+	+		2		TMEM132D		
chr12	129737122	129737501	+						1				
chr12	131994732	131995812				+			1				

chr13	19773519	19774214	+					1				
chr13	24404114	24404341	+			+		2	CENPJ			
chr13	24772995	24774200			+	+		2		NUPL1		
chr13	27389489	27390518			+	+		2	PDX1			
chr13	27400363	27400744				+		1				PDX1
chr13	27438357	27441544				+		1		CDX2		
chr13	27442525	27442890	+	+	+	+		4	CDX2			
chr13	27452428	27453065			+			1				
chr13	28190671	28191329				+		1		SLC46A3		
chr13	34942845	34943481	+		+			2			NBEA	MAB21L1
chr13	34947571	34948159	+			+		2			MAB21L1	
chr13	34950554	34951119	+		+	+		3	MAB21L1		NBEA	
chr13	49595986	49600287	+	+	+			3				
chr13	57101588	57102323	+		+	+		3	PCDH17			
chr13	57104528	57106931	+	+		+		3			PCDH17	
chr13	66702595	66703460				+		1	PCDH9			
chr13	77390427	77391383			+	+		2		EDNRB		
chr13	78068116	78069232	+					1				POU4F1
chr13	78079329	78079615			+	+		2	POU4F1			C13orf7
chr13	78079946	78080223	+		+			2	POU4F1			C13orf7
chr13	80127049	80127446			+			1				
chr13	83351666	83351898			+	+		2			SLITRK1	
chr13	94152191	94153185	+	+	+	+	+	5				SOX21
chr13	94155591	94155884				+		1				SOX21
chr13	94157643	94157875				+		1				SOX21
chr13	99108206	99108447		+				1			CLYBL	
chr13	99345635	99346912			+			1				CLYBL
chr13	99418243	99422349			+	+	+	3	ZIC2	ZIC5		
chr13	99447324	99448389		+	+	+		3				
chr13	107317294	107319064				+		1	LOC728215			
chr13	111675430	111675643				+		1				
chr13	111755806	111756697			+	+		2				
chr13	111757886	111760666			+	+		2	SOX1			
chr13	111763361	111764235	+		+	+		3	SOX1			
chr13	111768566	111771583			+	+		2		SOX1		
chr13	111774283	111776420				+		1				SOX1

chr13	111806600	111808492	+		+	+		3				
chr13	111808867	111809114				+		1				
chr13	112032968	112033734				+		1				
chr13	112249708	112249928			+			1			TUBGCP3	
chr13	112398480	112399512			+			1			ATP11A	
chr13	112477179	112477394			+			1			ATP11A	
chr13	112512193	112512414			+			1			ATP11A	
chr13	112534837	112535348			+			1			ATP11A	
chr13	112540488	112540837			+			1			ATP11A	
chr13	112545298	112545662			+			1			ATP11A	
chr13	112831888	112832703			+			1			F10	F7
chr14	20160935	20161279			+			1				
chr14	20170679	20170883				+		1				OR6S1
chr14	20628388	20631283	+					1			ZNF219	FLJ10357
chr14	23710894	23712060	+	+	+			3		REC8L1		IPO4
chr14	23854988	23855709		+				1	CIDEB		LTB4R	ADCY4
chr14	25744004	25744318			+			1				
chr14	28304641	28305659		+	+	+		3	FOXG1B			
chr14	28313155	28313514	+		+	+		3				FOXG1B
chr14	32471846	32473830			+		+	2	NPAS3			
chr14	33338698	33340189			+	+		2			NPAS3	
chr14	36042921	36043491				+		1				
chr14	36044300	36045176		+				1				
chr14	36060625	36060960				+		1	TITF1			
chr14	36063240	36064239	+			+		2	TITF1			
chr14	36119085	36121477			+			1			NKX2-8	
chr14	36122289	36122589	+	+	+	+		4	NKX2-8			
chr14	36185940	36187379			+			1				
chr14	36196538	36198025	+	+		+		3	PAX9			
chr14	36200933	36202536			+			1			PAX9	
chr14	36205265	36206099	+	+	+	+	+	5			PAX9	
chr14	37122397	37123917				+		1				FOXA1
chr14	37137198	37138958	+	+				2	FOXA1			
chr14	37149991	37150429	+		+	+		3				
chr14	37161221	37161927			+			1				
chr14	37746906	37747538			+	+		2		SSTR1		

chr14	37747997	37750688	+		+	+	+		4			SSTR1	
chr14	51604332	51606472	+		+	+			3		NID2	C14orf166	
chr14	54976951	54977186			+				1		TBPL2		
chr14	56330632	56331876	+	+	+				3				OTX2
chr14	56344361	56346593	+	+	+	+	+		5			OTX2	
chr14	60043526	60043876	+		+	+			3	SIX6			
chr14	60045486	60047933	+	+	+	+	+		5		SIX6		
chr14	60173732	60174416	+	+	+	+			4				SIX1
chr14	60178708	60179539	+	+	+	+			4				SIX1
chr14	64076628	64078950			+				1	C14orf50	HSPA2		ZBTB1
chr14	73775942	73777945			+				1			CHX10	
chr14	78814907	78815812				+			1		NRXN3		
chr14	85066248	85066711					+		1			FLRT2	
chr14	92966490	92967219				+			1			KIAA1409	
chr14	93323706	93325486	+	+					2		PRIMA1		
chr14	94304366	94306322	+	+		+			3		GSC		
chr14	94307376	94307964			+				1	GSC			
chr14	94309129	94309432	+	+		+	+		4	GSC			
chr14	94309837	94310094			+				1	GSC			
chr14	94896429	94896694	+						1				
chr14	96569359	96569929	+						1				
chr14	98781593	98783184		+		+			2			BCL11B	
chr14	100244949	100246020		+		+			2				
chr14	101095743	101101320				+			1			DIO3	
chr15	21674325	21674525				+			1				
chr15	22569268	22569626			+				1				
chr15	22674451	22674801	+		+				2			SNRPN	
chr15	24795649	24796142	+		+				2	GABRG3			
chr15	30796823	30798988	+		+	+			3		GREM1		
chr15	32833736	32834772			+				1		CX36		
chr15	34959766	34960310			+				1				
chr15	35177468	35177672			+				1			MEIS2	
chr15	35190335	35190559					+		1	MEIS2			
chr15	39580855	39582597		+					1			ITPKA	LTK
chr15	50863480	50865218	+		+	+			3			ONECUT1	
chr15	50867751	50870991			+				1		ONECUT1		



chr15	50873922	50874150	+		+	+		3	ONECUT1			
chr15	50874504	50874780	+			+		2	ONECUT1			
chr15	56144602	56146068	+			+	+	3		ALDH1A2		
chr15	58083428	58085812		+	+			2			FOXB1	
chr15	61460942	61461213					+	1		CA12		
chr15	62984853	62985116	+			+		2	ANKDD1A			
chr15	65902540	65909629		+	+	+	+	4		LBXCOR1		
chr15	67009644	67010434			+			1		SPESP1		
chr15	73035331	73036975	+					1		RPP25		
chr15	74414579	74414893		+		+	+	3	ISL2			
chr15	74419318	74422570	+					1			ISL2	ZNF291
chr15	74425528	74426878			+			1				ZNF291
chr15	77511155	77512698	+	+	+	+	+	5		KIAA1024		
chr15	87750378	87752134	+	+	+	+	+	5				
chr15	87753276	87754065	+	+	+	+	+	5				
chr15	94665886	94667791	+					1	NR2F2			
chr15	94674413	94678725		+	+			2		NR2F2		
chr15	94688420	94688620			+			1				NR2F2
chr15	94696311	94696733	+					1				
chr15	94697933	94698305			+			1				
chr15	94712516	94712812			+	+		2				
chr15	94760346	94761535			+		+	2				
chr15	95997026	95997395			+			1				
chr16	2956648	2960327	+		+	+		3		PAQR4	KREMEN2	PKMYT1
chr16	3160440	3161357				+		1				
chr16	3182624	3182913			+			1				
chr16	3354966	3355168	+		+	+		3				OR2C1
chr16	3433100	3433570			+			1	FLJ14154	ZNF597		
chr16	7294335	7294609				+		1			A2BP1	
chr16	10387188	10387755	+					1				
chr16	12902076	12905191				+		1				
chr16	22732118	22733960				+		1		HS3ST2		
chr16	30488729	30489035		+				1			ZNF688	
chr16	30960981	30961301	+	+		+		3				STX4A
chr16	34152988	34153610			+			1				
chr16	34444219	34444625			+			1				

chr16	34517099	34517561				+			1				
chr16	34598314	34598995			+				1				
chr16	45435302	45436067	+	+		+			3				
chr16	47866625	47866854				+			1				CBLN1
chr16	47868915	47869809			+	+			2				CBLN1
chr16	49432565	49432823	+	+	+	+			4				
chr16	49741201	49746264			+	+			2		SALL1		
chr16	49747302	49747761		+	+	+			3	SALL1			
chr16	52873104	52882105	+		+	+			3		IRX3		
chr16	52882542	52883204	+		+	+			3	IRX3			
chr16	53527803	53530347	+	+		+			3				IRX5
chr16	53648119	53648448					+		1				
chr16	63712158	63715165				+			1		CDH11		
chr16	65170251	65170913	+						1		CMTM2	CMTM1	
chr16	65740710	65742469	+						1		MGC4655		TRADD
chr16	67233952	67234344	+			+			2	CDH3			
chr16	69821862	69822160				+			1		HYDIN		
chr16	85085773	85086514			+				1				
chr16	85088249	85090495			+				1				
chr16	85156857	85160150			+				1	FOXL1		FOXC2	
chr16	86294154	86294408			+				1				KLHDC4
chr17	1053563	1054129			+				1				
chr17	4457304	4457526			+				1			FLJ42461	
chr17	4635369	4636303		+	+				2	LOC388323		VMO1	TM4SF5
chr17	5343856	5345326	+		+				2				NLRP1
chr17	6738154	6738448			+				1				
chr17	8809195	8810097				+			1				
chr17	12509393	12510060				+			1	MYOCD			
chr17	14142452	14142777	+		+	+			3	HS3ST3B1			
chr17	15106522	15107231				+			1		PMP22		
chr17	15185431	15185851				+			1		TEKT3		
chr17	15626944	15627199	+						1				
chr17	17566331	17569225			+				1			RAI1	
chr17	23658022	23658597	+						1		FLJ40504		
chr17	32366013	32374988	+		+				2	AATF		LHX1	
chr17	32377398	32377685	+			+			2	AATF			LHX1

chr17	33179448	33179696				+		1	TCF2			
chr17	34250975	34251187	+					1		LOC388381		RPL23
chr17	34575009	34575625			+			1				CACNB1
chr17	35277672	35278163			+			1	ZNFN1A3	ZPBP2		
chr17	36272914	36273627			+			1			KRT12	
chr17	38089258	38089793				+		1	CCR10		CNTNAP1	
chr17	38092376	38092588			+			1	CCR10		CNTNAP1	
chr17	39146637	39147002		+				1				
chr17	42410317	42411837				+		1		RPRML		
chr17	43982787	43983443		+	+	+	+	4	HOXB2		HOXB3	
chr17	44065812	44066418	+			+		2	HOXB9			
chr17	44068926	44069130	+			+		2				
chr17	44074360	44075233	+	+		+		3				
chr17	44151234	44152291	+		+			2				PRAC
chr17	44155945	44156287	+					1	PRAC			HOXB13
chr17	44159203	44159414	+	+		+	+	4	PRAC		HOXB13	
chr17	44182435	44182640			+			1				
chr17	44187109	44187631			+			1				TTLL6
chr17	45396282	45398063			+			1	DLX4			
chr17	45900570	45901899			+			1	RSAD1	CHAD	FLJ20920	
chr17	46213635	46213937	+		+			2				
chr17	51277734	51278138				+		1				
chr17	56827843	56838048	+	+		+	+	4	LOC388407	TBX2		BCAS3
chr17	56886506	56890036	+	+	+			3		TBX4		
chr17	58865386	58865618			+			1			CYB561	
chr17	67623575	67623903	+		+			2	SOX9			
chr17	67624420	67625866	+					1	SOX9			
chr17	70178791	70179305				+		1		RAB37		
chr17	75531280	75531511			+			1			TBC1D16	
chr17	76873878	76874132			+			1			MGC15523	
chr17	76992125	76992465				+		1			BAHCC1	
chr17	77793894	77794165	+					1				CSNK1D
chr17	77896736	77897004	+					1				
chr18	894579	899574			+	+		2		ADCYAP1		
chr18	5186244	5187389	+		+	+		3				
chr18	5618325	5620785				+		1				

chr18	8357274	8357599				+		1			PTPRM	
chr18	9126089	9127594		+				1		ANKRD12		NDUFV2
chr18	11138308	11139936				+		1				
chr18	13858533	13859026				+		1				
chr18	15155110	15155342				+		1				
chr18	17998935	18006361	+		+	+		3		GATA6		
chr18	18393483	18394244					+	1				
chr18	21967727	21967951				+		1		PSMA8		
chr18	26875488	26877115				+		1		DSC3		
chr18	30056357	30057790				+		1		NOL4		
chr18	30810653	30811881				+		1				
chr18	31101283	31102128				+		1				ZNF397
chr18	31783927	31784514				+		1				
chr18	33108246	33109161				+		1			BRUNOL4	
chr18	33398906	33401626				+		1		BRUNOL4		
chr18	35675459	35675827				+	+	2				
chr18	41609317	41609696	+			+		2				
chr18	41671387	41673101	+					1			CD33L3	KIAA1632
chr18	42590182	42591108				+		1		ST8SIA5		
chr18	42591509	42592098	+			+		2	ST8SIA5			
chr18	42780865	42781135	+			+	+	3			KATNAL2	
chr18	43031631	43032082				+	+	2				
chr18	43043741	43044676	+			+	+	3				
chr18	45341074	45341444	+					1	LIPG			
chr18	45341878	45342526	+					1		LIPG		
chr18	45593410	45594954	+			+		2		ACAA2		MYO5B
chr18	46046741	46047034	+					1		CCDC11		MBD1
chr18	46048449	46048994	+			+		2	CCDC11			MBD1
chr18	53170706	53172603	+	+	+	+	+	5		ST8SIA3		
chr18	53254153	53259851	+	+	+	+	+	5			ONECUT2	
chr18	55082983	55083321				+	+	2				RAX
chr18	55085814	55087807				+	+	2			RAX	
chr18	55090605	55092520				+	+	2		RAX		
chr18	57372432	57372966				+		1			CDH20	
chr18	68359955	68362770				+		1		CBLN2		
chr18	68684946	68687851	+			+	+	3	NETO1	NETO1		

chr18	71045096	71046221	+					1	TSHZ1		ZADH2	
chr18	74775198	74775785			+			1				
chr18	74837994	74842232	+		+	+		3		SALL3		
chr19	296261	296590	+		+			2	KIAA1193			
chr19	3385930	3386417			+			1			NFIC	
chr19	8562789	8563917			+			1			ADAMTS10	
chr19	9334590	9335001	+		+			2		ZNF177		
chr19	9469805	9470343	+			+	+	3		ZNF560		
chr19	9509935	9510410				+		1		ZNF426		
chr19	10258604	10259703	+					1	ICAM5	ICAM4		ICAM1
chr19	12166553	12166894	+		+	+		3				ZNF136
chr19	12692794	12693225			+			1			TNPO2	MGC2803
chr19	12981987	12985368	+					1			NFIX	
chr19	12996318	12997169	+					1			NFIX	
chr19	13076245	13076543			+			1	LYL1			TRMT1
chr19	18622273	18622669	+					1			KLHL26	
chr19	18759229	18759449			+	+		2			COMP	CRTC1
chr19	20023773	20024107				+		1				
chr19	22492237	22493101	+		+			2				
chr19	33976154	33976850	+					1				
chr19	35408169	35411810			+	+		2				
chr19	36535721	36536023			+			1	TSHZ3			
chr19	39760247	39760737				+		1				
chr19	41176745	41177316			+			1	LOC644096			
chr19	41427862	41428724	+	+	+	+		4				ZNF146
chr19	41604101	41604721	+		+			2	ZNF545			
chr19	41958435	41958867	+					1				
chr19	41980183	41980563	+					1				
chr19	42020737	42021358				+		1		ZNF790		
chr19	42155832	42156446	+		+	+		3				
chr19	42434579	42434869	+					1				ZNF383
chr19	42516942	42517596			+			1		HKR1		
chr19	42586184	42586705			+			1				ZNF569
chr19	42689631	42689965			+			1		LOC390927		
chr19	42874634	42875167	+			+		2		FLJ37549		ZNF607
chr19	42901948	42902532				+		1		ZNF607		

chr19	42972931	42973264			+			1				
chr19	42999719	43000366	+			+		2				
chr19	43037649	43038000	+		+			2				
chr19	48697733	48698273	+					1			PHLDB3	ETHE1
chr19	49097658	49097893				+		1				
chr19	49644257	49644649	+		+			2		ZNF229		
chr19	50286238	50286847			+			1			GEMIN7	
chr19	53675375	53675987			+			1				LMTK3
chr19	53824416	53826103	+					1			DBP	CA11
chr19	54405308	54405931	+		+			2			TRPM4	
chr19	55245825	55246304	+			+		2			FLJ26850	ZNF473
chr19	55552659	55553075			+			1				NAPSA
chr19	55553586	55553895			+			1			NAPSA	
chr19	55923445	55923781	+	+		+		3				CLEC11A
chr19	57082654	57083180	+	+		+	+	4		ZNF577		ZNF649
chr19	57144129	57144355	+		+	+	+	4				ZNF613
chr19	57564897	57565384				+		1				ZNF610
chr19	57592768	57592970			+			1		ZNF528		
chr19	58232548	58233045			+			1				
chr19	58253028	58253624			+			1				ZNF160
chr19	58354002	58354312				+		1		ZNF347		ZNF665
chr19	58503433	58503823	+		+	+		3				
chr19	59174834	59175384	+			+		2			CACNG8	
chr19	59359971	59360378			+			1	LENG1		TMC4	LENG4
chr19	60283718	60285792	+	+	+	+		4			EPS8L1	PPP1R12C
chr19	60907042	60907388	+		+			2				NALP9
chr19	61289851	61292108	+					1			LOC126208	
chr19	61571230	61571807	+			+		2				
chr19	61607169	61607668	+			+		2		ZNF583		
chr19	61680126	61681553	+					1		ZNF667		
chr19	617110556	61711318	+					1		ZNF471		
chr19	61968427	61968754	+		+	+		3				ZIM2
chr19	62302501	62302749	+		+	+		3				
chr19	62309414	62310260	+		+			2				
chr19	62322152	62322445			+			1	USP29			
chr19	62730385	62731020				+		1		ZNF549		

chr19	62786552	62787576	+		+	+		3	ZNF416	ZIK1		
chr19	62817343	62817714				+		1		ZNF134		ZNF530
chr19	62836152	62836811				+		1		ZNF211		ZNF134
chr19	62885081	62885450				+		1		ZNF551		ZSCAN4
chr19	62911911	62912329	+	+				2			ZNF154	
chr19	62930398	62930840	+		+			2		ZNF671		
chr19	62949901	62950431				+		1	FLJ38288			
chr19	63091758	63092088	+		+			2				
chr19	63138149	63138612	+					1		ZNF418		ZNF256
chr19	63212567	63213036				+		1	ZNF606			
chr19	63246167	63246399				+		1			ZSCAN1	
chr19	63262206	63263591	+		+			2		ZNF135		ZSCAN1
chr19	63321122	63322053	+		+			2				ZNF329
chr19	63353550	63354099	+		+			2		ZNF329		
chr19	63357836	63358645	+					1	ZNF329			
chr19	63386314	63386919	+					1			ZNF274	
chr19	63407033	63407845	+	+	+			3			ZNF274	
chr19	63420090	63420541	+		+	+		3				ZNF274
chr19	63559210	63560680	+	+		+		3	A1BG		ZNF497	
chr20	773268	774276				+		1		C20orf55	C20orf55	
chr20	1731825	1732552				+		1				
chr20	9435112	9435889	+		+	+	+	4	C20orf103			
chr20	9443254	9443597				+		1		C20orf103		
chr20	9444472	9444893				+	+	3			C20orf103	
chr20	17154529	17154952				+		1	PCSK2			
chr20	18433171	18433580				+		1	SEC23B			
chr20	20292401	20298605	+	+	+	+		4		INSM1		C20orf26
chr20	20381106	20381329				+		1			C20orf74	
chr20	20948766	20949280				+	+	2				
chr20	21028930	21030824				+	+	3				
chr20	21320042	21320463	+	+		+		3				XRN2
chr20	21433933	21444714	+			+	+	3		NKX2-2		
chr20	21637759	21638048				+	+	2			PAX1	
chr20	22496968	22497720				+		1				
chr20	22505518	22507240	+		+	+	+	4				FOXA2
chr20	22507554	22508001				+		1				FOXA2

chr20	22510737	22514104				+		1		FOXA2		
chr20	22514822	22515055				+		1	FOXA2			
chr20	25011839	25013525	+		+	+	+	4	VSX1			
chr20	29659780	29660246		+				1				ID1
chr20	33652134	33653681			+			1				
chr20	36785545	36790786	+	+	+	+		4		SLC32A1		
chr20	38749965	38753401	+	+	+	+		4		MAFB		
chr20	43366327	43366814	+					1	RBPSUHL		MATN4	
chr20	44713189	44713576			+			1		SLC13A3		
chr20	47368247	47369091				+		1				
chr20	54012011	54014085	+	+	+	+	+	5		CBLN4		
chr20	54633687	54640196		+	+	+		3		TFAP2C		
chr21	25856295	25856676			+			1				
chr21	26866882	26867517			+			1		CYYR1		
chr21	27259728	27262108			+			1		ADAMTS5		
chr21	30233258	30233977			+	+	+	3			GRIK1	
chr21	33364077	33366413				+		1		OLIG1		
chr21	34963176	34965094	+	+				2		CLIC6		
chr21	35320831	35321129	+	+	+	+		4			RUNX1	
chr21	36987050	36988055			+	+		2	SIM2			
chr21	36990064	36995761	+	+	+	+	+	5		SIM2		
chr21	36998633	36999555	+					1			SIM2	
chr21	37001812	37003703				+		1			SIM2	
chr21	37041664	37042612	+			+		2			SIM2	HLCS
chr22	16911216	16911504	+					1				
chr22	19113467	19116201			+			1			SCARF2	KLHL22
chr22	28039282	28042013			+			1		RRP22		GAS2L1
chr22	28196327	28196652				+		1	NEFH			
chr22	44655030	44655728		+		+	+	3				
chrX	6154121	6155906				+		1		NLGN4X		
chrX	10548200	10548486	+			+		2		MID1		
chrX	12511404	12511753				+		1			FRMPD4	
chrX	12903029	12904520	+			+		2		TMSB4X		
chrX	15263291	15263929				+		1		PIGA		FIGF
chrX	15421233	15421606				+		1	BMX	PIR		
chrX	17583307	17584404	+		+			2			NHS	



chrX	18603074	18603520	+		+		2	RS1			
chrX	20194049	20196732			+		1		RPS6KA3		
chrX	21583940	21586987			+		1		RP11-450P7.3		CNKSR2
chrX	23260206	23260517			+		1	PTCHD1			
chrX	23261064	23263560			+		1		PTCHD1		
chrX	23710977	23711645			+		1		SAT		
chrX	24930159	24934128			+		1			ARX	POLA
chrX	24943586	24944633		+	+		2		ARX		
chrX	38906607	38907075			+		1				
chrX	39357742	39358237			+		1				
chrX	39749470	39754050	+		+		2				
chrX	39756477	39759710	+		+		2				
chrX	39838379	39854191	+		+		2		BCOR		
chrX	39889985	39892010	+		+		2				
chrX	39895864	39901147			+		1				
chrX	39911537	39913320			+		1				
chrX	39915763	39917125	+				1				
chrX	40367319	40368157			+		1				CXorf38
chrX	42521953	42522327			+		1				
chrX	48569782	48571008		+			1	ERAS			HDAC6
chrX	48639445	48640273			+		1		PQBP1	TIMM17B	
chrX	53046434	53046818		+			1				
chrX	64171134	64172016			+		1				
chrX	67569672	67570632			+		1		OPHN1		
chrX	67635153	67635796			+		1		YIPF6		
chrX	68301639	68302129			+		1		PJA1		
chrX	73672371	73673509			+		1				SLC16A2
chrX	82652099	82652432		+	+		2				POU3F4
chrX	90576259	90576775			+		1			PABPC5	
chrX	99548310	99552014		+			1		PCDH19		
chrX	99552788	99553037		+			1	PCDH19			
chrX	99777956	99778450	+		+		2	SRPX2	TSPAN6		
chrX	100332897	100333393		+	+		2				
chrX	103103797	103104369			+		1		MGC39900		
chrX	107065887	107066288		+			1				MID2

chrX	110226021	110226335				+			1		PAK3		
chrX	111970221	111971471				+			1		AMOT		
chrX	113722346	113722665	+			+			2	HTR2C			
chrX	113724776	113725709	+			+			2		HTR2C		
chrX	118809186	118810157				+			1		RPL39		
chrX	130019813	130020416				+			1		FLJ30058		
chrX	133133345	133134602				+			1				
chrX	133510841	133513129	+		+				2				
chrX	134257297	134257520	+		+	+			3			ZNF75	
chrX	135943493	135943941				+			1	GPR101			
chrX	136457211	136457969				+	+		2				
chrX	136459743	136460985	+	+	+	+	+		5				
chrX	138104494	138104835				+			1				
chrX	139420772	139421248				+			1	SOX3			
chrX	149817451	149818830				+			1		CD99L2		
chrX	150093806	150094927				+			1	GPR50			
chrX	152872013	152872366				+			1	RENBP		HCFC1	
chrX	152872826	152873834				+			1	RENBP		HCFC1	
chrX	152889266	152891674				+			1		TMEM187		
chrY	238669	239872				+			1			PPP2R3B	
chrY	499674	501262	+			+			2	SHOX			
chrY	512624	512973				+			1			SHOX	
chrY	514728	515677	+		+	+			3			SHOX	
chrY	4927957	4928586				+			1		PCDH11Y		
chrY	4930745	4931225				+	+		2			PCDH11Y	
chrY	12587837	12588044	+						1				
<b>Total</b>		<b>1496 CGI</b>								<b>295</b>	<b>324</b>	<b>429</b>	<b>261</b>

\* Locations of the CpG islands (CGIs) relative to known genes are defined as: Promoter, overlapping any first exon/transcription start site (TSS) of a gene; Upstream, from -10 kb to the TSS except those overlapping with first exon/TSS; Intragenic, from TSS to the end of the gene boundary excluding those overlapping with first exon/TSS; Downstream, from the end of the gene to 10 kb downstream.