

Supplemental Table S1. Total cell numbers and mean yield of genomic DNA.

	Mean Cell Number	SD	Mean DNA yield [ng]	SD (yield)
LTHSC	2024.33	836.47	8.27	3.38
STHSC	3721.67	1033.34	12.63	3.81
CMP	3555.00	2889.67	15.53	13.49
MEP	3300.00	2758.02	11.40	8.91

Supplemental Table S2. Distribution of methylated and not methylated loci.

	total	25,626 loci
LTHSC	methylated	20,415 (80%)
	not methylated	5,211 (20%)
	SD	538
STHSC	methylated	20,810 (81%)
	not methylated	4,816 (19%)
	SD	533
CMP	methylated	20,088 (78%)
	not methylated	5,538 (22%)
	SD	266
MEP	methylated	19,869 (76%)
	not methylated	5,757 (24%)
	SD	660

Supplemental Table S3. Changes in DNA cytosine methylation during in vivo differentiation

n (%) loci, p<0.01	LTHSC → STHSC	STHSC → CMP	CMP → MEP
demethylated	205 (40%)	757 (95%)	127 (52%)
methyalted	304 (60%)	36 (5%)	116 (48%)
total	509	793	243

Supplemental Table S4. Composition of the commitment-associated epigenetic signature

HELP ID	ID	chromosome	start	end	nearest associated gene	demethylated at STHSC- CMP transition	methylated at STHSC-CMP transition	associated mirBase miRNA
MSPI0406S00000385	NR_027693	chr1	957906	958178	C1orf170	•		
MSPI0406S00000726	NM_003327	chr1	1189309	1189551	TNFRSF4	•		
MSPI0406S00000727	NM_003327	chr1	1189552	1190026	TNFRSF4	•		
MSPI0406S00000795	NM_058167	chr1	1237557	1237908	UBE2J2	•		
MSPI0406S00000813	NM_058167	chr1	1249687	1250185	UBE2J2	•		
MSPI0406S00002279	NM_024848	chr1	2354082	2354504	MORN1	•		
MSPI0406S00004156	NR_033711	chr1	3687181	3688411	TP73-AS1	•		
MSPI0406S00006564	NM_024654	chr1	6549100	6549357	NOL9	•		
MSPI0406S00014166	NM_015164	chr1	15754221	15755055	PLEKHM2	•		
MSPI0406S00014540	NM_014424	chr1	16090875	16091622	HSPB7	•		
MSPI0406S00015124	NR_027504	chr1	16716927	16717382	MST1P2	•		
MSPI0406S00017419	NM_003689	chr1	19382942	19383319	AKR7A2	•		
MSPI0406S00019195	NM_032236	chr1	21855465	21856098	USP48	•		
MSPI0406S00019402	NM_005529	chr1	22010022	22010782	HSPG2	•		
MSPI0406S00020501	NM_030634	chr1	23440314	23440761	ZNF436	•		
MSPI0406S00020659	NM_004091	chr1	23603359	23604042	E2F2	•		
MSPI0406S00027887	NM_003680	chr1	32953197	32954032	YARS	•		
MSPI0406S00027888	NM_003680	chr1	32954033	32954680	YARS	•		
MSPI0406S00029789	NM_145047	chr1	36585404	36586033	OSCP1	•		
MSPI0406S00034813	NR_024270	chr1	45438795	45439054	LOC400752	•		
MSPI0406S00037877	NR_038953	chr1	53416058	53416293	LOC100507564		•	
MSPI0406S00038358	NM_016126	chr1	54122232	54122724	HSPB11	•		
MSPI0406S00038942	NR_026782	chr1	54817457	54819004	HEATR8	•		
MSPI0406S00042698	NM_001902	chr1	70589060	70590030	CTH	•		
MSPI0406S00043611	NM_198549	chr1	77956930	77957172	FAM73A	•		
MSPI0406S00044825	NM_006536	chr1	86599385	86600099	CLCA2	•		
MSPI0406S00044978	NR_026988	chr1	87307708	87308405	LOC339524	•		
MSPI0406S00044979	NR_026988	chr1	87308406	87308954	LOC339524	•		
MSPI0406S00044980	NR_026987	chr1	87308955	87309663	LOC339524	•		
MSPI0406S00046989	NM_144988	chr1	95250505	95251771	ALG14		•	
MSPI0406S00051596	NM_001144822	chr1	116826399	116827849	CD58	•		
MSPI0406S00052973	NM_005105	chr1	142995970	142996399	RBM8A	•		
MSPI0406S00055879	NM_178348	chr1	149612211	149613164	LCE1A		•	
MSPI0406S00057202	NM_006556	chr1	151723132	151723767	PMVK	•		
MSPI0406S00057504	NM_001018016	chr1	151975007	151975698	MUC1	•		
MSPI0406S00058182	NM_001162384	chr1	152761420	152761690	ARHGEF2	•		
MSPI0406S00058933	NM_024540	chr1	153527535	153527805	MRPL24	•		
MSPI0406S00059603	NM_004833	chr1	155859524	155860191	AIM2		•	
MSPI0406S00060049	NM_020335	chr1	157197685	157197955	VANGL2	•		
MSPI0406S00060378	NM_005099	chr1	157980315	157980942	ADAMTS4	•		
MSPI0406S00061735	NM_053053	chr1	163577801	163578340	TADA1	•		
MSPI0406S00063089	NR_037845	chr1	170176093	170177170	LOC100506023	•		
MSPI0406S00063130	NM_198493	chr1	170370693	170372081	ANKRD45	•		
MSPI0406S00065666	NM_001200050	chr1	179490846	179491482	NPL	•		
MSPI0406S00066274	NM_007212	chr1	181744853	181745145	RNF2	•		
MSPI0406S00066275	NM_007212	chr1	181745146	181745897	RNF2	•		
MSPI0406S00072826	NM_014388	chr1	206388104	206389080	DIEXF	•		
MSPI0406S00073273	NM_001164688	chr1	208053353	208053680	RD3	•		
MSPI0406S00073274	NM_001164688	chr1	208053681	208054061	RD3	•		
MSPI0406S00078177	NR_024485	chr1	224224936	224225388	LOC100130093	•		
MSPI0406S00079222	NM_145257	chr1	225785590	225785825	C1orf96	•		
MSPI0406S00079555	NM_004481	chr1	226508139	226509317	GALNT2	•		
MSPI0406S00082057	NM_004485	chr1	232140050	232141799	GN4	•		
MSPI0406S00082353	NM_019891	chr1	232771598	232772990	ERO1LB		•	
MSPI0406S00091228	NR_026833	chr2	6072507	6073401	LOC400940		•	
MSPI0406S00092925	NM_003597	chr2	10097327	10097750	KLF11	•		
MSPI0406S00093424	NM_002539	chr2	10539882	10540677	ODC1	•		
MSPI0406S00096362	NM_001006946	chr2	20347390	20348252	SDC1	•		
MSPI0406S00098503	NM_175629	chr2	25506723	25507149	DNMT3A	•		
MSPI0406S00099129	NM_004802	chr2	26590216	26591090	OTOF	•		
MSPI0406S00099987	NM_001168364	chr2	27575821	27576237	KRTCAP3	•		
MSPI0406S00099988	NM_001168364	chr2	27576238	27576601	KRTCAP3	•		
MSPI0406S00101894	NM_001199139	chr2	32402061	32402439	NLR4	•		
MSPI0406S00103224	NM_144736	chr2	37370960	37371797	C2orf56	•		

Supplemental Table S4. Composition of the commitment-associated epigenetic signature

MSPI0406S00110453	NM_001001521	chr2	63979435	63979829	UGP2	•
MSPI0406S00111104	NM_181784	chr2	65571224	65571496	SPRED2	•
MSPI0406S00111108	NM_181784	chr2	65575553	65576585	SPRED2	•
MSPI0406S00111645	NM_001190265	chr2	68201971	68202668	C1D	•
MSPI0406S00111719	NM_001111101	chr2	68458347	68458608	CNRIP1	•
MSPI0406S00112387	NM_017880	chr2	70329727	70330679	C2orf42	•
MSPI0406S00116051	NM_001206840	chr2	85467468	85467949	TGOLN2	•
MSPI0406S00116077	NM_017750	chr2	85492695	85492916	RETSAT	•
MSPI0406S00116373	NM_012483	chr2	85831349	85832243	GNLY	•
MSPI0406S00119894	NM_001079	chr2	97787264	97787854	ZAP70	•
MSPI0406S00120314	NM_014044	chr2	98684341	98684820	UNC50	•
MSPI0406S00123054	NM_032411	chr2	106139577	106140059	C2orf40	•
MSPI0406S00125454	NM_006343	chr2	112370475	112371817	MERTK	•
MSPI0406S00125977	NM_173843	chr2	113590796	113591607	IL1RN	•
MSPI0406S00127575	NM_001105198	chr2	120151906	120152205	TMEM177	•
MSPI0406S00130328	NM_005291	chr2	128119819	128120032	GPR17	•
MSPI0406S00139379	NM_012290	chr2	171843202	171844410	TLK1	•
MSPI0406S00140523	NM_001193528	chr2	175086383	175086752	SCRN3	•
MSPI0406S00141266	NR_026966	chr2	178082238	178082772	LOC100130691	•
MSPI0406S00142783	NM_001128144	chr2	190472769	190473769	PMS1	•
MSPI0406S00144047	NM_199440	chr2	198191088	198191715	HSPD1	•
MSPI0406S00144699	NM_021824	chr2	201579689	201580307	NIF3L1	•
MSPI0406S00144920	NM_018571	chr2	202142471	202143236	STRADB	•
MSPI0406S00145503	NM_173511	chr2	203323728	203324851	FAM117B	•
MSPI0406S00146432	NM_003872	chr2	206471042	206471328	NRP2	•
MSPI0406S00149869	NM_003936	chr2	219649600	219649942	CDK5R2	•
MSPI0406S00150251	NM_001927	chr2	220107967	220108628	DES	•
MSPI0406S00150269	NM_005876	chr2	220133043	220133339	SPEG	•
MSPI0406S00150384	NM_001195731	chr2	220232048	220232257	CHPF	•
MSPI0406S00158249	NM_030768	chr2	238894518	238894783	ILKAP	•
MSPI0406S00163315	NM_014674	chr3	5202091	5202731	EDEM1	•
MSPI0406S00167034	NM_024923	chr3	13437731	13439205	NUP210	•
MSPI0406S00172232	NM_014805	chr3	37009703	37010176	EPM2AIP1	•
MSPI0406S00172323	NM_002078	chr3	37258709	37258922	GOLGA4	•
MSPI0406S00172324	NM_002078	chr3	37258923	37259567	GOLGA4	•
MSPI0406S00172678	NM_005109	chr3	38180936	38181208	OXSRI	•
MSPI0406S00174112	NM_207404	chr3	42921776	42922501	ZNF662	•
MSPI0406S00176712	NM_001130082	chr3	48446526	48447281	PLXNB1	•
MSPI0406S00177701	NR_028435	chr3	49434986	49436378	AMT	•
MSPI0406S00177902	NM_001640	chr3	49685519	49685997	APEH	•
MSPI0406S00182268	NM_020676	chr3	58197200	58197750	ABHD6	•
MSPI0406S00182375	NM_001173468	chr3	58394724	58395569	PDHB	•
MSPI0406S00183259	NR_038283	chr3	62278537	62279717	LOC100506994	•
MSPI0406S00183526	NM_025075	chr3	63823453	63823803	THOC7	•
MSPI0406S00184665	NM_007114	chr3	69184353	69184877	TMF1	•
MSPI0406S00195341	NM_001003794	chr3	129025461	129026251	MGLL	•
MSPI0406S00195683	NM_153330	chr3	129668727	129669499	DNAJB8	•
MSPI0406S00195821	NM_002950	chr3	129817604	129818298	RPN1	•
MSPI0406S00196095	NM_020741	chr3	130175121	130175578	KIAA1257	•
MSPI0406S00201052	NM_001870	chr3	150063953	150064397	CPA3	•
MSPI0406S00203021	NM_002888	chr3	159933151	159933495	RARRES1	•
MSPI0406S00206546	NM_021629	chr3	180652291	180652963	GNB4	•
MSPI0406S00209761	NM_181573	chr3	188007343	188007772	RFC4	•
MSPI0406S00209762	NM_181573	chr3	188007773	188008145	RFC4	•
MSPI0406S00210642	NM_018192	chr3	191321560	191321816	LEPREL1	•
MSPI0406S00212526	NM_012287	chr3	196645326	196646205	ACAP2	•
MSPI0406S00213180	NM_152672	chr3	197430169	197430607	OSTalpha	•
MSPI0406S00213767	NM_001042540	chr3	198156367	198156965	NCBP2	•
MSPI0406S00213866	NM_005929	chr3	198245645	198247002	MF12	•
MSPI0406S00215092	NM_007100	chr4	658938	659320	ATP5I	•
MSPI0406S00217118	NM_002938	chr4	2436560	2436866	RNF4	•
MSPI0406S00217491	NM_182982	chr4	3003047	3004265	GRK4	•
MSPI0406S00217492	NM_182982	chr4	3004266	3004866	GRK4	•
MSPI0406S00217920	NM_001528	chr4	3478532	3478999	HGFAC	•
MSPI0406S00219591	NM_001014809	chr4	6021445	6022370	CRMP1	•
MSPI0406S00220479	NM_020773	chr4	7030651	7030866	TBC1D14	•

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MSPI0406S00228163	NR_026804	chr4	38499868	38500348	FLJ13197	•	
MSPI0406S00230742	NM_152398	chr4	48749869	48750262	OCIAD2	•	
MSPI0406S00235137	NM_018243	chr4	78226311	78226619	SEP11'	•	
MSPI0406S00235743	NM_001201	chr4	82307339	82308340	BMP3	•	
MSPI0406S00236418	NM_133636	chr4	84732902	84733773	HELQ	•	
MSPI0406S00246532	NM_006726	chr4	152294680	152295602	LRBA	•	
MSPI0406S00247347	NM_015196	chr4	154743345	154744439	KIAA0922	•	
MSPI0406S00247772	NM_000857	chr4	157037093	157037800	GUCY1B3	•	
MSPI0406S00250036	NM_182662	chr4	171386523	171387074	AADAT	•	
MSPI0406S00265902	NM_152295	chr5	33475064	33476298	TARS	•	•
MSPI0406S00267948	NR_034085	chr5	43054155	43054431	LOC648987	•	
MSPI0406S00268188	NM_198566	chr5	43551071	43552189	C5orf34	•	
MSPI0406S00271740	NM_181523	chr5	67557695	67558467	PIK3R1	•	
MSPI0406S00274625	NM_004607	chr5	77108121	77108484	TBCA	•	
MSPI0406S00276457	NM_001867	chr5	85948785	85949343	COX7C	•	
MSPI0406S00277605	NM_014639	chr5	94916312	94916707	TTC37	•	
MSPI0406S00284244	NM_003337	chr5	133734172	133734451	UBE2B	•	
MSPI0406S00284605	NM_024715	chr5	134236169	134237110	TXNDC15	•	
MSPI0406S00286985	NM_001945	chr5	139706700	139707349	HBEGF	•	•
MSPI0406S00287665	NM_022481	chr5	141040128	141040897	ARAP3	•	
MSPI0406S00287940	NM_030571	chr5	141468045	141468407	NDFIP1	•	
MSPI0406S00289619	NR_029684	chr5	148781648	148782221	MIR143	•	
MSPI0406S00290836	NM_000405	chr5	150611587	150612407	GM2A	•	
MSPI0406S00300384	NM_017838	chr5	177509311	177509698	NHP2	•	
MSPI0406S00302447	NM_139068	chr5	179638857	179640249	MAPK9	•	•
MSPI0406S00303025	NM_152547	chr5	180398397	180399118	BTNL9	•	
MSPI0406S00304773	NR_026856	chr6	2933036	2933918	DKFZP686I15217	•	
MSPI0406S00304798	NM_000904	chr6	2969926	2970589	NQO2	•	
MSPI0406S00307061	NM_152551	chr6	7533766	7535367	SNRNP48	•	
MSPI0406S00309002	NM_001242827	chr6	13681759	13682012	SIRT5	•	
MSPI0406S00310641	NM_001143942	chr6	17389178	17389461	RBM24	•	
MSPI0406S00312711	NM_001080	chr6	24601607	24602784	ALDH5A1	•	
MSPI0406S00313669	NM_003495	chr6	27213765	27214980	HIST1H4I	•	
MSPI0406S00314963	NM_021959	chr6	30142976	30144351	PPP1R11	•	
MSPI0406S00315357	NM_014641	chr6	30792263	30792967	MDC1	•	•
MSPI0406S00315947	NM_000594	chr6	31650719	31651518	TNF	•	
MSPI0406S00316111	NR_003673	chr6	31790002	31791053	LY6G6E	•	•
MSPI0406S00316402	NM_002904	chr6	32034918	32035873	RDBP	•	
MSPI0406S00319390	NM_052961	chr6	36100387	36100668	SLC26A8	•	
MSPI0406S00319391	NM_052961	chr6	36100769	36101140	SLC26A8	•	
MSPI0406S00319826	NM_001220778	chr6	36773218	36774114	CDKN1A	•	
MSPI0406S00320263	NM_002648	chr6	37245432	37245710	PIM1	•	
MSPI0406S00320327	NM_145316	chr6	37332773	37333050	TMEM217	•	
MSPI0406S00321798	NM_024807	chr6	41276999	41277895	TREML2	•	
MSPI0406S00323994	NM_018426	chr6	44204401	44204938	TMEM63B	•	
MSPI0406S00324104	NR_039790	chr6	44331285	44332014	MIR4647	•	hsa-mir-4647
MSPI0406S00324105	NM_178148	chr6	44332015	44332294	SLC35B2	•	
MSPI0406S00324160	NM_020745	chr6	44389200	44390430	AARS2	•	•
MSPI0406S00325470	NM_018100	chr6	52375697	52376108	EFHC1	•	
MSPI0406S00325471	NM_018100	chr6	52376129	52376489	EFHC1	•	
MSPI0406S00327615	NM_145267	chr6	71332584	71333192	C6orf57	•	
MSPI0406S00329678	NM_138409	chr6	84799717	84799975	MRAP2	•	
MSPI0406S00332203	NM_005068	chr6	101018837	101019121	SIM1	•	
MSPI0406S00333894	NM_145315	chr6	108722123	108722667	LACE1	•	
MSPI0406S00338163	NM_001016	chr6	133177380	133177628	RPS12	•	
MSPI0406S00343828	NM_014892	chr6	155144933	155146299	SCAF8	•	
MSPI0406S00345871	NM_138810	chr6	159436504	159437411	TAGAP	•	
MSPI0406S00353655	NM_001080453	chr7	1318807	1319045	INTS1	•	
MSPI0406S00353749	NM_032302	chr7	1381984	1382393	PSMG3	•	
MSPI0406S00356874	NM_014855	chr7	4586839	4587756	KIAA0415	•	
MSPI0406S00358777	NM_006854	chr7	6296089	6296304	KDELR2	•	
MSPI0406S00363172	NM_018951	chr7	26987900	26988141	HOXA10	•	
MSPI0406S00363542	NM_175061	chr7	27994083	27994906	JAZF1	•	
MSPI0406S00363814	NM_031311	chr7	28959335	28960180	CPVL	•	
MSPI0406S00365259	NM_133468	chr7	33537855	33538648	BMPER	•	
MSPI0406S00366881	NM_031267	chr7	39762911	39763150	CDK13	•	

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MSPI0406S00379603	NM_014146	chr7	73068288	73068798	LAT2	•
MSPI0406S00387694	NM_003227	chr7	99883967	99884282	TFR2	•
MSPI0406S00387695	NM_003227	chr7	99884283	99884613	TFR2	•
MSPI0406S00389802	NM_017621	chr7	101685411	101685949	ALKBH4	•
MSPI0406S00391531	NM_024814	chr7	106976659	106977608	CBLL1	•
MSPI0406S00394412	NM_001201372	chr7	128024369	128024576	CCDC136	•
MSPI0406S00395167	NM_182697	chr7	129186875	129187462	UBE2H	•
MSPI0406S00395367	NM_032842	chr7	129439265	129439782	TMEM209	•
MSPI0406S00400076	NM_014690	chr7	142575908	142576122	FAM131B	•
MSPI0406S00402109	NM_001099220	chr7	148980237	148980824	ZNF862	•
MSPI0406S00402593	NM_001091	chr7	149986937	149987454	ABP1	•
MSPI0406S00405299	NM_005542	chr7	154525734	154526238	INSIG1	•
MSPI0406S00410190	NM_018941	chr8	1697917	1698652	CLN8	•
MSPI0406S00415873	NM_001007090	chr8	13468790	13470190	C8orf48	•
MSPI0406S00416442	NM_054026	chr8	17147581	17148794	CNOT7	•
MSPI0406S00416475	NM_004686	chr8	17250882	17251456	MTMR7	•
MSPI0406S00423826	NM_025151	chr8	37877091	37877986	RAB11FIP1	•
MSPI0406S00426135	NM_004198	chr8	42743049	42743635	CHRNA6	•
MSPI0406S00429492	NM_001023	chr8	57149697	57150240	RPS20	•
MSPI0406S00430763	NM_003878	chr8	64114680	64115167	GGH	•
MSPI0406S00431464	NM_019607	chr8	67742243	67743259	C8orf44	•
MSPI0406S00431539	NM_170709	chr8	67848775	67849399	SGK3	•
MSPI0406S00435303	NM_004337	chr8	90982606	90983258	OSGIN2	•
MSPI0406S00437779	NM_152628	chr8	101731190	101732002	SNX31	•
MSPI0406S00440889	NM_022783	chr8	120954692	120955088	DEPTOR	•
MSPI0406S00441696	NM_207006	chr8	124263484	124263939	FAM83A	•
MSPI0406S00442178	NM_194291	chr8	125454577	125455045	TMEM65	•
MSPI0406S00446919	NR_040712	chr8	141649045	141649431	CHRA1	•
MSPI0406S00450121	NM_024736	chr8	144710336	144711366	GSDMD	•
MSPI0406S00451371	NM_017767	chr8	145610684	145611022	SLC39A4	•
MSPI0406S00455279	NM_001039697	chr9	15412256	15412569	SNAPC3	•
MSPI0406S00455848	NM_003026	chr9	17568881	17569127	SH3GL2	•
MSPI0406S00458659	NM_018449	chr9	34039406	34040261	UBAP2	•
MSPI0406S00458904	NM_147169	chr9	34371892	34372298	C9orf24	•
MSPI0406S00459467	NM_014450	chr9	35640953	35641984	SIT1	•
MSPI0406S00459911	NM_194330	chr9	36391255	36391616	RNF38	•
MSPI0406S00465084	NM_001135820	chr9	71614390	71615744	TMEM2	•
MSPI0406S00468557	NM_030940	chr9	86127331	86128205	ISCA1	•
MSPI0406S00476999	NM_032012	chr9	108961697	108963419	C9orf5	•
MSPI0406S00480566	NM_015651	chr9	120732830	120733244	PHF19	•
MSPI0406S00483065	NM_005347	chr9	125083916	125084532	HSPA5	•
MSPI0406S00484746	NM_001012502	chr9	127552463	127553128	C9orf117	•
MSPI0406S00484960	NM_000476	chr9	127719676	127720136	AK1	•
MSPI0406S00491234	NM_001134707	chr9	133596668	133596902	SARDH	•
MSPI0406S00493905	NM_015447	chr9	136000683	136001323	CAMSAP1	•
MSPI0406S00494431	NM_181701	chr9	136345003	136345693	QSOX2	•
MSPI0406S00494994	NM_016215	chr9	136832457	136832694	EGFL7	•
MSPI0406S00495209	NR_024580	chr9	136979041	136979655	LOC100131193	•
MSPI0406S00495663	NM_013379	chr9	137285554	137285938	DPP7	•
MSPI0406S00495664	NM_013379	chr9	137285939	137286154	DPP7	•
MSPI0406S00495851	NM_006088	chr9	137412572	137412972	TUBB4B	•
MSPI0406S00495945	NM_001004354	chr9	137473820	137474042	NRARP	•
MSPI0406S00497967	NM_033261	chr10	1060430	1061901	IDI2	•
MSPI0406S00499919	NM_205845	chr10	5052184	5052700	AKR1C2	•
MSPI0406S00503941	NM_152751	chr10	13584869	13586369	BEND7	•
MSPI0406S00510332	NR_024284	chr10	31646819	31647269	ZEB1-AS1	•
MSPI0406S00511578	NM_001198777	chr10	35419566	35420138	CUL2	•
MSPI0406S00513360	NM_001098204	chr10	43225489	43226005	HNRNPF	•
MSPI0406S00513992	NM_032023	chr10	44775263	44775563	RASSF4	•
MSPI0406S00520095	NM_020999	chr10	71002980	71003225	NEUROG3	•
MSPI0406S00520796	NM_001083116	chr10	72032624	72032882	PRF1	•
MSPI0406S00520797	NM_001083116	chr10	72032883	72033277	PRF1	•
MSPI0406S00520906	NM_152710	chr10	72203735	72204133	C10orf27	•
MSPI0406S00520919	NM_152710	chr10	72214392	72215683	C10orf27	•
MSPI0406S00522303	NM_138357	chr10	74120329	74120939	MCU	•
MSPI0406S00527719	NM_032810	chr10	89566291	89567467	ATAD1	•

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MSPI0406S00529872	NM_001114094	chr10	98020200	98021250	BLNK	•
MSPI0406S00532814	NM_012215	chr10	103568439	103569550	MGEA5	•
MSPI0406S00533085	NM_152310	chr10	103974705	103976068	ELOVL3	•
MSPI0406S00536187	NM_145206	chr10	114197707	114198508	VTI1A	•
MSPI0406S00537929	NM_173791	chr10	119125739	119126231	PDZD8	•
MSPI0406S00539049	NM_001005339	chr10	121293107	121293502	RGS10	•
MSPI0406S00546065	NR_038365	chr10	133474386	133474793	FLJ46300	•
MSPI0406S00547848	NM_006659	chr10	135011902	135012124	TUBGCP2	•
MSPI0406S00548598	NM_203383	chr11	493466	494069	RNH1	•
MSPI0406S00548686	NM_003475	chr11	551919	552261	RASSF7	•
MSPI0406S00549217	NM_001142677	chr11	901693	902453	CHID1	•
MSPI0406S00550400	NM_002339	chr11	1829780	1830345	LSP1	•
MSPI0406S00551624	NM_007105	chr11	2881649	2882045	SLC22A18AS	•
MSPI0406S00551962	NM_001164377	chr11	3196789	3197099	MRGPRG	•
MSPI0406S00554274	NM_001143976	chr11	9552980	9553299	WEE1	•
MSPI0406S00556418	NM_001202439	chr11	17328938	17329683	B7H6	•
MSPI0406S00557176	NM_001256372	chr11	19220849	19221328	E2F8	•
MSPI0406S00558439	NM_018490	chr11	27450997	27451964	LGR4	•
MSPI0406S00560117	NM_001206615	chr11	34598501	34599147	EHF	•
MSPI0406S00560564	NM_024841	chr11	36353285	36354143	PRR5L	•
MSPI0406S00563810	NM_000256	chr11	47330763	47331342	MYBPC3	•
MSPI0406S00565202	NM_003146	chr11	56860067	56861058	SSRP1	•
MSPI0406S00566262	NM_024098	chr11	60364867	60365771	CCDC86	•
MSPI0406S00566281	NM_004778	chr11	60380143	60381551	PTGDR2	•
MSPI0406S00566561	NM_017966	chr11	60685779	60686763	VPS37C	•
MSPI0406S00567424	NM_013401	chr11	61441954	61443206	RAB3IL1	•
MSPI0406S00567425	NM_013401	chr11	61443322	61444278	RAB3IL1	•
MSPI0406S00567970	NM_004739	chr11	62127390	62128171	MTA2	•
MSPI0406S00568042	NM_198335	chr11	62173406	62173726	GANAB	•
MSPI0406S00568073	NM_024099	chr11	62196280	62196683	C11orf48	•
MSPI0406S00568118	NM_001130702	chr11	62230531	62231168	BSCL2	•
MSPI0406S00568553	NM_017878	chr11	63088397	63088787	HRASLS2	•
MSPI0406S00570045	NM_006795	chr11	64403383	64403704	EHD1	•
MSPI0406S00570207	NR_037650	chr11	64536912	64537751	ARL2-SNX15	•
MSPI0406S00570347	NM_172230	chr11	64659306	64659976	SYVN1	•
MSPI0406S00570484	NM_002689	chr11	64784716	64785758	POLA2	•
MSPI0406S00570849	NR_038923	chr11	65094040	65094271	LOC254100	•
MSPI0406S00570931	NM_032223	chr11	65149874	65150260	PCNXL3	•
MSPI0406S00578124	NM_002869	chr11	73149903	73150216	RAB6A	•
MSPI0406S00578280	NM_003355	chr11	73372563	73372934	UCP2	•
MSPI0406S00579744	NM_004055	chr11	76453319	76454972	CAPN5	•
MSPI0406S00583227	NM_016156	chr11	95297233	95298255	MTMR2	•
MSPI0406S00585995	NM_001931	chr11	111399727	111400844	DLAT	•
MSPI0406S00587692	NM_003904	chr11	116164347	116164731	ZNF259	•
MSPI0406S00588918	NM_015157	chr11	117982244	117983525	PHLDB1	•
MSPI0406S00589309	NM_001164280	chr11	118405547	118405872	SLC37A4	•
MSPI0406S00589310	NM_001164280	chr11	118405873	118406215	SLC37A4	•
MSPI0406S00589445	NM_024618	chr11	118543262	118544312	NLRX1	•
MSPI0406S00591746	NM_020716	chr11	122935027	122935933	GRAMD1B	•
MSPI0406S00592126	NM_019055	chr11	124272991	124274023	ROBO4	•
MSPI0406S00593800	NM_000890	chr11	128265119	128265470	KCNJ5	•
MSPI0406S00600667	NM_001039920	chr12	6669182	6670204	ZNF384	•
MSPI0406S00600744	NR_026581	chr12	6733229	6734509	MLF2	•
MSPI0406S00601095	NM_031491	chr12	7172761	7173347	RBP5	•
MSPI0406S00601096	NM_031491	chr12	7173348	7173587	RBP5	•
MSPI0406S00605755	NM_033360	chr12	25295755	25296119	KRAS	•
MSPI0406S00610693	NM_016594	chr12	47605688	47606434	FKBP11	•
MSPI0406S00610761	NM_002733	chr12	47698992	47700528	PRKAG1	•
MSPI0406S00610762	NM_002733	chr12	47700728	47701180	PRKAG1	•
MSPI0406S00611693	NM_005276	chr12	48782682	48783104	GPD1	•
MSPI0406S00613345	NM_175078	chr12	51383591	51384331	KRT77	•
MSPI0406S00613832	NM_002624	chr12	51974958	51975494	PFDN5	•
MSPI0406S00614592	NM_006163	chr12	52977641	52978040	NFE2	•
MSPI0406S00614653	NM_020370	chr12	53044631	53045562	GPR84	•
MSPI0406S00616562	NM_001172696	chr12	56461270	56462726	TSFM	•
MSPI0406S00617721	NM_178169	chr12	63306017	63306302	RASSF3	•

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MSPI0406S00618793	NM_007007	chr12	67919239	67919449	CPSF6	•	
MSPI0406S00618871	NM_006654	chr12	68149530	68150140	FRS2	•	
MSPI0406S00619874	NM_024685	chr12	75243205	75244377	BBS10	•	
MSPI0406S00623590	NM_002635	chr12	97488891	97489709	SLC25A3	•	
MSPI0406S00624704	NM_001031701	chr12	102737653	102737867	NT5DC3		•
MSPI0406S00627485	NM_014055	chr12	109023675	109024689	IFT81	•	
MSPI0406S00628682	NM_006768	chr12	110585488	110586156	BRAP	•	
MSPI0406S00634744	NM_019034	chr12	120698011	120698331	RHOF	•	
MSPI0406S00635330	NM_198240	chr12	121432682	121433683	CLIP1		•
MSPI0406S00635637	NR_027918	chr12	121783282	121783755	CCDC62	•	
MSPI0406S00637773	NM_021009	chr12	123922831	123923352	UBC	•	hsa-mir-5188
MSPI0406S00648859	NM_000059	chr13	31786963	31787560	BRCA2	•	
MSPI0406S00649798	NM_203451	chr13	36145136	36145506	SERTM1	•	
MSPI0406S00652143	NM_002298	chr13	45656100	45656488	LCP1	•	
MSPI0406S00653171	NR_037407	chr13	49467453	49468385	MIR3613		• hsa-mir-3613
MSPI0406S00656076	NM_080759	chr13	71339613	71340674	DACH1	•	
MSPI0406S00659741	NM_021033	chr13	96883693	96884286	RAP2A	•	
MSPI0406S00660163	NM_003576	chr13	97880215	97881366	STK24		•
MSPI0406S00661818	NM_138779	chr13	102224930	102225703	TEX30	•	
MSPI0406S00667713	NM_198235	chr14	20340858	20341311	RNASE1	•	
MSPI0406S00669080	NM_002471	chr14	22948432	22949129	MYH6		•
MSPI0406S00669688	NM_004554	chr14	23906682	23907154	NFATC4	•	
MSPI0406S00677469	NM_003082	chr14	61297915	61298758	SNAPC1	•	
MSPI0406S00679316	NM_182526	chr14	67052243	67052773	TMEM229B	•	
MSPI0406S00679787	NM_001244701	chr14	68333328	68333858	ZFP36L1	•	
MSPI0406S00682448	NM_194279	chr14	74030796	74031074	ISCA2	•	
MSPI0406S00682450	NM_194279	chr14	74038035	74038316	ISCA2	•	
MSPI0406S00687378	NR_003709	chr14	90681087	90681784	SNORA11B	•	
MSPI0406S00688763	NM_032490	chr14	92744133	92744831	C14orf142	•	
MSPI0406S00690443	NM_018036	chr14	95900365	95901640	ATG2B	•	
MSPI0406S00695209	NM_002376	chr14	102920112	102920884	MARK3		•
MSPI0406S00696695	NM_152328	chr14	104255983	104256280	ADSSL1	•	
MSPI0406S00696954	NM_138790	chr14	104477170	104477566	PLD4	•	
MSPI0406S00703506	NM_015995	chr15	29404425	29404998	KLF13	•	
MSPI0406S00706298	NM_170589	chr15	38671826	38672819	CASC5		•
MSPI0406S00706299	NM_170589	chr15	38672820	38673397	CASC5	•	
MSPI0406S00710015	NM_001159629	chr15	48260539	48261614	SLC27A2	•	
MSPI0406S00710618	NM_153374	chr15	49817403	49818168	LYSMD2		•
MSPI0406S00714989	NM_194272	chr15	62855981	62857302	RBPMS2	•	
MSPI0406S00716195	NM_006049	chr15	64577266	64577476	SNAPC5	•	hsa-mir-4512
MSPI0406S00720208	NM_001099436	chr15	72922872	72923285	ULK3	•	
MSPI0406S00721238	NM_001127716	chr15	74391035	74391426	ETFA	•	
MSPI0406S00721391	NM_003978	chr15	75073618	75073940	PSTPIP1	•	
MSPI0406S00721392	NM_003978	chr15	75074036	75074506	PSTPIP1	•	
MSPI0406S00722416	NM_001256567	chr15	76720614	76721399	CHRNB4	•	
MSPI0406S00722417	NM_001256567	chr15	76721400	76722304	CHRNB4	•	
MSPI0406S00723113	NM_000137	chr15	78233506	78234312	FAH	•	
MSPI0406S00723852	NM_001008226	chr15	80342577	80343558	FAM154B	•	
MSPI0406S00724506	NM_001011885	chr15	81527552	81527841	BTBD1	•	hsa-mir-4515
MSPI0406S00727073	NM_020212	chr15	88035261	88035675	WDR93	•	
MSPI0406S00727542	NM_020210	chr15	88528406	88528830	SEMA4B	•	
MSPI0406S00728072	NM_001143785	chr15	89227268	89227545	FES	•	
MSPI0406S00733296	NM_022450	chr16	63444	63915	RHBDF1	•	
MSPI0406S00733568	NM_006849	chr16	272083	272382	PDIA2	•	
MSPI0406S00733984	NM_176677	chr16	556363	556827	NHLRC4	•	
MSPI0406S00733988	NM_004204	chr16	558795	559610	PIGQ	•	
MSPI0406S00734147	NM_001005920	chr16	675195	675526	JMJD8	•	
MSPI0406S00735756	NM_001010865	chr16	1764597	1765093	EME2	•	
MSPI0406S00735985	NM_005061	chr16	1944922	1945333	RPL3L	•	
MSPI0406S00736504	NM_080594	chr16	2259437	2259665	RNPS1	•	hsa-mir-3677
MSPI0406S00736788	NM_015944	chr16	2509965	2510169	AMDHD2	•	
MSPI0406S00737124	NM_016333	chr16	2741166	2741922	SRRM2	•	
MSPI0406S00737493	NM_001103175	chr16	3022094	3022544	CCDC64B	•	
MSPI0406S00738903	NM_138440	chr16	4360292	4360865	VASN	•	
MSPI0406S00741193	NM_024109	chr16	8645499	8646609	METTL22	•	
MSPI0406S00749465	NM_001802	chr16	22293930	22294882	CDR2	•	

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MSPI0406S00754587	NR_002453	chr16	30254623	30254833	LOC595101	•
MSPI0406S00754673	NM_152652	chr16	30316799	30317011	ZNF48	•
MSPI0406S00754674	NM_152652	chr16	30317157	30317590	ZNF48	•
MSPI0406S00754937	NM_024031	chr16	30568833	30569069	PRR14	•
MSPI0406S00755856	NM_022744	chr16	31427385	31428655	C16orf58	•
MSPI0406S00757488	NM_000293	chr16	46052754	46053098	PHKB	•
MSPI0406S00760713	NR_026889	chr16	54786025	54787339	DKFZP434H168	•
MSPI0406S00761079	NM_000339	chr16	55456229	55456506	SLC12A3	•
MSPI0406S00761534	NM_002987	chr16	55995879	55997083	CCL17	•
MSPI0406S00761900	NM_005550	chr16	56394059	56394614	KIFC3	•
MSPI0406S00764799	NM_006565	chr16	66152412	66153241	CTCF	•
MSPI0406S00765009	NM_020850	chr16	66371560	66372539	RANBP10	•
MSPI0406S00765010	NM_020850	chr16	66372540	66372822	RANBP10	•
MSPI0406S00767431	NM_138383	chr16	69253098	69253368	MTSS1L	•
MSPI0406S00768009	NM_001030007	chr16	70400943	70401381	AP1G1	•
MSPI0406S00769661	NM_032268	chr16	73589452	73589908	ZNRF1	•
MSPI0406S00773929	NM_021197	chr16	82914283	82914948	WFDC1	•
MSPI0406S00774697	NM_014732	chr16	83653877	83654132	KIAA0513	•
MSPI0406S00774778	NM_198491	chr16	83704767	83705133	FAM92B	•
MSPI0406S00776431	NM_001159380	chr16	85144751	85145959	MTHFSD	•
MSPI0406S00780228	NM_002768	chr16	88250462	88250864	CHMP1A	•
MSPI0406S00781439	NM_015721	chr17	600353	601081	GEMIN4	•
MSPI0406S00781467	NM_018146	chr17	631205	631803	RNMTL1	•
MSPI0406S00783415	NM_021947	chr17	2154773	2155142	SRR	•
MSPI0406S00783940	NM_001100398	chr17	2645217	2646254	RAP1GAP2	•
MSPI0406S00784700	NM_031965	chr17	3572498	3573624	GSG2	•
MSPI0406S00784824	NM_002208	chr17	3652514	3653239	ITGAE	•
MSPI0406S00785601	NM_014520	chr17	4406157	4406978	MYBBP1A	•
MSPI0406S00788257	NR_002912	chr17	7421686	7422153	SNORA67	•
MSPI0406S00789042	NM_012393	chr17	8092931	8093243	PFAS	•
MSPI0406S00790869	NM_001004313	chr17	10575097	10575322	TMEM220	•
MSPI0406S00794954	NM_144775	chr17	18159975	18161334	SMCR8	•
MSPI0406S00798188	NM_016231	chr17	23392040	23392713	NLK	•
MSPI0406S00798388	NM_001242366	chr17	23756684	23757187	SLC46A1	•
MSPI0406S00798509	NM_005148	chr17	23903869	23905128	UNC119	•
MSPI0406S00800129	NM_024857	chr17	26182985	26183196	ATAD5	•
MSPI0406S00801053	NM_138328	chr17	27615581	27616202	RHBDL3	•
MSPI0406S00803598	NM_001163545	chr17	33043702	33044444	SYNRG	•
MSPI0406S00805952	NM_001024809	chr17	35760339	35760792	RARA	•
MSPI0406S00806565	NM_000422	chr17	37034362	37034807	KRT17	•
MSPI0406S00807170	NM_001252039	chr17	37561140	37561428	RAB5C	•
MSPI0406S00807288	NM_003152	chr17	37691485	37692036	STAT5A	•
MSPI0406S00809444	NM_001099225	chr17	40122778	40123381	CCDC43	•
MSPI0406S00809684	NM_001242376	chr17	40348450	40349253	GFAP	•
MSPI0406S00809833	NM_021079	chr17	40494547	40495804	NMT1	•
MSPI0406S00810073	NM_152343	chr17	40693944	40694983	TEX34	•
MSPI0406S00811398	NM_001002841	chr17	42641441	42642472	MYL4	•
MSPI0406S00818498	NM_001112707	chr17	57908294	57908830	TLK2	•
MSPI0406S00819274	NM_001098426	chr17	59274020	59274347	SMARCD2	•
MSPI0406S00819680	NM_000442	chr17	59787488	59788289	PECAM1	•
MSPI0406S00825381	NM_001545	chr17	70519276	70519909	ICT1	•
MSPI0406S00825688	NR_036520	chr17	70779572	70779902	LOC100287042	•
MSPI0406S00826552	NM_001258	chr17	71509068	71509383	CDK3	•
MSPI0406S00826673	NM_015219	chr17	71611468	71611926	EXOC7	•
MSPI0406S00828344	NR_040050	chr17	73068311	73068696	LOC100507351	•
MSPI0406S00828845	NM_001163075	chr17	73652919	73653170	C17orf99	•
MSPI0406S00828913	NM_003258	chr17	73694869	73695483	TK1	•
MSPI0406S00829846	NM_003255	chr17	74441468	74441689	TIMP2	•
MSPI0406S00830469	NM_001082575	chr17	74901770	74902146	RBFOX3	•
MSPI0406S00832877	NM_178520	chr17	76920047	76920387	TMEM105	•
MSPI0406S00834028	NM_001206950	chr17	77778624	77779240	SLC16A3	•
MSPI0406S00841500	NM_032142	chr18	12996584	12996984	CEP192	•
MSPI0406S00851148	NM_000140	chr18	53405090	53406605	FECH	•
MSPI0406S00854974	NM_001168499	chr18	70326383	70327093	CNDP2	•
MSPI0406S00858518	NM_032510	chr18	76107020	76108260	PARD6G	•
MSPI0406S00858915	NM_004359	chr19	481965	482307	CDC34	•

Supplemental Table S4. Composition of the commitment-associated epigenetic signature

MSPI0406S00859548	NM_005224	chr19	879464	879945	ARID3A	•	
MSPI0406S00859830	NM_002695	chr19	1046289	1047195	POLR2E	•	
MSPI0406S00860008	NM_000455	chr19	1155937	1156406	STK11		•
MSPI0406S00861645	NM_004152	chr19	2219397	2220089	OAZ1	•	
MSPI0406S00861661	NM_198532	chr19	2233726	2234123	C19orf35	•	
MSPI0406S00862986	NM_021938	chr19	3174335	3175395	CELF5	•	
MSPI0406S00864844	NM_001171091	chr19	4406413	4406736	UBXN6	•	
MSPI0406S00864845	NM_001171091	chr19	4406737	4407622	UBXN6	•	
MSPI0406S00866032	NM_130855	chr19	5238303	5238734	PTPRS	•	
MSPI0406S00868809	NM_001042462	chr19	7650799	7651612	TRAPPC5	•	
MSPI0406S00868966	NM_145245	chr19	7800750	7801132	EVI5L	•	
MSPI0406S00869638	NM_016579	chr19	8279194	8279825	CD320	•	
MSPI0406S00871361	NM_022377	chr19	10256085	10256286	ICAM4	•	
MSPI0406S00871362	NM_022377	chr19	10256489	10256714	ICAM4	•	
MSPI0406S00872791	NM_004283	chr19	11293630	11293898	RAB3D	•	
MSPI0406S00873667	NM_001164276	chr19	12266873	12267626	ZNF44	•	
MSPI0406S00874250	NM_006563	chr19	12858892	12859512	KLF1	•	
MSPI0406S00878016	NM_024074	chr19	16632653	16632863	TMEM38A	•	
MSPI0406S00884792	NM_001238	chr19	34993294	34993869	CCNE1	•	
MSPI0406S00886365	NM_032139	chr19	37856542	37857254	ANKRD27	•	
MSPI0406S00886962	NM_004364	chr19	38483180	38483826	CEBPA	•	
MSPI0406S00886965	NR_026887	chr19	38487407	38488023	LOC80054	•	
MSPI0406S00892326	NM_022835	chr19	44606513	44607157	PLEKHG2	•	
MSPI0406S00893344	NM_004756	chr19	45889140	45889364	NUMBL	•	
MSPI0406S00899216	NR_038452	chr19	52680298	52681145	LOC100505681	•	
MSPI0406S00900239	NM_000836	chr19	53589173	53589609	GRIN2D	•	
MSPI0406S00900884	NM_020904	chr19	54063741	54064493	PLEKHA4	•	
MSPI0406S00901512	NM_144688	chr19	54582914	54583202	CCDC155	•	
MSPI0406S00902144	NM_030973	chr19	55026822	55027257	MED25	•	hsa-mir-6800
MSPI0406S00902145	NM_030973	chr19	55027398	55027930	MED25	•	hsa-mir-6800
MSPI0406S00902172	NR_039904	chr19	55049812	55050059	MIR4749	•	hsa-mir-4749
MSPI0406S00902299	NM_001193357	chr19	55124647	55125750	NUP62	•	
MSPI0406S00902913	NM_138411	chr19	55672193	55674042	FAM71E1		•
MSPI0406S00907046	NM_000363	chr19	60361054	60362099	TNNI3	•	
MSPI0406S00907047	NM_000363	chr19	60362100	60362453	TNNI3	•	
MSPI0406S00907613	NM_153219	chr19	60804114	60805331	ZNF524	•	
MSPI0406S00907753	NM_001130071	chr19	60898111	60898493	EPN1	•	
MSPI0406S00908998	NM_001085384	chr19	62912968	62913576	ZNF154	•	
MSPI0406S00910167	NM_080725	chr20	582329	583546	SRXN1		•
MSPI0406S00912064	NM_153640	chr20	3820110	3820425	PANK2	•	
MSPI0406S00917269	NR_034149	chr20	23061060	23062405	LOC200261	•	
MSPI0406S00919448	NM_002657	chr20	30257498	30258756	PLAGL2	•	
MSPI0406S00920592	NM_005225	chr20	31738132	31738671	E2F1	•	
MSPI0406S00921898	NM_198398	chr20	33593430	33594012	ERGIC3	•	
MSPI0406S00922393	NM_015511	chr20	34286713	34287463	C20orf4	•	
MSPI0406S00922946	NM_199181	chr20	34923272	34923618	KIAA0889	•	
MSPI0406S00926308	NM_198941	chr20	42584174	42585016	SERINC3	•	
MSPI0406S00926309	NM_198941	chr20	42585017	42586042	SERINC3	•	
MSPI0406S00926655	NM_002251	chr20	43163288	43163988	KCNS1	•	
MSPI0406S00927406	NM_173073	chr20	44396514	44398120	SLC35C2		•
MSPI0406S00929256	NR_045796	chr20	47094546	47096270	CSE1L	•	
MSPI0406S00935833	NM_173644	chr20	58063221	58064395	C20orf197	•	
MSPI0406S00935940	NR_030376	chr20	58325406	58326778	MIR646	•	
MSPI0406S00938256	NM_001853	chr20	60917779	60918058	COL9A3	•	
MSPI0406S00939457	NM_003823	chr20	61790587	61790895	TNFRSF6B	•	
MSPI0406S00939727	NR_045370	chr20	61979251	61979462	LOC100505815	•	
MSPI0406S00942970	NM_006585	chr21	29367756	29368629	CCT8	•	
MSPI0406S00943715	NM_000454	chr21	31953394	31953618	SOD1	•	
MSPI0406S00945435	NM_001122607	chr21	35185118	35185524	RUNX1	•	
MSPI0406S00947330	NM_005239	chr21	39232369	39232934	ETS2	•	
MSPI0406S00948356	NM_002463	chr21	41655104	41655865	MX2	•	
MSPI0406S00949364	NM_018961	chr21	42696377	42697223	UBASH3A	•	
MSPI0406S00950200	NM_000394	chr21	43464710	43465021	CRYAA	•	
MSPI0406S00951682	NM_030891	chr21	44703511	44704210	LRRC3	•	
MSPI0406S00951838	NM_198688	chr21	44837373	44838175	KRTAP10-6	•	
MSPI0406S00954343	NM_001163079	chr22	15976851	15977056	CECR6		•

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MSPi0406S00956008	NM_173793	chr22	17810394	17811023	C22orf39	•	
MSPi0406S00956724	NM_182984	chr22	18478070	18478279	TRMT2A	•	hsa-mir-6816
MSPi0406S00957785	NM_058004	chr22	19536332	19536939	PI4KA	•	
MSPi0406S00957875	NM_001018060	chr22	19637050	19637689	AIFM3	•	
MSPi0406S00959026	NM_007128	chr22	20923618	20923926	VPREB1	•	
MSPi0406S00960120	NM_003073	chr22	22450922	22452714	SMARCB1	•	
MSPi0406S00960122	NM_003073	chr22	22453329	22453665	SMARCB1	•	
MSPi0406S00964312	NM_001037666	chr22	29010612	29010898	GATSL3	•	
MSPi0406S00965315	NM_001164502	chr22	30211106	30212410	EIF4ENIF1	•	
MSPi0406S00965691	NM_003405	chr22	30643843	30644796	YWHAH	•	
MSPi0406S00966239	NM_000362	chr22	31520979	31522000	TIMP3	•	
MSPi0406S00968016	NM_002473	chr22	35108932	35109796	MYH9	•	
MSPi0406S00968389	NM_001177701	chr22	35497152	35498127	IFT27	•	
MSPi0406S00969583	NM_005318	chr22	36524721	36524963	H1FO	•	
MSPi0406S00970049	NM_001199562	chr22	36902570	36903013	PLA2G6	•	
MSPi0406S00970158	NM_001195071	chr22	36987513	36987897	TMEM184B	•	
MSPi0406S00976340	NM_001198726	chr22	43446693	43447507	ARHGAP8	•	
MSPi0406S00977070	NM_015653	chr22	44130450	44131360	RIBC2	•	
MSPi0406S00977704	NR_027033	chr22	44788955	44789557	MIRLET7BHG	•	
MSPi0406S00977767	NR_029479	chr22	44830076	44830455	MIRLET7B	•	hsa-let-7a-3, hsa-let-7b, hsa-mir-4763
MSPi0406S00977939	NM_006071	chr22	44979792	44980898	PKDREJ	•	
MSPi0406S00978597	NM_022766	chr22	45455264	45456159	CERK	•	
MSPi0406S00982020	NR_027691	chr22	48910187	48910389	PANX2	•	
MSPi0406S00982435	NM_152299	chr22	49237087	49238094	NCAPH2	•	
MSPi0406S00987810	NM_138636	chrX	12697137	12698127	TLR8	•	
MSPi0406S00989036	NM_006746	chrX	17513776	17515316	SCML1	•	
MSPi0406S00997588	NM_017883	chrX	48210449	48211728	WDR13	•	
MSPi0406S00997745	NM_002049	chrX	48400265	48400653	GATA1	•	
MSPi0406S01001779	NM_002547	chrX	67436878	67437685	OPHN1	•	
MSPi0406S01008699	NM_017752	chrX	105852209	105853682	TBC1D8B	•	
MSPi0406S01009278	NM_022977	chrX	108782852	108783388	ACSL4	•	
MSPi0406S01019060	NM_001711	chrX	152280673	152281136	BGN	•	
MSPi0406S01019378	NM_001139457	chrX	152508733	152510123	BCAP31	•	
MSPi0406S01019466	NM_001204527	chrX	152578988	152580122	SSR4	•	
MSPi0406S01019840	NM_001110792	chrX	152884156	152885140	MECP2	•	

Supplemental Table S5 Ingenuity pathway analysis of the commitment-associated epigenetic signature

Ingenuity Pathway Analysis

<u>Category</u> <u>Physiological System</u> <u>Development and Function</u>	<u>Functions Annotation</u>	<u>Benjamini-Hochberg-corrected p-value</u>	<u>number of molecules involved</u>	<u>molecules</u>
Hematological System Development and Function	differentiation of hematopoietic cells	0.0281	19/81	BLNK,CEBPA,CTCF (includes EG:10664),E2F1,GATA1,HIST1H4A (includes others),HOXA10,MERTK,NFE2,PECAM1,RAR A,RUNX1,SLC37A4,SLC46A1,SPRED2,STAT 5A,STK11,TNF,ZAP70
	development of hematopoietic progenitor cells	0.0281	15/81	BLNK,CDK13,CDKN1A,E2F1,GATA1,HOXA10,LAT2,PECAM1,PIK3R1,PIM1 (includes EG:18712),RUNX1,SIT1 (includes EG:27240),STK11,TNF,ZAP70
	differentiation of blood cells	0.0336	41/81	ARID3A,BLNK,BRCA2,CDK13,CEBPA,CTCF (includes EG:10664),E2F1,E2F2,ETS2,FECH,FES,GATA1,HIST1H4A (includes others),HOXA10,HSPD1,IL1RN,KLF13,MAPK 9,MERTK,NCAPH2,NDFIP1,NFE2,NRARP,PECAM1,PIK3R1,RARA,RGS10,RUNX1,SIT1 (includes EG:27240),SLC37A4,SLC46A1,SOD1,SPRED2,STAT5A,STK11,TBATA,TNF,TNFRSF4,TNFRSF6R,VPRFR1,ZAP70
Hematopoiesis	accumulation of hematopoietic cells	0.0402	4/81	E2F1,PIM1 (includes EG:18712),SLC46A1,TNFRSF4
	differentiation of hematopoietic cells	0.0281	19/53	BLNK,CEBPA,CTCF (includes EG:10664),E2F1,GATA1,HIST1H4A (includes others),HOXA10,MERTK,NFE2,PECAM1,RAR A,RUNX1,SLC37A4,SLC46A1,SPRED2,STAT 5A,STK11,TNF,ZAP70
	development of hematopoietic progenitor cells	0.0281	15/53	BLNK,CDK13,CDKN1A,E2F1,GATA1,HOXA10,LAT2,PECAM1,PIK3R1,PIM1 (includes EG:18712),RUNX1,SIT1 (includes EG:27240),STK11,TNF,ZAP70

Supplemental Table S5 Ingenuity pathway analysis of the commitment-associated epigenetic signature

Lymphoid Tissue Structure and Development	accumulation of hematopoietic cells	0.0402	4/53	E2F1,PIM1 (includes EG:18712),SLC46A1,TNFRSF4
	quantity of splenocytes	0.0388	7/50	BLNK,CDKN1A,GATA1,KLF13,STAT5A,TNF, UBASH3A
	quantity of bone marrow cells	0.0453	14/50	ARID3A,BRCA2,CDKN1A,FES,GATA1,NFE2, PECAM1,PIM1 (includes EG:18712),RARA,SLC37A4,SOD1,SPRED2,T NF,VPREB1
Tissue Morphology	development of bone marrow cells	0.0496	9/50	CDK13,E2F1,HOXA10,IL1RN,MERTK,PECAM 1,PLA2G6,RARA,TNF
	quantity of splenocytes	0.0388	7/72	BLNK,CDKN1A,GATA1,KLF13,STAT5A,TNF, UBASH3A
	quantity of bone marrow cells	0.0453	14/72	ARID3A,BRCA2,CDKN1A,FES,GATA1,NFE2, PECAM1,PIM1 (includes EG:18712),RARA,SLC37A4,SOD1,SPRED2,T NF,VPREB1
Tissue Development	development of bone marrow cells	0.0496	9/72	CDK13,E2F1,HOXA10,IL1RN,MERTK,PECAM 1,PLA2G6,RARA,TNF
	accumulation of hematopoietic cells	0.0402	4/46	E2F1,PIM1 (includes EG:18712),SLC46A1,TNFRSF4
Embryonic Development	development of bone marrow cells	0.0496	9/48	CDK13,E2F1,HOXA10,IL1RN,MERTK,PECAM 1,PLA2G6,RARA,TNF
Organ Development	development of bone marrow cells	0.0496	9/38	CDK13,E2F1,HOXA10,IL1RN,MERTK,PECAM 1,PLA2G6,RARA,TNF
Organismal Development	development of bone marrow cells	0.0496	9/66	CDK13,E2F1,HOXA10,IL1RN,MERTK,PECAM 1,PLA2G6,RARA,TNF
Connective Tissue Development and Function	arrest in cell cycle progression of fibroblast cell lines	0.0496	6/26	AK1,CDKN1A,CEBPA,MECP2,SMARCB1,SS RP1
<u>Diseases and Disorders</u>				
Developmental Disorder	dysplasia of exocrine cells	0.0281	3/16	E2F1,E2F2,KRAS
Cancer	polycythemia vera	0.0388	5/147	let-7,mir-143,NFE2,RUNX1,STAT5A
Hematological Disease	polycythemia vera	0.0388	5/58	let-7,mir-143,NFE2,RUNX1,STAT5A
Organismal Injury and Abnormalities	polycythemia vera	0.0388	5/51	let-7,mir-143,NFE2,RUNX1,STAT5A

Supplemental Table S5 Ingenuity pathway analysis of the commitment-associated epigenetic signature

Molecular and Cellular Functions

Cellular Development	differentiation of hematopoietic cells	0.0281	19/105	BLNK,CEBPA,CTCF (includes EG:10664),E2F1,GATA1,HIST1H4A (includes others),HOXA10,MERTK,NFE2,PECAM1,RARA,RUNX1,SLC37A4,SLC46A1,SPRED2,STAT5A,STK11,TNF,ZAP70
	maturation of lymphatic system cells	0.0281	6/105	BLNK,CDKN1A,GATA1,LCP1,NFE2,RARA
	development of hematopoietic progenitor cells	0.0281	15/105	BLNK,CDK13,CDKN1A,E2F1,GATA1,HOXA10,LAT2,PECAM1,PIK3R1,PIM1 (includes EG:18712),RUNX1,SIT1 (includes EG:27240),STK11,TNF,ZAP70
	differentiation of blood cells	0.0336	41/105	ARID3A,BLNK,BRCA2,CDK13,CEBPA,CTCF (includes EG:10664),E2F1,E2F2,ETS2,FECH,FES,GATA1,HIST1H4A (includes others),HOXA10,HSPD1,IL1RN,KLF13,MAPK9,MERTK,NCAPH2,NDFIP1,NFE2,NRARP,PECAM1,PIK3R1,RARA,RGS10,RUNX1,SIT1 (includes EG:27240),SLC37A4,SLC46A1,SOD1,SPRED2,STAT5A,STK11,TBATA,TNF,TNFRSF4,TNFRSF6B,VPRFB1,ZAP70
	maturation of bone marrow cells	0.0496	5/105	BLNK,CDKN1A,GATA1,NFE2,RARA
Cellular Assembly and Organization	development of bone marrow cells	0.0496	9/105	CDK13,E2F1,HOXA10,IL1RN,MERTK,PECAM1,PLA2G6,RARA,TNF
	proliferation of mitochondria	0.0388	3/72	CDKN1A,DES,UCP2
	binding of chromatin	0.0411	6/72	CCNE1,CDKN1A,E2F1,MECP2,NUP62,TNF
Cell Cycle	senescence of cells	0.0453	15/53	ARID3A,BRCA2,C2orf40,CCNE1,CDKN1A,E2F1,EHF,KRAS,let-7,RUNX1,SMARCB1,SOD1,STK11,UBC,ULK3
	arrest in cell cycle progression of fibroblast cell lines	0.0496	6/53	AK1,CDKN1A,CEBPA,MECP2,SMARCB1,SSRP1

Supplemental Table S5 Ingenuity pathway analysis of the commitment-associated epigenetic signature

<u>Top Networks</u>	<u>Score</u>
Infectious Disease, Dermatological Diseases and Conditions, Organismal Injury and Abnormalities	66
Cell Death and Survival, Post- Translational Modification, Hematological System	51
Development and Function Carbohydrate Metabolism, Nucleic Acid Metabolism, Small Molecule Biochemistry	44
Cellular Compromise, RNA Damage and Repair, Gene Expression	43
Cellular Movement, Hypersensitivity Response, Immune Cell Trafficking	39

Supplemental Table S6 Differential Gene Expression Signature

Nimblegen ID	ID	chromosome	start	end	gene name
HSAP0406S00000056	AF116687	chr1	1229228	1229838	PRO2121; Homo sapiens PRO2121 mRNA, complete cds.
HSAP0406S00000057	AK094155	chr1	1233525	1235537	Homo sapiens cDNA FLJ36836 fis, clone ASTRO2011149.
HSAP0406S00000058	AK125883	chr1	1233360	1236877	Homo sapiens cDNA FLJ43895 fis, clone TEST14009638.
HSAP0406S00000060	AK056065	chr1	1229216	1243201	Homo sapiens cDNA FLJ31503 fis, clone NT2NE2005720, highly similar to Mus musculus Ubc6p homolog mRNA.
HSAP0406S00000346	NM_001066	chr1	12161325	12203542	TNFRSF1B; tumor necrosis factor receptor 2 precursor; Homo sapiens tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B), mRNA.
HSAP0406S00000353	AY358093	chr1	12574397	12611910	SDR1; Homo sapiens clone DNA49828 SDR1 (UNQ2424) mRNA, complete cds.
HSAP0406S00000354	NM_004753	chr1	12562205	12611734	DHRS3; dehydrogenase/reductase (SDR family) member 3; Homo sapiens dehydrogenase/reductase (SDR family) member 3 (DHRS3), mRNA.
HSAP0406S00000365	BC016048	chr1	13546750	13585464	LOC126755; LOC126755 protein; Homo sapiens hypothetical protein LOC126755, mRNA (cDNA clone IMAGE:4645529), partial cds.
HSAP0406S00000690	BC000644	chr1	26328608	26331155	CDW52; CDW52 antigen (CAMPATH-1 antigen); Homo sapiens CDW52 antigen (CAMPATH-1 antigen), mRNA (cDNA clone MGC:1783 IMAGE:3345325), complete cds.
HSAP0406S00000965	NM_156039	chr1	36600736	36617602	CSF3R; colony stimulating factor 3 receptor isoform c precursor; Homo sapiens colony stimulating factor 3 receptor (granulocyte) (CSF3R), transcript variant 3, mRNA.
HSAP0406S00001427	L12685	chr1	66509796	66509963	3',5'-cyclic AMP phosphodiesterase; Homo sapiens 3',5'-cyclic AMP phosphodiesterase mRNA, partial cds.
HSAP0406S00001428	L12686	chr1	66509908	66552280	3',5'-cyclic AMP phosphodiesterase; Homo sapiens 3',5'-cyclic AMP phosphodiesterase mRNA, 3'end.
HSAP0406S00001429	L20971	chr1	66509707	66551961	phosphodiesterase; Human phosphodiesterase mRNA, complete cds.
HSAP0406S00001430	AK127365	chr1	66548891	66552279	Homo sapiens cDNA FLJ45439 fis, clone BRSSN2004710, highly similar to cAMP-dependent 3',5'-cyclic phosphodiesterase 4B (EC 3.1.4.17).
HSAP0406S00001450	NM_001559	chr1	67485067	67574604	IL12RB2; interleukin 12 receptor, beta 2 precursor; Homo sapiens interleukin 12 receptor, beta 2 (IL12RB2), mRNA.
HSAP0406S00001606	NM_052941	chr1	89359480	89376583	GBP4; guanylate binding protein 4; Homo sapiens guanylate binding protein 4 (GBP4), mRNA.
HSAP0406S00001607	AK131094	chr1	89359480	89376567	FLJ00316; FLJ00316 protein; Homo sapiens mRNA for FLJ00316 protein.
HSAP0406S00001608	BC033761	chr1	89438284	89445222	Similar to guanylate binding protein 5; Homo sapiens, Similar to guanylate binding protein 5, clone IMAGE:3857492, mRNA, partial cds.
HSAP0406S00001609	NM_052942	chr1	89438285	89450552	GBP5; guanylate-binding protein 5; Homo sapiens guanylate binding protein 5 (GBP5), mRNA.
HSAP0406S00001610	AK090479	chr1	89440401	89450508	FLJ00401; FLJ00401 protein; Homo sapiens mRNA for FLJ00401 protein.
HSAP0406S00001643	NM_005263	chr1	92652341	92664451	GFI1; growth factor independent 1; Homo sapiens growth factor independent 1 (GFI1), mRNA.
HSAP0406S00001676	NM_152487	chr1	95295004	95370895	FLJ31842; hypothetical protein FLJ31842; Homo sapiens hypothetical protein FLJ31842 (FLJ31842), mRNA.
HSAP0406S00002061	NM_144698	chr1	143038287	143057565	FLJ25124; hypothetical protein FLJ25124; Homo sapiens hypothetical protein FLJ25124 (FLJ25124), mRNA.
HSAP0406S00002062	AK057853	chr1	143051358	143057570	Homo sapiens cDNA FLJ25124 fis, clone CBR06414.
HSAP0406S00002371	NM_000565	chr1	151190741	151253261	IL6R; interleukin 6 receptor isoform 1 precursor; Homo sapiens interleukin 6 receptor (IL6R), transcript variant 1, mRNA.
HSAP0406S00002498	NM_170707	chr1	152897570	152922944	LMNA; lamin A/C isoform 1 precursor; Homo sapiens lamin A/C (LMNA), transcript variant 1, mRNA.
HSAP0406S00002499	M13452	chr1	152913571	152922944	Human lamin A mRNA, 3'end.
HSAP0406S00002781	AY194294	chr1	164369692	164371769	INM04; Homo sapiens INM04 mRNA, complete cds.
HSAP0406S00002815	AY367061	chr1	166402374	166409255	L-selectin; Homo sapiens L-selectin mRNA, partial cds.
HSAP0406S00002857	BC041663	chr1	169884530	169906354	TNFSF4; TNFSF4 protein; Homo sapiens tumor necrosis factor (ligand) superfamily, member 4 (tax-transcriptionally activated glycoprotein 1, 34kDa), mRNA (cDNA clone MGC:47852 IMAGE:4510740), complete cds.
HSAP0406S00002858	NM_003326	chr1	169884527	169908128	TNFSF4; tumor necrosis factor (ligand) superfamily, member 4; Homo sapiens tumor necrosis factor (ligand) superfamily, member 4 (tax-transcriptionally activated glycoprotein 1, 34kDa) (TNFSF4), mRNA.
HSAP0406S00002974	NM_030769	chr1	179493050	179530245	NPL; N-acetylneuraminase pyruvate lyase; Homo sapiens N-acetylneuraminase pyruvate lyase (dihydrodipicolinate synthase) (NPL), mRNA.
HSAP0406S00003264	NM_006850	chr1	203459183	203465879	IL24; interleukin 24 isoform 1 precursor; Homo sapiens interleukin 24 (IL24), transcript variant 1, mRNA.
HSAP0406S00003265	NM_005449	chr1	203466125	203483738	TOSO; regulator of Fas-induced apoptosis; Homo sapiens regulator of Fas-induced apoptosis (TOSO), mRNA.
HSAP0406S00003661	NM_003679	chr1	238021747	238084984	KMO; kynurenine 3-monooxygenase (kynurenine 3-hydroxylase); Homo sapiens kynurenine 3-monooxygenase (kynurenine 3-hydroxylase) (KMO), mRNA.
HSAP0406S00003729	NM_004895	chr1	243907391	243938445	CIAS1; cryopyrin isoform a; Homo sapiens cold autoinflammatory syndrome 1 (CIAS1), transcript variant 1, mRNA.
HSAP0406S00003730	AY422168	chr1	243908143	243937847	CIAS1; cryopyrin deletion 4 isoform; Homo sapiens cryopyrin deletion 4 isoform (CIAS1) mRNA, complete cds, alternatively spliced.
HSAP0406S00004264	BT009916	chr2	47299567	47309555	calmodulin 2 (phosphorylase kinase, delta); Homo sapiens calmodulin 2 (phosphorylase kinase, delta) mRNA, complete cds.
HSAP0406S00004266	NM_002354	chr2	47508117	47525808	TACSTD1; tumor-associated calcium signal transducer 1 precursor; Homo sapiens tumor-associated calcium signal transducer 1 (TACSTD1), mRNA.
HSAP0406S00004295	AK124923	chr2	54003657	54009748	Homo sapiens cDNA FLJ42933 fis, clone BRSSN2013874, highly similar to Rattus norvegicus TEMO (Temo).
HSAP0406S00004296	BC043602	chr2	54003657	54031636	PSME4; PSME4 protein; Homo sapiens proteasome (prosome, macropain) activator subunit 4, mRNA (cDNA clone IMAGE:5406676), partial cds.
HSAP0406S00004297	NM_014614	chr2	54003221	54109501	PSME4; proteasome (prosome, macropain) activator subunit 4; Homo sapiens proteasome (prosome, macropain) activator subunit 4 (PSME4), mRNA.
HSAP0406S00004298	D38521	chr2	54003657	54109438	KIAA0077; Homo sapiens KIAA0077 mRNA, partial cds.
HSAP0406S00004396	NM_002398	chr2	66574182	66711541	MEIS1; Meis1 homolog; Homo sapiens Meis1, myeloid ecotropic viral integration site 1 homolog (mouse) (MEIS1), mRNA.
HSAP0406S00004400	AL110235	chr2	68431793	68458182	DKFZp566K1924; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp566K1924 (from clone DKFZp566K1924).
HSAP0406S00004407	NM_015463	chr2	68431793	68458494	C2orf32; cannabinoid receptor CB1-interacting protein 1; Homo sapiens chromosome 2 open reading frame 32 (C2orf32), mRNA.
HSAP0406S00004723	NM_015341	chr2	96423364	96461456	BRRN1; barren; Homo sapiens barren homolog (Drosophila) (BRRN1), mRNA.
HSAP0406S00004893	NM_033514	chr2	110657256	110665015	LIMS3; LIM and senescent cell antigen-like domains 3; Homo sapiens LIM and senescent cell antigen-like domains 3 (LIMS3), mRNA.

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HSAP0406S00005007	NM_139343	chr2	127521838	127581094	BIN1; bridging integrator 1 isoform 1; Homo sapiens bridging integrator 1 (BIN1), transcript variant 1, mRNA.
HSAP0406S00005112	AF255647	chr2	135047064	135047986	DC29; Homo sapiens DC29 mRNA, complete cds.
HSAP0406S00005113	NM_030923	chr2	135047292	135310302	DKFZP566N034; hypothetical protein DKFZp566N034; Homo sapiens hypothetical protein DKFZp566N034 (DKFZP566N034), mRNA.
HSAP0406S00005114	AL122044	chr2	135047062	135359066	DKFZp566N034; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp566N034 (from clone DKFZp566N034).
HSAP0406S00005269	BC006264	chr2	165425472	165524157	Unknown (protein for IMAGE:3951455); Homo sapiens cDNA clone IMAGE:3951455, complete cds.
HSAP0406S00005708	BC012919	chr2	207770593	207857077	KLF7; KLF7 protein; Homo sapiens Kruppel-like factor 7 (ubiquitous), mRNA (cDNA clone MGC:21308 IMAGE:4509200), complete cds.
HSAP0406S00005709	BX537890	chr2	207769327	207857476	DKFZp313F0536; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp313F0536 (from clone DKFZp313F0536); complete cds.
HSAP0406S00005714	AL136852	chr2	208452841	208454921	DKFZp434E2135; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434E2135 (from clone DKFZp434E2135).
HSAP0406S00006070	NM_014521	chr2	235642685	235746356	SH3BP4; SH3-domain binding protein 4; Homo sapiens SH3-domain binding protein 4 (SH3BP4), mRNA.
HSAP0406S00006071	AF015043	chr2	235731632	235746290	EH-binding protein; Homo sapiens EH-binding protein mRNA, partial cds.
HSAP0406S00006241	AB032982	chr3	9050114	9097971	KIAA1156; KIAA1156 protein; Homo sapiens mRNA for KIAA1156 protein, partial cds.
HSAP0406S00006242	BC039300	chr3	9023661	9233444	SRGAP2; SRGAP2 protein; Homo sapiens SLIT-ROBO Rho GTPase activating protein 2, mRNA (cDNA clone IMAGE:4830856), complete cds.
HSAP0406S00006243	AB007871	chr3	8999175	9265593	KIAA0411; Homo sapiens KIAA0411 mRNA, partial cds.
HSAP0406S00006244	AF464189	chr3	8997277	9265897	WAVE-associated Rac GTPase activating protein; Homo sapiens WAVE-associated Rac GTPase activating protein mRNA, complete cds.
HSAP0406S00006282	NM_033084	chr3	10043127	10116344	FANCD2; Fanconi anemia, complementation group D2; Homo sapiens Fanconi anemia, complementation group D2 (FANCD2), mRNA.
HSAP0406S00006283	AK022613	chr3	10053010	10089639	Homo sapiens cDNA FLJ12551 fis, clone NT2RM4000700.
HSAP0406S00006357	NM_022497	chr3	15065023	15081820	MRPS25; mitochondrial ribosomal protein S25; Homo sapiens mitochondrial ribosomal protein S25 (MRPS25), nuclear gene encoding mitochondrial protein, mRNA.
HSAP0406S00006358	AK024433	chr3	15065028	15081763	FLJ00023; FLJ00023 protein; Homo sapiens mRNA for FLJ00023 protein, partial cds.
HSAP0406S00006362	NM_014296	chr3	15222736	15269426	CAPN7; calpain 7; Homo sapiens calpain 7 (CAPN7), mRNA.
HSAP0406S00006363	BX641159	chr3	15271364	15274665	DKFZp686F05233; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686F05233 (from clone DKFZp686F05233).
HSAP0406S00006364	NM_004844	chr3	15271367	15348892	SH3BP5; SH3-domain binding protein 5 (BTK-associated); Homo sapiens SH3-domain binding protein 5 (BTK-associated) (SH3BP5), mRNA.
HSAP0406S00006451	NM_178868	chr3	32255174	32386815	CKLFSF8; chemokine-like factor superfamily 8; Homo sapiens chemokine-like factor super family 8 (CKLFSF8), mRNA.
HSAP0406S00006630	AK026187	chr3	45105553	45127142	Homo sapiens cDNA: FLJ22534 fis, clone HRC13020.
HSAP0406S00006631	AK023834	chr3	45098782	45128942	Homo sapiens cDNA FLJ13772 fis, clone PLACE4000300.
HSAP0406S00006632	NM_022842	chr3	45098773	45162918	CDCP1; CUB domain-containing protein 1 isoform 1; Homo sapiens CUB domain-containing protein 1 (CDCP1), transcript variant 1, mRNA.
HSAP0406S00006661	AJ312775	chr3	46573891	46576182	LUZP3; leucine zipper protein 3; Homo sapiens mRNA for leucine zipper protein 3 (LUZP3 gene).
HSAP0406S00006697	BX537953	chr3	47299443	47363309	DKFZp686M0586; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686M0586 (from clone DKFZp686M0586); complete cds.
HSAP0406S00006698	BC015962	chr3	47299452	47303952	Unknown (protein for IMAGE:4081125); Homo sapiens, clone IMAGE:4081125, mRNA, partial cds.
HSAP0406S00006699	AB062478	chr3	47334379	47363309	OK/SW-cl.74; OK/SW-CL.74; Homo sapiens OK/SW-cl.74 mRNA, complete cds.
HSAP0406S00006700	NM_025010	chr3	47299439	47355316	KLHL18; kelch-like 18; Homo sapiens kelch-like 18 (Drosophila) (KLHL18), mRNA.
HSAP0406S00006701	BC016388	chr3	47349754	47361781	Unknown (protein for IMAGE:3344095); Homo sapiens cDNA clone IMAGE:3344095, partial cds.
HSAP0406S00007048	NM_001457	chr3	57969200	58133015	FLNB; filamin B, beta (actin binding protein 278); Homo sapiens filamin B, beta (actin binding protein 278) (FLNB), mRNA.
HSAP0406S00007049	AK098160	chr3	57977696	57979729	Homo sapiens cDNA FLJ40841 fis, clone TRACH2014082.
HSAP0406S00007050	BX641085	chr3	58039022	58133015	DKFZp686E1669; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686E1669 (from clone DKFZp686E1669).
HSAP0406S00007051	AF353666	chr3	58110747	58114164	FLNB; filamin B variant 2; Homo sapiens filamin B variant 2 (FLNB) mRNA, partial cds, alternatively spliced.
HSAP0406S00007059	NM_003500	chr3	58465903	58497956	ACOX2; acyl-Coenzyme A oxidase 2, branched chain; Homo sapiens acyl-Coenzyme A oxidase 2, branched chain (ACOX2), mRNA.
HSAP0406S00007311	NM_001004196	chr3	113534663	113564346	CD200; CD200 antigen isoform b; Homo sapiens CD200 antigen (CD200), transcript variant 2, mRNA.
HSAP0406S00007759	NM_031850	chr3	149898362	149943486	AGTR1; angiotensin II receptor, type 1; Homo sapiens angiotensin II receptor, type 1 (AGTR1), transcript variant 4, mRNA.
HSAP0406S00007969	NM_003810	chr3	173706166	173723971	TNFSF10; tumor necrosis factor (ligand) superfamily, member 10; Homo sapiens tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10), mRNA.
HSAP0406S00008042	BC007229	chr3	185188259	185214837	Unknown (protein for IMAGE:2957862); Homo sapiens cDNA clone IMAGE:2957862, partial cds.
HSAP0406S00008043	BC015334	chr3	185201153	185214870	Unknown (protein for IMAGE:4391654); Homo sapiens, clone IMAGE:4391654, mRNA, partial cds.
HSAP0406S00008326	NM_000142	chr4	1762853	1777829	FGFR3; fibroblast growth factor receptor 3 isoform 1 precursor; Homo sapiens fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3), transcript variant 1, mRNA.
HSAP0406S00008327	M64347	chr4	1768327	1777829	fgfrl; Human novel growth factor receptor mRNA, 3' cds.
HSAP0406S00008328	AF369211	chr4	1770419	1772697	FGFR3; fibroblast growth factor receptor 3 IIIc isoform; Homo sapiens fibroblast growth factor receptor 3 IIIc isoform (FGFR3) mRNA, partial cds.
HSAP0406S00008329	AF238374	chr4	1776073	1776645	FGFR3; mutant fibroblast growth factor receptor 3; Homo sapiens mutant fibroblast growth factor receptor 3 (FGFR3) mRNA, partial cds.
HSAP0406S00008383	AF229833	chr4	4387673	4394191	PNAS-5; apoptosis-related protein PNAS-5; Homo sapiens apoptosis-related protein PNAS-5 (PNAS-5) mRNA, partial cds.
HSAP0406S00008384	NM_017816	chr4	4387510	4409915	LYAR; hypothetical protein FLJ20425; Homo sapiens hypothetical protein FLJ20425 (LYAR), mRNA.
HSAP0406S00008534	NM_001358	chr4	24205369	24262446	DHX15; DEAH (Asp-Glu-Ala-His) box polypeptide 15; Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 15 (DHX15), mRNA.
HSAP0406S00008536	AK125353	chr4	24486080	24590777	Homo sapiens cDNA FLJ43363 fis, clone NT2RP7017474.
HSAP0406S00008628	BX537916	chr4	41455846	41542987	DKFZp686O12114; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686O12114 (from clone DKFZp686O12114).
HSAP0406S00008629	BX640692	chr4	41456453	41541930	DKFZp686G03277; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686G03277 (from clone DKFZp686G03277).
HSAP0406S00008630	BC029735	chr4	41509558	41540759	Similar to LIM domain only 7; Homo sapiens, Similar to LIM domain only 7, clone IMAGE:3857528, mRNA, partial cds.

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HSAP0406S00008731	AF492675	chr4	57355092	57388774	OB1; odd homeobox 1 protein isoform A; Homo sapiens heart odd homeobox 1 protein isoform A (OB1) mRNA, complete alternatively spliced.
HSAP0406S00008732	BC022514	chr4	57516954	57528825	SPINK2; serine protease inhibitor, Kazal type 2 (acrosin-trypsin inhibitor); Homo sapiens serine protease inhibitor, Kazal type 2 (acrosin-trypsin inhibitor), mRNA (cDNA clone MGC:26562 IMAGE:4812189), complete cds.
HSAP0406S00008798	NM_144646	chr4	71886718	71897299	IGJ; immunoglobulin J chain; Homo sapiens immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptides (IGJ), mRNA.
HSAP0406S00008851	BC009799	chr4	75675887	75685762	AREG; amphiregulin, preproprotein; Homo sapiens amphiregulin (schwannoma-derived growth factor), mRNA (cDNA clone MGC:13647 IMAGE:4277616), complete cds.
HSAP0406S00008929	AB014771	chr4	82747340	82747653	mop-1; MOP-1; Homo sapiens mRNA for MOP-1, complete cds.
HSAP0406S00009113	BC037277	chr4	104358239	104378590	DHRS6; DHRS6 protein; Homo sapiens dehydrogenase/reductase (SDR family) member 6, mRNA (cDNA clone MGC:32990 IMAGE:4838679), complete cds.
HSAP0406S00009144	NM_016269	chr4	109326304	109447182	LEF1; lymphoid enhancer binding factor-1; Homo sapiens lymphoid enhancer-binding factor 1 (LEF1), mRNA.
HSAP0406S00009443	AF260333	chr4	159403338	159405616	AD036; Homo sapiens AD036 mRNA, complete cds.
HSAP0406S00009444	AL834177	chr4	159403338	159450115	DKFZp434L142; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434L142 (from clone DKFZp434L142).
HSAP0406S00009445	NM_016613	chr4	159403367	159451148	DKFZp434L142; hypothetical protein DKFZp434L142; Homo sapiens hypothetical protein DKFZp434L142 (DKFZp434L142), mRNA.
HSAP0406S00009489	NM_016081	chr4	169792946	170224296	KIAA0992; palladin; Homo sapiens palladin (KIAA0992), mRNA.
HSAP0406S00009490	AK096458	chr4	169807448	169996781	Homo sapiens cDNA FLJ39139 fis, clone NTONG2009229.
HSAP0406S00009491	AB023209	chr4	170127921	170224296	KIAA0992; KIAA0992 protein; Homo sapiens mRNA for KIAA0992 protein, partial cds.
HSAP0406S00009492	BC013867	chr4	170174256	170222367	KIAA0992; KIAA0992 protein; Homo sapiens palladin, mRNA (cDNA clone IMAGE:3845400), partial cds.
HSAP0406S00009493	AY211921	chr4	170174257	170217441	sarcoma antigen NY-SAR-77; Homo sapiens sarcoma antigen NY-SAR-77 mRNA, partial cds.
HSAP0406S00009494	AF151909	chr4	170193950	170224296	CGI-151 protein; Homo sapiens CGI-151 protein mRNA, complete cds.
HSAP0406S00009495	AF077041	chr4	170193857	170224296	SIH002; Homo sapiens SIH002 mRNA, complete cds.
HSAP0406S00009496	BX537391	chr4	170217502	170224294	DKFZp313N1136; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp313N1136 (from clone DKFZp313N1136).
HSAP0406S00009530	NM_000860	chr4	175786110	175818341	HPGD; hydroxyprostaglandin dehydrogenase 15-(NAD); Homo sapiens hydroxyprostaglandin dehydrogenase 15-(NAD) (HPGD), mRNA.
HSAP0406S00009698	NM_024337	chr5	3649167	3654517	IRX1; iroquois homeobox protein 1; Homo sapiens iroquois homeobox protein 1 (IRX1), mRNA.
HSAP0406S00009730	NM_199133	chr5	10279444	10302989	LOC134145; hypothetical protein LOC134145; Homo sapiens hypothetical protein LOC134145 (LOC134145), mRNA.
HSAP0406S00009847	NM_174914	chr5	36070880	36102741	LOC167127; hypothetical protein LOC167127; Homo sapiens hypothetical protein LOC167127 (LOC167127), mRNA.
HSAP0406S00009890	NM_000958	chr5	40715788	40729592	PTGER4; prostaglandin E receptor 4, subtype EP4; Homo sapiens prostaglandin E receptor 4 (subtype EP4) (PTGER4), mRNA.
HSAP0406S00009997	NM_152687	chr5	57823086	57827942	FLJ33641; hypothetical protein FLJ33641; Homo sapiens hypothetical protein FLJ33641 (FLJ33641), mRNA.
HSAP0406S00010314	NM_173060	chr5	96064260	96136139	CAST; calpastatin isoform b; Homo sapiens calpastatin (CAST), transcript variant 2, mRNA.
HSAP0406S00010315	AB026049	chr5	96064261	96091090	heart-type calpastatin; Homo sapiens mRNA for heart-type calpastatin, partial cds.
HSAP0406S00010316	NM_173062	chr5	96089768	96134279	CAST; calpastatin isoform d; Homo sapiens calpastatin (CAST), transcript variant 4, mRNA.
HSAP0406S00010317	AY189741	chr5	96102801	96136139	CAST; calpastatin; Homo sapiens calpastatin (CAST) mRNA, partial alternatively spliced.
HSAP0406S00010318	NM_173061	chr5	96104173	96134871	CAST; calpastatin isoform c; Homo sapiens calpastatin (CAST), transcript variant 3, mRNA.
HSAP0406S00010567	AF208070	chr5	136981087	137084898	KLHL3b; kelch-like protein KLHL3b; Homo sapiens kelch-like protein KLHL3b (KLHL3b) mRNA, complete cds.
HSAP0406S00010568	NM_017415	chr5	136981087	137099362	KLHL3; kelch-like 3 (Drosophila); Homo sapiens kelch-like 3 (Drosophila) (KLHL3), mRNA.
HSAP0406S00010608	NM_016459	chr5	138751082	138753501	PACAP; proapoptotic caspase adaptor protein; Homo sapiens proapoptotic caspase adaptor protein (PACAP), mRNA.
HSAP0406S00010882	AY545555	chr5	151026199	151027353	SPARC; cysteine-rich protein; Homo sapiens cysteine-rich protein (SPARC) mRNA, partial cds.
HSAP0406S00010883	NM_003118	chr5	151021203	151046710	SPARC; secreted protein, acidic, cysteine-rich (osteonectin); Homo sapiens secreted protein, acidic, cysteine-rich (osteonectin) (SPARC), mRNA.
HSAP0406S00011009	BC025707	chr5	169742257	169749216	KCNMB1; KCNMB1 protein; Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 1, mRNA (cDNA clone MGC:34483 IMAGE:5224514), complete cds.
HSAP0406S00011285	BC022217	chr6	3214206	3217511	C6orf85; C6orf85 protein; Homo sapiens chromosome 6 open reading frame 85, mRNA (cDNA clone IMAGE:3846727), complete cds.
HSAP0406S00011399	NM_152737	chr6	14033181	14088212	MGC33993; hypothetical protein MGC33993; Homo sapiens hypothetical protein MGC33993 (MGC33993), mRNA.
HSAP0406S00011806	BC063289	chr6	32057779	32078422	Unknown (protein for MGC:71601); Homo sapiens cDNA clone MGC:71601 IMAGE:5289068, complete cds.
HSAP0406S00011807	K02403	chr6	32057898	32078435	C4A; complement component C4A; Human complement component C4A mRNA, complete cds.
HSAP0406S00011808	K00830	chr6	32074869	32074947	human complement fourth component (c4) gamma chain (codons 1-27).
HSAP0406S00011809	BC012372	chr6	32076849	32078418	C4A; C4A protein; Homo sapiens complement component 4A, mRNA (cDNA clone IMAGE:4186970), partial cds.
HSAP0406S00011810	S81585	chr6	32076752	32078419	ZA; ZA [region between exons 35 and 36 of the complement component C4 ge] [human, fetal adrenal gland, mRNA, 830 nt].
HSAP0406S00011893	NM_002119	chr6	33081330	33085315	HLA-DOA; major histocompatibility complex, class II, DO alpha; Homo sapiens major histocompatibility complex, class II, DO alpha (HLA-DOA), mRNA.
HSAP0406S00011957	BC040228	chr6	34590641	34610976	PACSIIN1; PACSIIN1 protein; Homo sapiens protein kinase C and casein kinase substrate in neurons 1, mRNA (cDNA clone MGC:34644 IMAGE:5173129), complete cds.
HSAP0406S00012064	NM_031460	chr6	39374764	39390176	KCNK17; potassium channel, subfamily K, member 17; Homo sapiens potassium channel, subfamily K, member 17 (KCNK17), mRNA.
HSAP0406S00012142	BC006293	chr6	43097360	43105312	C6orf153; C6orf153 protein; Homo sapiens chromosome 6 open reading frame 153, mRNA (cDNA clone IMAGE:4053965), partial cds.
HSAP0406S00012143	NM_033112	chr6	43097362	43105319	C6orf153; hypothetical protein LOC88745; Homo sapiens chromosome 6 open reading frame 153 (C6orf153), mRNA.
HSAP0406S00012144	AF161371	chr6	43100806	43105313	HSPC253; Homo sapiens HSPC253 mRNA, partial cds.
HSAP0406S00012268	NM_000324	chr6	49680850	49712511	RHAG; Rhesus blood group-associated glycoprotein; Homo sapiens Rhesus blood group-associated glycoprotein (RHAG), mRNA.
HSAP0406S00012328	BC051772	chr6	56430752	56438914	DST; DST protein; Homo sapiens dystonin, mRNA (cDNA clone IMAGE:6193128), partial cds.
HSAP0406S00012329	BC004912	chr6	56430817	56442713	DST; DST protein; Homo sapiens dystonin, mRNA (cDNA clone IMAGE:3534745), partial cds.
HSAP0406S00012330	AK025142	chr6	56456314	56465000	Homo sapiens cDNA: FLJ21489 fis, clone COL05450.

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HSAP0406S00012331	AF083131	chr6	56476806	56488300	CATX-15; unknown; Homo sapiens CATX-15 mRNA, complete cds.
HSAP0406S00012332	AK129724	chr6	56513405	56514396	Homo sapiens cDNA FLJ26213 fis, clone ADG07906.
HSAP0406S00012333	NM_015548	chr6	56430995	56615647	DST; bullous pemphigoid antigen 1 isoform 1eA precursor; Homo sapiens dystonin (DST), transcript variant 1eA, mRNA.
HSAP0406S00012334	M69225	chr6	56587346	56615575	source; Human bullous pemphigoid antigen (BPAG1) mRNA, complete cds.
HSAP0406S00012335	AF165191	chr6	56643414	56665828	BPAG1; BPAG1n3; Homo sapiens BPAG1n3 (BPAG1) mRNA, partial cds.
HSAP0406S00012336	NM_183380	chr6	56430752	56816422	DST; bullous pemphigoid antigen 1 isoform 1; Homo sapiens dystonin (DST), transcript variant 1, mRNA.
HSAP0406S00012596	U83115	chr6	107067167	107125016	AIM1; non-lens beta gamma-crystallin like protein; Human non-lens beta gamma-crystallin like protein (AIM1) mRNA, partial cds.
HSAP0406S00012597	BC062788	chr6	107095701	107113098	Unknown (protein for IMAGE:4769888); Homo sapiens cDNA clone IMAGE:4769888, partial cds.
HSAP0406S00012608	AK074125	chr6	108146851	108252209	FLJ00197; FLJ00197 protein; Homo sapiens mRNA for FLJ00197 protein.
HSAP0406S00012609	AK093571	chr6	108132105	108252214	Homo sapiens cDNA FLJ36252 fis, clone THYMU2002109, moderately similar to Homo sapiens Sex comb on midleg homolog 1 isoform 1.
HSAP0406S00012610	NM_198081	chr6	108146850	108200148	SCML4; sex comb on midleg-like 4; Homo sapiens sex comb on midleg-like 4 (Drosophila) (SCML4), mRNA.
HSAP0406S00012853	BC064689	chr6	138230150	138246137	TNFAIP3; TNFAIP3 protein; Homo sapiens tumor necrosis factor, alpha-induced protein 3, mRNA (cDNA clone IMAGE:30345989), complete cds.
HSAP0406S00012854	AL157444	chr6	138237841	138245708	DKFZp434B029; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434B029 (from clone DKFZp434B029); partial cds.
HSAP0406S00012883	BX640873	chr6	142665142	142806785	DKFZp686N04172; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686N04172 (from clone DKFZp686N04172).
HSAP0406S00012884	NM_198569	chr6	142664758	142808343	GPR126; G protein-coupled receptor 126 beta 1; Homo sapiens G protein-coupled receptor 126 (GPR126), mRNA.
HSAP0406S00012885	AF305821	chr6	142725905	142728517	PRO0902; Homo sapiens PRO0902 mRNA, complete cds.
HSAP0406S00012886	AK027843	chr6	142765640	142808074	Homo sapiens cDNA FLJ14937 fis, clone PLACE1010231, weakly similar to CELL SURFACE GLYCOPROTEIN EMR1 PRECURSOR.
HSAP0406S00012887	AK075087	chr6	142780149	142809081	Homo sapiens cDNA FLJ390606 fis, clone PLACE1001564, weakly similar to H.sapiens mRNA for HE6 Tm7 receptor.
HSAP0406S00013476	NM_153632	chr7	26919048	26926856	HOXA3; homeobox A3 protein isoform b; Homo sapiens homeo box A3 (HOXA3), transcript variant 3, mRNA.
HSAP0406S00013492	NM_175061	chr7	27643431	27993465	JAZF1; juxtaposed with another zinc finger gene 1; Homo sapiens juxtaposed with another zinc finger gene 1 (JAZF1), mRNA.
HSAP0406S00013602	NM_001003799	chr7	38072483	38086488	TARP; TCR gamma alternate reading frame protein; Homo sapiens TCR gamma alternate reading frame protein (TARP), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA.
HSAP0406S00013603	BC062761	chr7	38072482	38086473	TRGV9; TRGV9 protein; Homo sapiens T cell receptor gamma variable 9, mRNA (cDNA clone IMAGE:4248993), partial cds.
HSAP0406S00013604	BC027954	chr7	38145975	38148477	Unknown (protein for MGC:34839); Homo sapiens cDNA clone MGC:34839 IMAGE:5210958, complete cds.
HSAP0406S00013605	BC035592	chr7	38156734	38162844	Unknown (protein for MGC:45453); Homo sapiens cDNA clone MGC:45453 IMAGE:5575279, complete cds.
HSAP0406S00013606	BC039725	chr7	38052426	38176359	Unknown (protein for MGC:47828); Homo sapiens cDNA clone MGC:47828 IMAGE:5227869, complete cds.
HSAP0406S00013726	NM_152701	chr7	48015103	48464352	ABCA13; ATP binding cassette gene, sub-family A (ABC1), member 13; Homo sapiens ATP binding cassette gene, sub-family A (ABC1), member 13 (ABCA13), mRNA.
HSAP0406S00013727	AK091195	chr7	48090363	48093582	Homo sapiens cDNA FLJ33876 fis, clone CTONG2007009.
HSAP0406S00013728	AF501281	chr7	48098270	48462457	ABCA13; ATP binding cassette transporter A13; Homo sapiens ATP binding cassette transporter A13 (ABCA13) mRNA, partial cds.
HSAP0406S00013729	AK128570	chr7	48129938	48221523	Homo sapiens cDNA FLJ46729 fis, clone TRACH3019370, weakly similar to ATP-binding cassette, sub-family A, member 1.
HSAP0406S00013730	AK128516	chr7	48271920	48464353	Homo sapiens cDNA FLJ46673 fis, clone TRACH3009061, weakly similar to ATP-binding cassette, sub-family A, member 1.
HSAP0406S00013731	AK091270	chr7	48337073	48464303	Homo sapiens cDNA FLJ33951 fis, clone CTONG2018483, weakly similar to ATP-BINDING CASSETTE, SUB-FAMILY A, MEMBER 1.
HSAP0406S00013768	BC037405	chr7	55795078	55797159	MRPS17; MRPS17 protein; Homo sapiens mitochondrial ribosomal protein S17, mRNA (cDNA clone IMAGE:4453189), partial cds.
HSAP0406S00013769	NM_015969	chr7	55793819	55797240	MRPS17; mitochondrial ribosomal protein S17; Homo sapiens mitochondrial ribosomal protein S17 (MRPS17), nuclear gene encoding mitochondrial protein, mRNA.
HSAP0406S00013876	AJ224442	chr7	72542589	72557117	methyltransferase; Homo sapiens mRNA for putative methyltransferase.
HSAP0406S00014010	NM_001001548	chr7	79912607	79950974	CD36; CD36 antigen; Homo sapiens CD36 antigen (collagen type I receptor, thrombospondin receptor) (CD36), transcript variant 1, mRNA.
HSAP0406S00014095	NM_004126	chr7	93195749	93200475	GNG11; guanine nucleotide binding protein (G protein), gamma 11; Homo sapiens guanine nucleotide binding protein (G protein), gamma 11 (GNG11), mRNA.
HSAP0406S00014252	NM_003227	chr7	99862690	99883810	TFR2; transferrin receptor 2; Homo sapiens transferrin receptor 2 (TFR2), mRNA.
HSAP0406S00014306	AK124705	chr7	100470510	100473864	Homo sapiens cDNA FLJ42715 fis, clone BRAMY3008505.
HSAP0406S00014307	NM_014343	chr7	100468808	100474551	CLDN15; claudin 15; Homo sapiens claudin 15 (CLDN15), mRNA.
HSAP0406S00014417	AF217519	chr7	107706024	107722342	uncharacterized bone marrow protein BM043; Homo sapiens uncharacterized bone marrow protein BM043 mRNA, complete cds.
HSAP0406S00014418	AK002115	chr7	107706019	107736962	Homo sapiens cDNA FLJ11253 fis, clone PLACE1008867.
HSAP0406S00014419	AK024335	chr7	107706925	107762556	Homo sapiens cDNA FLJ14273 fis, clone PLACE1004913.
HSAP0406S00014420	AL834147	chr7	107704818	107760466	DKFZp761P18121; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp761P18121 (from clone DKFZp761P18121).
HSAP0406S00014447	NM_199072	chr7	114156159	114253207	HIC; I-mfa domain-containing protein isoform p40; Homo sapiens I-mfa domain-containing protein (HIC), mRNA.
HSAP0406S00014448	AY196485	chr7	114156955	114249962	I-mfa domain-containing protein; Homo sapiens I-mfa domain-containing protein mRNA, complete cds.
HSAP0406S00014709	NM_002769	chr7	141943618	141947210	PRSS1; protease, serine, 1 preproprotein; Homo sapiens protease, serine, 1 (trypsin 1) (PRSS1), mRNA.
HSAP0406S00014710	AY052784	chr7	141984688	141989076	protease serine 2 isoform B; Homo sapiens protease serine 2 isoform B mRNA, complete cds.
HSAP0406S00014711	NM_002770	chr7	141985492	141989078	PRSS2; protease, serine, 2 preproprotein; Homo sapiens protease, serine, 2 (trypsin 2) (PRSS2), transcript variant 1, mRNA.
HSAP0406S00014724	NM_000420	chr7	142155039	142176340	KEL; Kell blood group antigen; Homo sapiens Kell blood group (KEL), mRNA.
HSAP0406S00014772	AF338232	chr7	143401416	143403369	CTAGE-4 protein; Homo sapiens CTAGE-4 protein mRNA, complete cds.
HSAP0406S00014818	AB039791	chr7	149381949	149437717	ARP11; actin-related protein Arp11; Homo sapiens mRNA for actin-related protein Arp11, complete cds.
HSAP0406S00014830	AK074044	chr7	149760554	149767030	FLJ00102; FLJ00102 protein; Homo sapiens mRNA for FLJ00102 protein.
HSAP0406S00014831	BC060760	chr7	149760113	149767044	GIMAP6; GIMAP6 protein; Homo sapiens GTPase, IMAP family member 6, mRNA (cDNA clone MGC:71490 IMAGE:30336063), complete cds.

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HSAP0406S00014841	BT007336	chr7	150084634	150109576	potassium voltage-gated channel, subfamily H (eag-related), member 2; Homo sapiens potassium voltage-gated channel, subfamily H (eag-related), member 2 mRNA, complete cds.
HSAP0406S00014842	BC001914	chr7	150084162	150109581	KCNH2; KCNH2 protein; Homo sapiens potassium voltage-gated channel, subfamily H (eag-related), member 2, mRNA (cDNA clone IMAGE:3510423), partial cds.
HSAP0406S00015085	NM_006094	chr8	12985242	13035180	DLC1; deleted in liver cancer 1 isoform 2; Homo sapiens deleted in liver cancer 1 (DLC1), transcript variant 2, mRNA.
HSAP0406S00015189	AF289563	chr8	22492600	22507748	unknown; Homo sapiens clone pp6345 unknown mRNA.
HSAP0406S00015190	AK090432	chr8	22501189	22507748	FLJ00349; FLJ00349 protein; Homo sapiens mRNA for FLJ00349 protein.
HSAP0406S00015191	AK074031	chr8	22502330	22507035	FLJ00072; FLJ00072 protein; Homo sapiens mRNA for FLJ00072 protein.
HSAP0406S00015209	BX537617	chr8	22933595	22941357	DKFZp686A24188; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686A24188 (from clone DKFZp686A24188).
HSAP0406S00015210	NM_003842	chr8	22933595	22982637	TNFRSF10B; tumor necrosis factor receptor superfamily, member 10b isoform 1 precursor; Homo sapiens tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B), transcript variant 1, mRNA.
HSAP0406S00015299	NM_006867	chr8	30361584	30547815	RBPMS; RNA-binding protein with multiple splicing; Homo sapiens RNA binding protein with multiple splicing (RBPMS), mRNA.
HSAP0406S00015300	L17325	chr8	30394459	30394962	1D12A; Human pre-T/NK cell associated protein (1D12A2) mRNA, complete cds.
HSAP0406S00015301	AK057533	chr8	30520692	30522687	Homo sapiens cDNA FLJ32971 fis, clone TESTI2008847.
HSAP0406S00015302	AK124859	chr8	30543854	30547815	Homo sapiens cDNA FLJ42869 fis, clone BRHIP2022221.
HSAP0406S00015399	AF005213	chr8	41631982	41641949	ANK1; ankyrin 1; Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds.
HSAP0406S00015400	NM_000037	chr8	41629900	41774297	ANK1; ankyrin 1 isoform 3; Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 3, mRNA.
HSAP0406S00015650	M33987	chr8	86427088	86478495	CA1; Human carbonic anhydrase I (CAI) mRNA, complete cds.
HSAP0406S00015741	AK126443	chr8	97416330	97418399	Homo sapiens cDNA FLJ44479 fis, clone UTERU2031851.
HSAP0406S00015759	NM_015029	chr8	99199243	99239814	POP1; processing of precursor 1, ribonuclease P/MRP subunit; Homo sapiens processing of precursor 1, ribonuclease P/MRP subunit (S. cerevisiae) (POP1), mRNA.
HSAP0406S00015760	D31765	chr8	99209819	99241238	KIAA0061; Homo sapiens KIAA0061 mRNA, partial cds.
HSAP0406S00015801	NM_024812	chr8	104222118	104311708	BAALC; brain and acute leukemia, cytoplasmic; Homo sapiens brain and acute leukemia, cytoplasmic (BAALC), mRNA.
HSAP0406S00015829	BC029406	chr8	108365408	108403397	ANGPT1; ANGPT1 protein; Homo sapiens angiopoietin 1, mRNA (cDNA clone IMAGE:4805448), complete cds.
HSAP0406S00015830	NM_001146	chr8	108330885	108579430	ANGPT1; angiopoietin 1 isoform a; Homo sapiens angiopoietin 1 (ANGPT1), transcript variant 1, mRNA.
HSAP0406S00015831	D13628	chr8	108330895	108579313	KIAA0003; Homo sapiens KIAA0003 mRNA, complete cds.
HSAP0406S00015935	M13930	chr8	128816861	128821905	Human c-myc-P64 mRNA, initiating from promoter P0, (HLMyc3.1) partial cds.
HSAP0406S00015936	NM_002467	chr8	128817685	128822853	MYC; v-myc myelocytomatosis viral oncogene homolog; Homo sapiens v-myc myelocytomatosis viral oncogene homolog (avian) (MYC), mRNA.
HSAP0406S00015937	X66258	chr8	128822201	128822383	c-myc; H.sapiens c-myc mRNA, partial CDS.
HSAP0406S00016439	AL137608	chr9	32445704	32471394	DKFZp434J1111; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434J1111 (from clone DKFZp434J1111); partial cds.
HSAP0406S00016440	NM_014314	chr9	32445704	32516322	DDX58; DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide RIG-I; Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 58 (DDX58), mRNA.
HSAP0406S00016706	NM_021965	chr9	68201368	68374205	PGM5; phosphoglucomutase 5; Homo sapiens phosphoglucomutase 5 (PGM5), mRNA.
HSAP0406S00016707	AL137698	chr9	68341294	68375530	DKFZp434C1915; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434C1915 (from clone DKFZp434C1915); partial cds.
HSAP0406S00016907	NM_004148	chr9	92963334	92976125	NINJ1; ninjurin 1; Homo sapiens ninjurin 1 (NINJ1), mRNA.
HSAP0406S00016908	BC019336	chr9	92963336	92976080	NINJ1; NINJ1 protein; Homo sapiens ninjurin 1, mRNA (cDNA clone IMAGE:3617778), partial cds.
HSAP0406S00016937	NM_000507	chr9	94444977	94481358	FBP1; fructose-1,6-bisphosphatase 1; Homo sapiens fructose-1,6-bisphosphatase 1 (FBP1), mRNA.
HSAP0406S00016985	NM_002486	chr9	97475462	97513466	NCBP1; nuclear cap binding protein subunit 1, 80kDa; Homo sapiens nuclear cap binding protein subunit 1, 80kDa (NCBP1), mRNA.
HSAP0406S00016992	AF228713	chr9	97768632	97786658	EDAG-1; Homo sapiens EDAG-1 mRNA, complete cds.
HSAP0406S00016993	NM_018437	chr9	97768627	97786689	HEMGN; hemogen; Homo sapiens hemogen (HEMGN), transcript variant 1, mRNA.
HSAP0406S00017101	NM_001004065	chr9	109890530	110010475	AKAP2; A kinase (PRKA) anchor protein 2; Homo sapiens A kinase (PRKA) anchor protein 2 (AKAP2), mRNA.
HSAP0406S00017203	NM_001244	chr9	114744677	114772324	TNFSF8; tumor necrosis factor (ligand) superfamily, member 8; Homo sapiens tumor necrosis factor (ligand) superfamily, member 8 (TNFSF8), mRNA.
HSAP0406S00017244	NM_000177	chr9	121141646	121174674	GSN; gelsolin isoform a; Homo sapiens gelsolin (amyloidosis, Finnish type) (GSN), transcript variant 1, mRNA.
HSAP0406S00017322	NM_182487	chr9	124642706	124656719	OLFML2A; olfactomedin-like 2A; Homo sapiens olfactomedin-like 2A (OLFML2A), mRNA.
HSAP0406S00017372	AK025804	chr9	127347172	127349752	Homo sapiens cDNA: FLJ22151 fis, clone HRC00111.
HSAP0406S00017373	AK023580	chr9	127347172	127358703	Homo sapiens cDNA FLJ13518 fis, clone PLACE1005799.
HSAP0406S00017374	AK098478	chr9	127396411	127398495	Homo sapiens cDNA FLJ25612 fis, clone STM01228.
HSAP0406S00017375	BC067366	chr9	127347176	127410778	C9orf88; C9orf88 protein; Homo sapiens chromosome 9 open reading frame 88, mRNA (cDNA clone MGC:71308 IMAGE:5456246), complete cds.
HSAP0406S00017376	AF151783	chr9	127347176	127420822	MEG3; MEG3; Homo sapiens MEG3 (MEG3) mRNA, complete cds.
HSAP0406S00017750	NM_015392	chr9	137209759	137216492	NPDC1; neural proliferation, differentiation and control, 1; Homo sapiens neural proliferation, differentiation and control, 1 (NPDC1), mRNA.
HSAP0406S00017918	NM_001002295	chr10	8136672	8157170	GATA3; GATA binding protein 3 isoform 1; Homo sapiens GATA binding protein 3 (GATA3), transcript variant 1, mRNA.
HSAP0406S00017919	BC006839	chr10	8156222	8156861	GATA3; GATA binding protein 3; Homo sapiens GATA binding protein 3, mRNA (cDNA clone IMAGE:3450299), complete cds.
HSAP0406S00017949	AL136840	chr10	13243593	13293108	DKFZp434H152; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434H152 (from clone DKFZp434H152).
HSAP0406S00017950	BC004876	chr10	13264962	13291904	MCM10; MCM10 protein; Homo sapiens MCM10 minichromosome maintenance deficient 10 (S. cerevisiae), mRNA (cDNA clone IMAGE:3688557), partial cds.

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HSAP0406S00017951	BC009108	chr10	13257577	13292319	MCM10; MCM10 protein; Homo sapiens MCM10 minichromosome maintenance deficient 10 (<i>S. cerevisiae</i>), mRNA (cDNA clone IMAGE:3451214), complete cds.
HSAP0406S00018046	NM_020200	chr10	25177559	25281539	PRTFDC1; phosphoribosyl transferase domain containing 1; Homo sapiens phosphoribosyl transferase domain containing 1 (PRTFDC1), mRNA.
HSAP0406S00018214	AK128634	chr10	46378532	46382035	Homo sapiens cDNA FLJ46793 fis, clone TRACH3029592.
HSAP0406S00018215	NM_031912	chr10	46378532	46390607	SYT15; synaptotagmin XV isoform a; Homo sapiens synaptotagmin XV (SYT15), transcript variant a, mRNA.
HSAP0406S00018337	NM_001786	chr10	62208241	62223930	CDC2; cell division cycle 2 protein isoform 1; Homo sapiens cell division cycle 2, G1 to S and G2 to M (CDC2), transcript variant 1, mRNA.
HSAP0406S00018445	NM_014431	chr10	71908582	71998211	KIAA1274; KIAA1274; Homo sapiens KIAA1274 (KIAA1274), mRNA.
HSAP0406S00019086	BC022348	chr10	118634298	118670969	KIAA1598; KIAA1598 protein; Homo sapiens KIAA1598, mRNA (cDNA clone IMAGE:4251340), complete cds.
HSAP0406S00019087	AB046818	chr10	118634297	118754550	KIAA1598; KIAA1598 protein; Homo sapiens mRNA for KIAA1598 protein, partial cds.
HSAP0406S00019088	NM_018330	chr10	118634297	118754866	KIAA1598; KIAA1598; Homo sapiens KIAA1598 (KIAA1598), mRNA.
HSAP0406S00019669	BX641032	chr11	9553663	9559591	DKFZp686I18166; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686I18166 (from clone DKFZp686I18166).
HSAP0406S00019674	BC011143	chr11	9756912	9762546	SBF2; SBF2 protein; Homo sapiens SET binding factor 2, mRNA (cDNA clone IMAGE:3451384), partial cds.
HSAP0406S00019675	BX538184	chr11	9756912	9767263	DKFZp686G24200; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686G24200 (from clone DKFZp686G24200).
HSAP0406S00019676	BC063656	chr11	9757276	9767308	SBF2; SBF2 protein; Homo sapiens SET binding factor 2, mRNA (cDNA clone IMAGE:5123552), partial cds.
HSAP0406S00019677	BC043389	chr11	9756905	9767345	SBF2; SBF2 protein; Homo sapiens SET binding factor 2, mRNA (cDNA clone IMAGE:5738099), partial cds.
HSAP0406S00019678	BC053867	chr11	9756915	9767379	SBF2; SBF2 protein; Homo sapiens SET binding factor 2, mRNA (cDNA clone IMAGE:5198438), partial cds.
HSAP0406S00019679	AL512756	chr11	9816181	9828211	DKFZp667L246; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp667L246 (from clone DKFZp667L246).
HSAP0406S00019680	AB051553	chr11	9816181	10172080	KIAA1766; KIAA1766 protein; Homo sapiens mRNA for KIAA1766 protein, partial cds.
HSAP0406S00019681	NM_030962	chr11	9756789	10272296	CMT4B2; SET binding factor 2; Homo sapiens Charcot-Marie-Tooth neuropathy 4B2 (autosomal recessive, with myelin outflowing) (CMT4B2), mRNA.
HSAP0406S00019867	NM_001584	chr11	30388349	30558616	C11orf8; chromosome 11 open reading frame 8; Homo sapiens chromosome 11 open reading frame 8 (C11orf8), mRNA.
HSAP0406S00019939	AK024275	chr11	36354163	36443091	Homo sapiens cDNA FLJ14213 fis, clone NT2RP3003572.
HSAP0406S00019940	NM_024841	chr11	36354130	36443329	FLJ14213; hypothetical protein FLJ14213; Homo sapiens hypothetical protein FLJ14213 (FLJ14213), mRNA.
HSAP0406S00019941	BC008922	chr11	36433414	36443799	Unknown (protein for MGC:16218); Homo sapiens cDNA clone MGC:16218 IMAGE:3659247, complete cds.
HSAP0406S00020006	NM_002391	chr11	46359859	46361950	MDK; midkine (neurite growth-promoting factor 2); Homo sapiens midkine (neurite growth-promoting factor 2) (MDK), mRNA.
HSAP0406S00020053	NM_031909	chr11	47567791	47572479	C1QTNF4; C1q and tumor necrosis factor related protein 4; Homo sapiens C1q and tumor necrosis factor related protein 4 (C1QTNF4), mRNA.
HSAP0406S00020147	BC029228	chr11	57169142	57173824	YPEL4; YPEL4 protein; Homo sapiens yippee-like 4 (<i>Drosophila</i>), mRNA (cDNA clone IMAGE:5172948), complete cds.
HSAP0406S00020294	BC021295	chr11	61861551	61916616	ASRGL1; ASRGL1 protein; Homo sapiens asparaginase like 1, mRNA (cDNA clone IMAGE:3937243), partial cds.
HSAP0406S00020295	NM_025080	chr11	61861540	61916616	ASRGL1; asparaginase-like 1 protein; Homo sapiens asparaginase like 1 (ASRGL1), mRNA.
HSAP0406S00020296	AK025969	chr11	61880371	61916616	Homo sapiens cDNA: FLJ22316 fis, clone HRC05262.
HSAP0406S00020297	BC064963	chr11	61861516	61916616	ASRGL1; ASRGL1 protein; Homo sapiens asparaginase like 1, mRNA (cDNA clone MGC:74544 IMAGE:6141919), complete cds.
HSAP0406S00020298	BC006267	chr11	61881032	61917458	ASRGL1; ASRGL1 protein; Homo sapiens asparaginase like 1, mRNA (cDNA clone IMAGE:3952485), complete cds.
HSAP0406S00020674	NM_015973	chr11	68208610	68215219	GAL; galanin preproprotein; Homo sapiens galanin (GAL), mRNA.
HSAP0406S00020675	AF077047	chr11	68214501	68215223	galanin-related peptide; Homo sapiens galanin-related peptide mRNA, complete cds.
HSAP0406S00020691	NM_053056	chr11	69165053	69178422	CCND1; cyclin D1; Homo sapiens cyclin D1 (PRAD1: parathyroid adenomatosis 1) (CCND1), mRNA.
HSAP0406S00020788	BC003046	chr11	73560004	73643394	PME-1; protein phosphatase methylesterase-1; Homo sapiens protein phosphatase methylesterase-1, mRNA (cDNA clone MGC:664 IMAGE:3536415), complete cds.
HSAP0406S00020789	AF118072	chr11	73572367	73573670	PRO1716; Homo sapiens PRO1716 mRNA, complete cds.
HSAP0406S00020790	AF111853	chr11	73619477	73643395	PRO0750; Homo sapiens PRO0750 mRNA, complete cds.
HSAP0406S00020791	AK123288	chr11	73627281	73643394	Homo sapiens cDNA FLJ41294 fis, clone BRAMY2039872, moderately similar to Homo sapiens protein phosphatase methylesterase-1 (PME-1) mRNA.
HSAP0406S00020792	AF193049	chr11	73627883	73643395	PP2593; unknown; Homo sapiens PP2593 mRNA, complete cds.
HSAP0406S00021240	BC018652	chr11	117212906	117252566	FXYD6; FXYP6 protein; Homo sapiens FXYP domain containing ion transport regulator 6, mRNA (cDNA clone MGC:2369 IMAGE:2822864), complete cds.
HSAP0406S00021242	NM_001558	chr11	117362318	117377404	IL10RA; interleukin 10 receptor, alpha precursor; Homo sapiens interleukin 10 receptor, alpha (IL10RA), mRNA.
HSAP0406S00021249	AK057590	chr11	117569890	117574604	Homo sapiens cDNA FLJ33028 fis, clone THYMU2000140.
HSAP0406S00021250	NM_153206	chr11	117569887	117589284	AMICA; adhesion molecule AMICA; Homo sapiens adhesion molecule AMICA (AMICA), mRNA.
HSAP0406S00021419	AK025195	chr11	124259324	124262884	Homo sapiens cDNA: FLJ21542 fis, clone COL06168.
HSAP0406S00021420	AK000805	chr11	124261491	124269058	Homo sapiens cDNA FLJ20798 fis, clone ADSU02031.
HSAP0406S00021421	AY358083	chr11	124259333	124272892	magic roundabout; Homo sapiens clone DNA41404 magic roundabout (UNQ421) mRNA, partial cds.
HSAP0406S00021422	AK074163	chr11	124259324	124272901	FLJ00236; FLJ00236 protein; Homo sapiens mRNA for FLJ00236 protein.
HSAP0406S00021423	BC064643	chr11	124259324	124272923	ROBO4; ROBO4 protein; Homo sapiens roundabout homolog 4, magic roundabout (<i>Drosophila</i>), mRNA (cDNA clone IMAGE:5770453), partial cds.
HSAP0406S00021676	NM_002286	chr12	6751930	6757880	LAG3; lymphocyte-activation protein 3 precursor; Homo sapiens lymphocyte-activation gene 3 (LAG3), mRNA.
HSAP0406S00021679	BC007918	chr12	6801294	6806844	GRCA; GRCA protein; Homo sapiens gene rich cluster, A gene, mRNA (cDNA clone IMAGE:4301475), partial cds.
HSAP0406S00021680	BC002353	chr12	6801130	6806844	GRCA; gene rich cluster, A, isoform 1; Homo sapiens gene rich cluster, A gene, transcript variant A-1, mRNA (cDNA clone MGC:8427 IMAGE:2821031), complete cds.
HSAP0406S00021681	NM_019858	chr12	6801223	6806844	GRCA; gene rich cluster, A isoform 2; Homo sapiens gene rich cluster, A gene (GRCA), transcript variant A-2, mRNA.

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HSAP0406S00021707	NM_0017733	chr12	7057771	7058863	C1R; complement component 1, r subcomponent; Homo sapiens complement component 1, r subcomponent (C1R), mRNA.
HSAP0406S00021716	NM_000319	chr12	7234223	7255342	PEX5; peroxisomal biogenesis factor 5; Homo sapiens peroxisomal biogenesis factor 5 (PEX5), mRNA.
HSAP0406S00021801	BC058035	chr12	10889716	10893341	PRR4; proline rich 4 (lacrimal); Homo sapiens proline rich 4 (lacrimal), mRNA (cDNA clone MGC:61943 IMAGE:6558043), complete cds.
HSAP0406S00021849	BC017854	chr12	13240986	13241985	EMP1; EMP1 protein; Homo sapiens epithelial membrane protein 1, mRNA (cDNA clone IMAGE:4691099), partial cds.
HSAP0406S00021850	NM_001423	chr12	13240923	13260974	EMP1; epithelial membrane protein 1; Homo sapiens epithelial membrane protein 1 (EMP1), mRNA.
HSAP0406S00021944	NM_005086	chr12	26239788	26277134	SSPN; sarcospan; Homo sapiens sarcospan (Kras oncogene-associated gene) (SSPN), mRNA.
HSAP0406S00022091	AF116673	chr12	45201593	45202571	PRO1925; Homo sapiens PRO1925 mRNA, complete cds.
HSAP0406S00022366	NM_020547	chr12	52103907	52111579	AMHR2; anti-Mullerian hormone receptor, type II; Homo sapiens anti-Mullerian hormone receptor, type II (AMHR2), mRNA.
HSAP0406S00022464	NM_201444	chr12	54612078	54634072	DGKA; diacylglycerol kinase, alpha 80kDa; Homo sapiens diacylglycerol kinase, alpha 80kDa (DGKA), transcript variant 1, mRNA.
HSAP0406S00022465	AK127093	chr12	54618309	54634065	Homo sapiens cDNA FLJ45150 fis, clone BRAWH3042438, highly similar to Diacylglycerol kinase, alpha (EC 2.7.1.107).
HSAP0406S00022551	AK055053	chr12	55909760	55914776	Homo sapiens cDNA FLJ30491 fis, clone BRAWH2000177, moderately similar to SERINE HYDROXYMETHYLTRANSFERASE, MITOCHONDRIAL PRECURSOR (EC 2.1.2.1).
HSAP0406S00022682	AF007130	chr12	66974613	66995111	unknown; Homo sapiens clone 23750 unknown mRNA, partial cds.
HSAP0406S00022683	NM_017440	chr12	66974612	67012379	MDM1; nuclear protein double minute 1; Homo sapiens nuclear protein double minute 1 (MDM1), mRNA.
HSAP0406S00022807	NM_001946	chr12	88244306	88248764	DUSP6; dual specificity phosphatase 6 isoform a; Homo sapiens dual specificity phosphatase 6 (DUSP6), transcript variant 1, mRNA.
HSAP0406S00022889	BC015117	chr12	99148513	99163221	DEPDC4; DEPDC4 protein; Homo sapiens DEP domain containing 4, mRNA (cDNA clone IMAGE:3684087), partial cds.
HSAP0406S00023119	NM_002535	chr12	111879114	111910781	OAS2; 2'-5'-oligoadenylate synthetase 2 isoform p69; Homo sapiens 2'-5'-oligoadenylate synthetase 2, 69/71kDa (OAS2), transcript variant 2, mRNA.
HSAP0406S00023445	AB046765	chr12	131677735	131772121	KIAA1545; KIAA1545 protein; Homo sapiens mRNA for KIAA1545 protein, partial cds.
HSAP0406S00023446	BC013284	chr12	131696549	131698882	Unknown (protein for IMAGE:4025174); Homo sapiens cDNA clone IMAGE:4025174, partial cds.
HSAP0406S00023447	AK096230	chr12	131739237	131741883	Homo sapiens cDNA FLJ38911 fis, clone NT2NE2007220.
HSAP0406S00023448	AF490258	chr12	131757397	131770714	XTP9; XTP9; Homo sapiens XTP9 (XTP9) mRNA, complete cds.
HSAP0406S00023581	NM_004119	chr13	27475752	27572703	FLT3; fms-related tyrosine kinase 3; Homo sapiens fms-related tyrosine kinase 3 (FLT3), mRNA.
HSAP0406S00023699	AF305819	chr13	42395346	42399079	PRO0777; Homo sapiens PRO0777 mRNA, complete cds.
HSAP0406S00023700	AL831953	chr13	42358524	42464365	DKFZp667P0410; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp667P0410 (from clone DKFZp667P0410).
HSAP0406S00023701	NM_001002264	chr13	42360121	42464377	EPST11; epithelial stromal interaction 1; Homo sapiens epithelial stromal interaction 1 (breast) (EPST11), mRNA.
HSAP0406S00023805	NM_000053	chr13	51404809	51483631	ATP7B; ATPase, Cu++ transporting, beta polypeptide; Homo sapiens ATPase, Cu++ transporting, beta polypeptide (Wilson disease) (ATP7B), mRNA.
HSAP0406S00023844	AL162044	chr13	66092849	66094536	DKFZp761L0812; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp761L0812 (from clone DKFZp761L0812); partial cds.
HSAP0406S00023845	AL834258	chr13	65774969	66700116	DKFZp761B047; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp761B047 (from clone DKFZp761B047).
HSAP0406S00023846	NM_203487	chr13	65774967	66702464	PCDH9; protocadherin 9 isoform 1 precursor; Homo sapiens protocadherin 9 (PCDH9), transcript variant 1, mRNA.
HSAP0406S00023912	NM_014305	chr13	94024276	94046484	TGDS; TDP-glucose 4,6-dehydratase; Homo sapiens TDP-glucose 4,6-dehydratase (TGDS), mRNA.
HSAP0406S00023921	AL049931	chr13	95031371	95040186	DKFZp564G1516; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp564G1516 (from clone DKFZp564G1516).
HSAP0406S00023922	NM_198968	chr13	95028457	95094945	DZIP1; DAZ interacting protein 1; Homo sapiens DAZ interacting protein 1 (DZIP1), mRNA.
HSAP0406S00023935	NM_178861	chr13	97626042	97627520	ZNF183L1; zinc finger protein 183-like 1; Homo sapiens zinc finger protein 183-like 1 (ZNF183L1), mRNA.
HSAP0406S00023936	NM_005766	chr13	97593434	97900022	FARP1; FERM, RhoGEF, and pleckstrin domain protein 1 isoform 1; Homo sapiens FERM, RhoGEF (ARHGEF) and pleckstrin domain protein 1 (chondrocyte-derived) (FARP1), transcript variant 1, mRNA.
HSAP0406S00023937	AK123565	chr13	97881411	97885252	Homo sapiens cDNA FLJ41571 fis, clone CTONG2009531.
HSAP0406S00023992	NM_002312	chr13	107657791	107665131	LIG4; DNA ligase IV; Homo sapiens ligase IV, DNA, ATP-dependent (LIG4), transcript variant 1, mRNA.
HSAP0406S00024072	NM_017905	chr13	113193310	113252507	C13orf11; chromosome 13 open reading frame 11; Homo sapiens chromosome 13 open reading frame 11 (C13orf11), mRNA.
HSAP0406S00024073	AF209505	chr13	113198322	113212707	putative LAG1-interacting protein; Homo sapiens putative LAG1-interacting protein mRNA, partial cds.
HSAP0406S00024074	AK074415	chr13	113200826	113252543	Homo sapiens cDNA FLJ23835 fis, clone KAlA2214.
HSAP0406S00024140	NM_198235	chr14	20339355	20340876	RNASE1; pancreatic ribonuclease precursor; Homo sapiens ribonuclease, RNase A family, 1 (pancreatic) (RNASE1), transcript variant 1, mRNA.
HSAP0406S00024141	NM_002935	chr14	20429401	20430347	RNASE3; ribonuclease, RNase A family, 3 (eosinophil cationic protein); Homo sapiens ribonuclease, RNase A family, 3 (eosinophil cationic protein) (RNASE3), mRNA.
HSAP0406S00024142	NM_002934	chr14	20493469	20494434	RNASE2; ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin); Homo sapiens ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin) (RNASE2), mRNA.
HSAP0406S00024331	NM_017769	chr14	30098127	30158797	KIAA1333; KIAA1333; Homo sapiens KIAA1333 (KIAA1333), mRNA.
HSAP0406S00024332	AK022867	chr14	30144522	30156805	Homo sapiens cDNA FLJ12805 fis, clone NT2RP2002231.
HSAP0406S00024361	NM_022073	chr14	33463172	33490037	EGLN3; egl nine homolog 3; Homo sapiens egl nine homolog 3 (C. elegans) (EGLN3), mRNA.
HSAP0406S00024362	BC064924	chr14	33464478	33489995	EGLN3; EGLN3 protein; Homo sapiens egl nine homolog 3 (C. elegans), mRNA (cDNA clone IMAGE:6141425), partial cds.
HSAP0406S00024399	NM_030631	chr14	36218828	36711616	SLC25A21; solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21; Homo sapiens solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21 (SLC25A21), mRNA.
HSAP0406S00024445	BX248298	chr14	49135421	49151089	human full-length cDNA clone CSODK007YE23 of HeLa cells of Homo sapiens (human).
HSAP0406S00024446	NM_152329	chr14	49135164	49151139	PPIL5; peptidylprolyl isomerase (cyclophilin)-like 5 isoform 1; Homo sapiens peptidylprolyl isomerase (cyclophilin)-like 5 (PPIL5), transcript variant 1, mRNA.
HSAP0406S00024600	NM_006255	chr14	60858267	61087449	PRKCH; protein kinase C, eta; Homo sapiens protein kinase C, eta (PRKCH), mRNA.
HSAP0406S00024601	BC001000	chr14	61086426	61087443	PRKCH; protein kinase C, eta; Homo sapiens protein kinase C, eta, mRNA (cDNA clone IMAGE:3048775), complete cds.
HSAP0406S00024616	NM_030791	chr14	63220688	63264509	SGPPP1; sphingosine-1-phosphatase; Homo sapiens sphingosine-1-phosphate phosphatase 1 (SGPPP1), mRNA.

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HSAP0406S00025131	NM_003836	chr14	100263005	100271210	DLK1; delta-like homolog; Homo sapiens delta-like 1 homolog (Drosophila) (DLK1), mRNA.
HSAP0406S00025289	BX161420	chr14	105391393	105393825	human full-length cDNA clone CS0DD006YL02 of Neuroblastoma of Homo sapiens (human).
HSAP0406S00025291	AF161538	chr14	105427024	105459570	HSPC053; Homo sapiens HSPC053 mRNA, complete cds.
HSAP0406S00025292	AK090461	chr14	105375698	105442448	FLJ00382; FLJ00382 protein; Homo sapiens mRNA for FLJ00382 protein.
HSAP0406S00025293	NM_014792	chr14	105461656	105469554	KIAA0125; KIAA0125 gene product; Homo sapiens KIAA0125 (KIAA0125), mRNA.
HSAP0406S00025294	AF035040	chr14	105401842	105476931	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone S3F5H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025295	AF035039	chr14	105401470	105476958	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone B5G5G4H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025296	AF035019	chr14	105401842	105524008	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone B2C2G4H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025301	BC011857	chr14	105389084	105549606	IGHM; IGHM protein; Homo sapiens immunoglobulin heavy constant mu, mRNA (cDNA clone MGC:20337 IMAGE:4309235), complete cds.
HSAP0406S00025303	X17115	chr14	105389084	105610595	Human mRNA for IgM heavy chain complete sequence.
HSAP0406S00025304	AF035027	chr14	105402662	105623563	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone S12G10H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025305	BC021276	chr14	105374144	105623822	Unknown (protein for MGC:29633); Homo sapiens cDNA clone MGC:29633 IMAGE:4855067, complete cds.
HSAP0406S00025309	AF035026	chr14	105401470	105681657	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone MCB11H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025312	AB049915	chr14	105738625	105738919	single chain Fv fragment; Homo sapiens mRNA for single chain Fv fragment, partial cds.
HSAP0406S00025316	BC015760	chr14	105391368	105796758	IGHM; IGHM protein; Homo sapiens immunoglobulin heavy constant mu, mRNA (cDNA clone MGC:23134 IMAGE:4878806), complete cds.
HSAP0406S00025317	AF035802	chr14	105828697	105828988	rheumatoid factor RF-ET13; Homo sapiens rheumatoid factor RF-ET13 mRNA, partial cds.
HSAP0406S00025320	AF035021	chr14	105862052	105862340	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone B4E9F5H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025324	AF035024	chr14	105401470	105887059	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone MCE11H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025327	BC006180	chr14	105391373	105901096	IGHM; IGHM protein; Homo sapiens immunoglobulin heavy constant mu, mRNA (cDNA clone MGC:1905 IMAGE:3528484), complete cds.
HSAP0406S00025328	BC019235	chr14	105389084	105901095	Unknown (protein for MGC:2374); Homo sapiens cDNA clone MGC:2374 IMAGE:2963274, complete cds.
HSAP0406S00025330	AF035043	chr14	105401842	105997529	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone FD2H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025331	BX248748	chr14	106009518	106022574	human full-length cDNA 5-PRIME end of clone CS0DA002YL09 of Neuroblastoma of Homo sapiens (human).
HSAP0406S00025332	BX161407	chr14	106015817	106022574	human full-length cDNA clone CS0DC020YC12 of Neuroblastoma of Homo sapiens (human).
HSAP0406S00025333	BC009851	chr14	105389084	106034411	IGHM; IGHM protein; Homo sapiens immunoglobulin heavy constant mu, mRNA (cDNA clone MGC:15420 IMAGE:4054579), complete cds.
HSAP0406S00025334	AF035022	chr14	105401470	106038386	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone MC56H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025336	AF035023	chr14	105401844	106065152	myosin-reactive immunoglobulin heavy chain variable region; Homo sapiens clone MCA1H myosin-reactive immunoglobulin heavy chain variable region mRNA, partial cds.
HSAP0406S00025449	NM_001036	chr15	31390468	31945594	RYR3; ryanodine receptor 3; Homo sapiens ryanodine receptor 3 (RYR3), mRNA.
HSAP0406S00025450	AK097920	chr15	31656934	31658711	Homo sapiens cDNA FLJ40601 fis, clone THYMU2011447.
HSAP0406S00025635	AB037721	chr15	40769707	40800347	KIAA1300; KIAA1300 protein; Homo sapiens mRNA for KIAA1300 protein, partial cds.
HSAP0406S00025636	AK124695	chr15	40795026	40799142	Homo sapiens cDNA FLJ42705 fis, clone BRAMY3006297.
HSAP0406S00025763	BC057236	chr15	47938488	47956019	ATP8B4; ATP8B4 protein; Homo sapiens ATPase, Class I, type 8B, member 4, mRNA (cDNA clone IMAGE:6668549), partial cds.
HSAP0406S00025764	AK128602	chr15	47974380	47981772	Homo sapiens cDNA FLJ46761 fis, clone TRACH3024081, moderately similar to Potential phospholipid-transporting ATPase ID (EC 3.6.3.13).
HSAP0406S00025765	AB075819	chr15	47937727	48192805	KIAA1939; KIAA1939 protein; Homo sapiens mRNA for KIAA1939 protein.
HSAP0406S00025766	NM_024837	chr15	47937726	48198711	ATP8B4; ATPase class I type 8B member 4; Homo sapiens ATPase, Class I, type 8B, member 4 (ATP8B4), mRNA.
HSAP0406S00025800	AF161352	chr15	50300660	50316997	HSPC089; Homo sapiens HSPC089 mRNA, partial cds.
HSAP0406S00025801	L29144	chr15	50355053	50355152	myosin; Homo sapiens myosin mRNA, partial cds.
HSAP0406S00025802	NM_018728	chr15	50271811	50375144	MYO5C; myosin VC; Homo sapiens myosin VC (MYO5C), mRNA.
HSAP0406S00025938	NM_182703	chr15	63001178	63038085	LOC348094; hypothetical protein LOC348094; Homo sapiens hypothetical protein LOC348094 (LOC348094), mRNA.
HSAP0406S00026076	NM_033028	chr15	70765587	70817869	BBS4; Bardet-Biedl syndrome 4; Homo sapiens Bardet-Biedl syndrome 4 (BBS4), mRNA.
HSAP0406S00026182	NM_003978	chr15	75074608	75116726	PSTPIP1; proline-serine-threonine phosphatase interacting protein 1; Homo sapiens proline-serine-threonine phosphatase interacting protein 1 (PSTPIP1), mRNA.
HSAP0406S00026260	NM_004513	chr15	79374521	79392156	IL16; interleukin 16 isoform 1 proprotein; Homo sapiens interleukin 16 (lymphocyte chemoattractant factor) (IL16), transcript variant 1, mRNA.
HSAP0406S00026263	AL136778	chr15	80121938	80123357	DKFZp434J0617; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434J0617 (from clone DKFZp434J0617).
HSAP0406S00026389	NM_001150	chr15	88129130	88150938	ANPEP; membrane alanine aminopeptidase precursor; Homo sapiens alanyl (membrane) aminopeptidase (aminopeptidase N, aminopeptidase M, microsomal aminopeptidase, CD13, p150) (ANPEP), mRNA.
HSAP0406S00026798	AK095412	chr16	3651287	3654064	Homo sapiens cDNA FLJ38093 fis, clone CTONG2027361.

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HSAP0406S00026799	AK098732	chr16	3665411	3667061	Homo sapiens cDNA FLJ25866 fis, clone CBR01987.
HSAP0406S00026800	BC001455	chr16	3648045	3707497	TRAP1; TRAP1 protein; Homo sapiens TNF receptor-associated protein 1, mRNA (cDNA clone IMAGE:3138548), partial cds.
HSAP0406S00026801	AK093344	chr16	3648039	3707573	Homo sapiens cDNA FLJ36025 fis, clone TEST12016701, highly similar to TUMOR NECROSIS FACTOR TYPE 1 RECEPTOR ASSOCIATED PROTEIN.
HSAP0406S00026836	AF217521	chr16	4793205	4794788	uncharacterized bone marrow protein BM045; Homo sapiens uncharacterized bone marrow protein BM045 mRNA, complete cds.
HSAP0406S00026837	BC064940	chr16	4793910	4837273	N-PAC; N-PAC protein; Homo sapiens cytokine-like nuclear factor n-pac, mRNA (cDNA clone MGC:70426 IMAGE:5787345), complete cds.
HSAP0406S00026838	BC003693	chr16	4794935	4836212	Similar to RIKEN cDNA 3930401K13 gene; Homo sapiens, Similar to RIKEN cDNA 3930401K13 gene, clone IMAGE:3454556, mRNA, partial cds.
HSAP0406S00026839	NM_032569	chr16	4793205	4837285	N-PAC; cytokine-like nuclear factor n-pac; Homo sapiens cytokine-like nuclear factor n-pac (N-PAC), mRNA.
HSAP0406S00027389	NM_016633	chr16	31446721	31447624	ERAF; erythroid associated factor; Homo sapiens erythroid associated factor (ERAF), mRNA.
HSAP0406S00027421	AK027478	chr16	45673205	45675194	Homo sapiens cDNA FLJ14572 fis, clone NT2RM4000717.
HSAP0406S00027422	AK027630	chr16	45672942	45700931	Homo sapiens cDNA FLJ14724 fis, clone NT2RP3001716.
HSAP0406S00027423	AL834404	chr16	45673205	45720646	DKFZp547L153; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp547L153 (from clone DKFZp547L153).
HSAP0406S00027424	BX538063	chr16	45674240	45720766	DKFZp686N19198; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp686N19198 (from clone DKFZp686N19198).
HSAP0406S00027425	NM_018092	chr16	45672942	45735409	NETO2; neuropilin- and tolloid-like protein 2 precursor; Homo sapiens neuropilin (NRP) and tolloid (TLL)-like 2 (NETO2), mRNA.
HSAP0406S00027488	NM_004530	chr16	54070603	54097652	MMP2; matrix metalloproteinase 2 preproprotein; Homo sapiens matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) (MMP2), mRNA.
HSAP0406S00027737	NM_004360	chr16	67328695	67426945	CDH1; cadherin 1, type 1 preproprotein; Homo sapiens cadherin 1, type 1, E-cadherin (epithelial) (CDH1), mRNA.
HSAP0406S00028291	AK001683	chr17	3872459	3912841	Homo sapiens cDNA FLJ10821 fis, clone NT2RP4001057.
HSAP0406S00028298	NM_182538	chr17	4283967	4338247	MGC29671; hypothetical protein MGC29671; Homo sapiens hypothetical protein MGC29671 (MGC29671), mRNA.
HSAP0406S00028299	BC023646	chr17	4284015	4338247	MGC29671; MGC29671 protein; Homo sapiens hypothetical protein MGC29671, mRNA (cDNA clone MGC:29671 IMAGE:5087991), complete cds.
HSAP0406S00028528	BC028212	chr17	8722958	8809745	PIK3R5; PIK3R5 protein; Homo sapiens phosphoinositide-3-kinase, regulatory subunit 5, p101, mRNA (cDNA clone MGC:39947 IMAGE:5215094), complete cds.
HSAP0406S00028529	NM_014308	chr17	8724137	8756559	PIK3R5; phosphoinositide-3-kinase, regulatory subunit 5, p101; Homo sapiens phosphoinositide-3-kinase, regulatory subunit 5, p101 (PIK3R5), mRNA.
HSAP0406S00028713	BC062415	chr17	19227569	19230746	MFAP4; microfibrillar-associated protein 4; Homo sapiens microfibrillar-associated protein 4, mRNA (cDNA clone MGC:70468 IMAGE:6187998), complete cds.
HSAP0406S00028714	NM_002404	chr17	19227348	19231086	MFAP4; microfibrillar-associated protein 4; Homo sapiens microfibrillar-associated protein 4 (MFAP4), mRNA.
HSAP0406S00028715	L38486	chr17	19227382	19231065	MFAP4; microfibril-associated glycoprotein 4; Human microfibril-associated glycoprotein 4 (MFAP4) mRNA, 3' end of cds.
HSAP0406S00028994	NM_002985	chr17	31222609	31231490	CCL5; small inducible cytokine A5 precursor; Homo sapiens chemokine (C-C motif) ligand 5 (CCL5), mRNA.
HSAP0406S00029136	NM_001838	chr17	35963549	35975250	CCR7; chemokine (C-C motif) receptor 7 precursor; Homo sapiens chemokine (C-C motif) receptor 7 (CCR7), mRNA.
HSAP0406S00029321	BC035701	chr17	39201280	39211829	DUSP3; DUSP3 protein; Homo sapiens dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related), mRNA (cDNA clone MGC:46177 IMAGE:5550536), complete cds.
HSAP0406S00029356	J02963	chr17	39807604	39809078	ITGA2B; Human platelet glycoprotein IIb mRNA, 3' end.
HSAP0406S00029357	NM_000419	chr17	39805075	39822399	ITGA2B; integrin alpha 2b precursor; Homo sapiens integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B) (ITGA2B), mRNA.
HSAP0406S00029406	BC029634	chr17	40827057	40828355	ARHGAP27; ARHGAP27 protein; Homo sapiens Rho GTPase activating protein 27, mRNA (cDNA clone IMAGE:4748060), partial cds.
HSAP0406S00029407	NM_199282	chr17	40827057	40858780	ARHGAP27; Rho GTPase activating protein 27; Homo sapiens Rho GTPase activating protein 27 (ARHGAP27), mRNA.
HSAP0406S00029455	NM_001002841	chr17	42641426	42656043	MYL4; atrial/embryonic alkali myosin light chain; Homo sapiens myosin, light polypeptide 4, alkali; atrial, embryonic (MYL4), transcript variant 1, mRNA.
HSAP0406S00029456	M20641	chr17	42654042	42656044	MYL1; Human alkali myosin light chain (AMLC) encoding GT-1 protein, partial cds.
HSAP0406S00029457	AF116676	chr17	42641763	42656044	PRO1957; Homo sapiens PRO1957 mRNA, complete cds.
HSAP0406S00029495	BC010732	chr17	44034851	44038771	LOC404266; LOC404266 protein; Homo sapiens hypothetical LOC404266, mRNA (cDNA clone MGC:10077 IMAGE:3896690), complete cds.
HSAP0406S00029612	NM_002126	chr17	50697374	50755886	HLF; hepatic leukemia factor; Homo sapiens hepatic leukemia factor (HLF), mRNA.
HSAP0406S00029613	M95586	chr17	50753020	50755887	E2A/HLF; E2A/HLF fusion protein; Human E2A/HLA fusion protein (E2A/HLF) mRNA, complete cds.
HSAP0406S00029620	BC034027	chr17	52026273	52027546	NOG; noggin, precursor; Homo sapiens noggin, mRNA (cDNA clone MGC:23903 IMAGE:4737725), complete cds.
HSAP0406S00029735	U06715	chr17	58864308	58869042	B561; HCYTO B561; Human cytochrome B561, HCYTO B561, mRNA, partial cds.
HSAP0406S00029736	NM_001915	chr17	58864160	58877395	CYB561; cytochrome b-561; Homo sapiens cytochrome b-561 (CYB561), mRNA.
HSAP0406S00029775	NM_000626	chr17	59359831	59363446	CD79B; CD79B antigen isoform 1 precursor; Homo sapiens CD79B antigen (immunoglobulin-associated beta) (CD79B), transcript variant 1, mRNA.
HSAP0406S00029881	AK001694	chr17	68845689	68893593	Homo sapiens cDNA FLJ10832 fis, clone NT2RP4001150, weakly similar to NG-CAM RELATED CELL ADHESION MOLECULE PRECURSOR.
HSAP0406S00029882	AL137357	chr17	68845648	68906164	DKFZp434B2226; hypothetical protein; Homo sapiens mRNA; cDNA DKFZp434B2226 (from clone DKFZp434B2226); partial cds.
HSAP0406S00029883	BC045763	chr17	68845687	68909875	SDK2; SDK2 protein; Homo sapiens sidekick homolog 2 (chicken), mRNA (cDNA clone IMAGE:5501394), partial cds.
HSAP0406S00029884	AB040947	chr17	68865103	68945503	KIAA1514; KIAA1514 protein; Homo sapiens mRNA for KIAA1514 protein, partial cds.
HSAP0406S00029885	NM_019064	chr17	68845406	68945808	SDK2; sidekick 2; Homo sapiens sidekick homolog 2 (chicken) (SDK2), mRNA.
HSAP0406S00030021	AK055949	chr17	71651450	71669619	Homo sapiens cDNA FLJ31387 fis, clone NT2NE1000018, weakly similar to SUPPRESSOR PROTEIN SRP40.
HSAP0406S00030022	BC004231	chr17	71651450	71674791	RNF157; RNF157 protein; Homo sapiens ring finger protein 157, mRNA (cDNA clone IMAGE:3603836), partial cds.

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HSAP0406S00030023	AK091467	chr17	71652015	71747868	Homo sapiens cDNA FLJ34148 fis, clone FCBBF3012546.
HSAP0406S00030024	AB067504	chr17	71651450	71747985	KIAA1917; KIAA1917 protein; Homo sapiens mRNA for KIAA1917 protein, partial cds.
HSAP0406S00030046	AK000113	chr17	72132433	72136873	Homo sapiens cDNA FLJ20106 fis, clone COL04830.
HSAP0406S00030047	NM_018414	chr17	72132441	72151327	SIAT7A; GalNAc alpha-2, 6-sialyltransferase I; Homo sapiens sialyltransferase 7 ((alpha-N-acetylneuraminy-2,3-beta-galactosyl-1,3)-N-acetyl galactosaminide alpha-2,6-sialyltransferase) A (SIAT7A), mRNA.
HSAP0406S00030216	NM_017921	chr17	77134358	77214493	NPL4; nuclear protein localization 4; Homo sapiens nuclear protein localization 4 (NPL4), mRNA.
HSAP0406S00030331	NM_001117	chr18	895386	901050	ADCYAP1; adenylate cyclase activating polypeptide precursor; Homo sapiens adenylate cyclase activating polypeptide 1 (pituitary) (ADCYAP1), mRNA.
HSAP0406S00030402	NM_022068	chr18	10660859	10687814	FAM38B; family with sequence similarity 38, member B; Homo sapiens family with sequence similarity 38, member B (FAM38B), mRNA.
HSAP0406S00030520	NM_198991	chr18	22288874	22474306	KCTD1; potassium channel tetramerisation domain containing 1; Homo sapiens potassium channel tetramerisation domain containing 1 (KCTD1), mRNA.
HSAP0406S00030647	NM_005904	chr18	44700221	44731079	SMAD7; MAD, mothers against decapentaplegic homolog 7; Homo sapiens SMAD, mothers against DPP homolog 7 (Drosophila) (SMAD7), mRNA.
HSAP0406S00030687	M74720	chr18	51169184	51219881	SEF2-1D; SEF2-1D protein; Human SEF2-1D protein (SEF2-1D) mRNA, partial cds.
HSAP0406S00030688	NM_003199	chr18	51045966	51406441	TCF4; transcription factor 4 isoform b; Homo sapiens transcription factor 4 (TCF4), mRNA.
HSAP0406S00031390	NM_022377	chr19	10258679	10260198	ICAM4; intercellular adhesion molecule 4 isoform 2 precursor; Homo sapiens intercellular adhesion molecule 4, Landsteiner-Wiener blood group (ICAM4), transcript variant 2, mRNA.
HSAP0406S00031497	NM_001004314	chr19	12064077	12086499	FLJ46419; FLJ46419 protein; Homo sapiens FLJ46419 protein (FLJ46419), mRNA.
HSAP0406S00031498	AK128282	chr19	12083668	12086567	Homo sapiens cDNA FLJ46419 fis, clone THYMU3012983, moderately similar to Homo sapiens zinc finger protein 14 (KOX 6) (ZNF14).
HSAP0406S00031544	NM_006563	chr19	12856238	12859017	KLF1; Kruppel-like factor 1 (erythroid); Homo sapiens Kruppel-like factor 1 (erythroid) (KLF1), mRNA.
HSAP0406S00031679	NM_016270	chr19	16296650	16299337	KLF2; Kruppel-like factor; Homo sapiens Kruppel-like factor 2 (lung) (KLF2), mRNA.
HSAP0406S00031705	BC029361	chr19	17198012	17201021	FLJ22709; hypothetical protein FLJ22709; Homo sapiens hypothetical protein FLJ22709, mRNA (cDNA clone MGC:32535 IMAGE:4064124), complete cds.
HSAP0406S00031706	BC004121	chr19	17198548	17201023	FLJ22709; FLJ22709 protein; Homo sapiens hypothetical protein FLJ22709, mRNA (cDNA clone IMAGE:3927742), complete cds.
HSAP0406S00032000	X87248	chr19	38482692	38485046	HP8; HP8 peptide; H.sapiens mRNA for HP8 protein.
HSAP0406S00032114	AF118081	chr19	41252982	41253812	PRO1900; Homo sapiens PRO1900 mRNA, complete cds.
HSAP0406S00032186	NM_033256	chr19	43433718	43439012	PPP1R14A; protein phosphatase 1, regulatory (inhibitor) subunit 14A; Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 14A (PPP1R14A), mRNA.
HSAP0406S00032348	NM_030622	chr19	46390954	46405283	CYP2S1; cytochrome P450, family 2, subfamily S, polypeptide 1; Homo sapiens cytochrome P450, family 2, subfamily S, polypeptide 1 (CYP2S1), mRNA.
HSAP0406S00032511	NM_000041	chr19	50100878	50104489	APOE; apolipoprotein E precursor; Homo sapiens apolipoprotein E (APOE), mRNA.
HSAP0406S00032512	X00199	chr19	50103002	50104110	Human mRNA fragment for apolipoprotein E (apo E).
HSAP0406S00032513	BC055093	chr19	50109418	50114437	APOC1; apolipoprotein C-I, precursor; Homo sapiens apolipoprotein C-I, mRNA (cDNA clone MGC:62029 IMAGE:6567705), complete cds.
HSAP0406S00032558	AK098798	chr19	50722524	50779940	Homo sapiens cDNA FLJ25932 fis, clone CBR05617.
HSAP0406S00032891	NM_001772	chr19	56420174	56435084	CD33; CD33 antigen (gp67); Homo sapiens CD33 antigen (gp67) (CD33), mRNA.
HSAP0406S00033035	AF283986	chr19	59470017	59476753	LILRB2; leukocyte immunoglobulin-like receptor-2; Homo sapiens leukocyte immunoglobulin-like receptor-2 (LILRB2) mRNA, LILRB2-v1 allele, complete cds.
HSAP0406S00033036	BC025766	chr19	59470133	59476764	LILRB2; LILRB2 protein; Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 2, mRNA (cDNA clone MGC:34452 IMAGE:5205611), complete cds.
HSAP0406S00033055	NM_006866	chr19	59777070	59790833	LILRA2; leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2; Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2), mRNA.
HSAP0406S00033088	BC064806	chr19	60109332	60119319	NCR1; NCR1 protein; Homo sapiens natural cytotoxicity triggering receptor 1, mRNA (cDNA clone MGC:65100 IMAGE:5218848), complete cds.
HSAP0406S00033279	NM_138781	chr19	63508554	63518823	LOC113386; similar to envelope protein; Homo sapiens similar to envelope protein (LOC113386), mRNA.
HSAP0406S00033280	BC011670	chr19	63508551	63518379	LOC113386; LOC113386 protein; Homo sapiens similar to envelope protein, mRNA (cDNA clone MGC:16737 IMAGE:4129886), complete cds.
HSAP0406S00033347	AK126932	chr20	1249353	1253011	Homo sapiens cDNA FLJ44985 fis, clone BRAWH3005037.
HSAP0406S00033401	NM_000915	chr20	3000265	3001162	OXT; oxytocin-neurophysin I preproprotein; Homo sapiens oxytocin, prepro- (neurophysin I) (OXT), mRNA.
HSAP0406S00033735	NM_006404	chr20	33223434	33228826	PROCR; endothelial protein C receptor precursor; Homo sapiens protein C receptor, endothelial (EPCR) (PROCR), mRNA.
HSAP0406S00033787	NM_015474	chr20	34954058	35013590	SAMHD1; SAM domain- and HD domain-containing protein 1; Homo sapiens SAM domain and HD domain 1 (SAMHD1), mRNA.
HSAP0406S00033922	BC050736	chr20	43874671	43878997	UBE2C; ubiquitin-conjugating enzyme E2C, isoform 1; Homo sapiens ubiquitin-conjugating enzyme E2C, transcript variant 1, mRNA (cDNA clone MGC:60380 IMAGE:6503915), complete cds.
HSAP0406S00033923	NM_181802	chr20	43874661	43879001	UBE2C; ubiquitin-conjugating enzyme E2C isoform 4; Homo sapiens ubiquitin-conjugating enzyme E2C (UBE2C), transcript variant 5, mRNA.
HSAP0406S00033924	NM_003279	chr20	43885263	43889360	TNNC2; fast skeletal muscle troponin C; Homo sapiens troponin C2, fast (TNNC2), mRNA.
HSAP0406S00034029	BC016044	chr20	49646723	49648892	Unknown (protein for IMAGE:4549698); Homo sapiens, clone IMAGE:4549698, mRNA, partial cds.
HSAP0406S00034030	AB014511	chr20	49646723	49818274	KIAA0611; KIAA0611 protein; Homo sapiens mRNA for KIAA0611 protein, partial cds.
HSAP0406S00034236	BC036837	chr20	62185176	62186156	Unknown (protein for MGC:46433); Homo sapiens cDNA clone MGC:46433 IMAGE:5173095, complete cds.
HSAP0406S00034237	BC038433	chr20	62186812	62202435	OPRL1; OPRL1 protein; Homo sapiens opiate receptor-like 1, mRNA (cDNA clone MGC:34578 IMAGE:5164017), complete cds.

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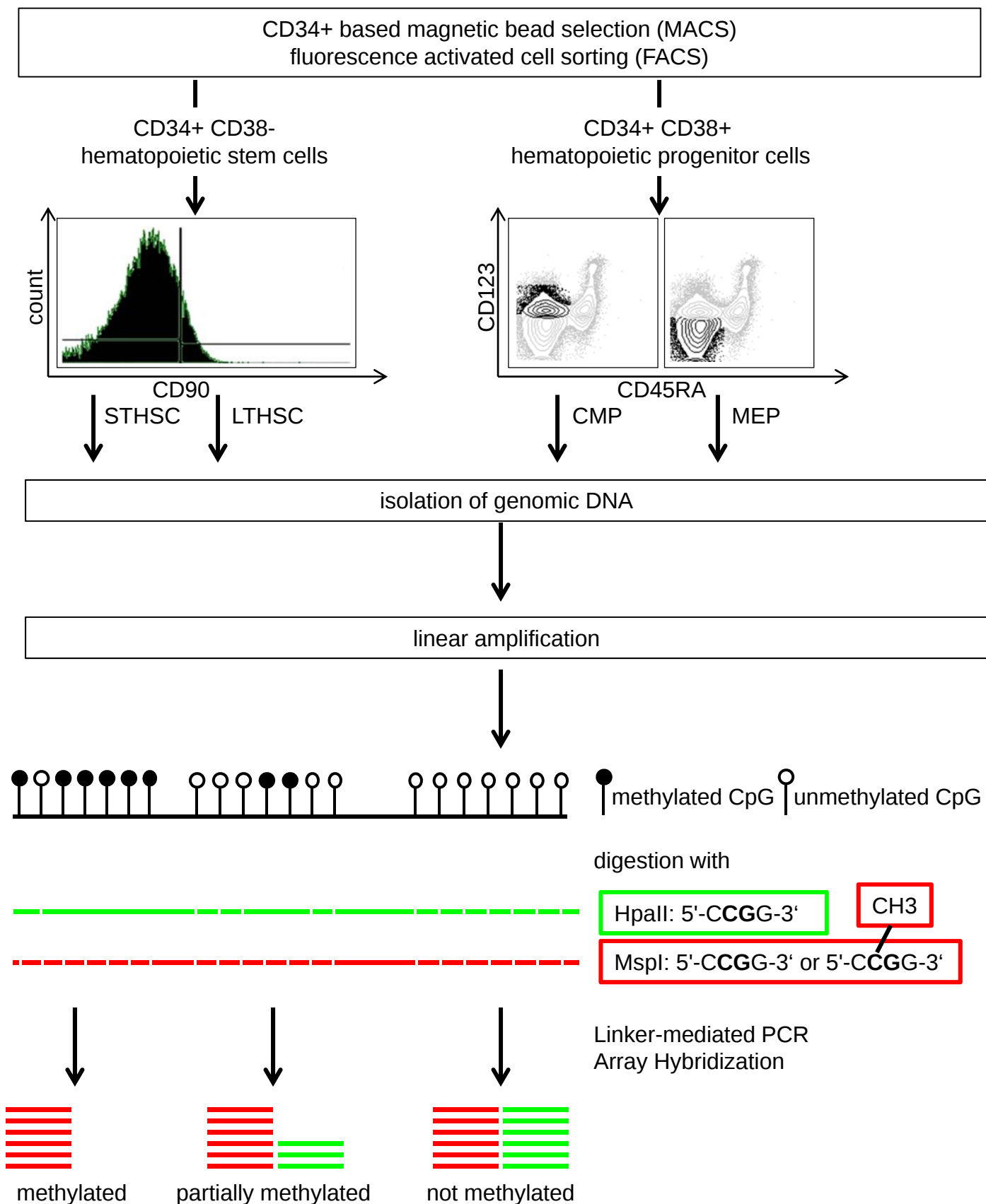
HSAP0406S00034238	AF115266	chr20	62194502	62200617	KOR-3A splice variant; Homo sapiens KOR-3A splice variant mRNA, complete cds.
HSAP0406S00034268	NM_001338	chr21	17807200	17861135	CXADR; coxsackie virus and adenovirus receptor precursor; Homo sapiens coxsackie virus and adenovirus receptor (CXADR), mRNA.
HSAP0406S00034395	NM_172201	chr21	34658192	34665310	KCNE2; potassium voltage-gated channel, Isk-related family, member 2; Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNE2), mRNA.
HSAP0406S00034478	AK093008	chr21	41725510	41753006	Homo sapiens cDNA FLJ35689 fis, clone SPLEN2019379, highly similar to INTERFERON-REGULATED RESISTANCE GTP-BINDING PROTEIN MXA.
HSAP0406S00034479	NM_002462	chr21	41720023	41753008	MX1; myxovirus resistance protein 1; Homo sapiens myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse) (MX1), mRNA.
HSAP0406S00034480	BC014222	chr21	41729778	41753008	MX1; MX1 protein; Homo sapiens myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse), mRNA (cDNA clone IMAGE:4336669), partial cds.
HSAP0406S00034481	AY186254	chr21	41744986	41746612	MxA; Homo sapiens MxA mRNA, partial cds.
HSAP0406S00034831	BC006248	chr22	20321153	20323141	stromal cell-derived factor 2-like 1; Homo sapiens stromal cell-derived factor 2-like 1, mRNA (cDNA clone MGC:10722 IMAGE:3946057), complete cds.
HSAP0406S00034836	AK026838	chr22	20606896	20609017	Homo sapiens cDNA: FLJ23185 fis, clone LNG11762.
HSAP0406S00034837	NM_014634	chr22	20598346	20631771	PPM1F; protein phosphatase 1F; Homo sapiens protein phosphatase 1F (PP2C domain containing) (PPM1F), mRNA.
HSAP0406S00034838	D13640	chr22	20598353	20631763	KIAA0015; Homo sapiens KIAA0015 mRNA, partial cds.
HSAP0406S00034978	NM_002430	chr22	26468819	26522040	MN1; meningioma 1; Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA.
HSAP0406S00035041	NM_012429	chr22	29117486	29144382	SEC14L2; SEC14-like 2; Homo sapiens SEC14-like 2 (S. cerevisiae) (SEC14L2), mRNA.
HSAP0406S00035042	AB051445	chr22	29134364	29141223	KIAA1658; KIAA1658 protein; Homo sapiens mRNA for KIAA1658 protein, partial cds.
HSAP0406S00035064	NM_080430	chr22	29825316	29828105	SELM; selenoprotein M precursor; Homo sapiens selenoprotein M (SELM), mRNA.
HSAP0406S00035151	NM_000395	chr22	35642721	35659318	CSF2RB; colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage); Homo sapiens colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) (CSF2RB), mRNA.
HSAP0406S00035154	NM_003312	chr22	35731406	35739991	TST; thiosulfate sulfurtransferase; Homo sapiens thiosulfate sulfurtransferase (rhodanese) (TST), nuclear gene encoding mitochondrial protein, mRNA.
HSAP0406S00035166	AK024428	chr22	36003069	36035880	FLJ00017; FLJ00017 protein; Homo sapiens mRNA for FLJ00017 protein, partial cds.
HSAP0406S00035167	NM_013385	chr22	36002923	36035880	PSCD4; pleckstrin homology, Sec7 and coiled/coil domains 4; Homo sapiens pleckstrin homology, Sec7 and coiled-coil domains 4 (PSCD4), mRNA.
HSAP0406S00035168	AK002145	chr22	36021511	36035880	Homo sapiens cDNA FLJ11283 fis, clone PLACE1009524, moderately similar to ARF NUCLEOTIDE-BINDING SITE OPENER.
HSAP0406S00035193	AK123190	chr22	36528444	36537683	Homo sapiens cDNA FLJ41196 fis, clone BRACE2045772, highly similar to 2-AMINO-3-KETO BUTYRATE COENZYME A LIGASE, MITOCHONDRIAL PRECURSOR (EC 2.3.1.29).
HSAP0406S00035439	NM_017911	chr22	44026351	44057180	C22orf8; chromosome 22 open reading frame 8; Homo sapiens chromosome 22 open reading frame 8 (C22orf8), mRNA.
HSAP0406S00035770	NM_021083	chrX	37301324	37347594	XK; McLeod syndrome-associated, Kell blood group protein; Homo sapiens Kell blood group precursor (McLeod phenotype) (XK), mRNA.
HSAP0406S00035899	NM_002049	chrX	48401209	48408964	GATA1; GATA binding protein 1; Homo sapiens GATA binding protein 1 (globin transcription factor 1) (GATA1), mRNA.
HSAP0406S00035976	AF320908	chrX	51638699	51640838	MAGED4; MAGE-D4; Homo sapiens MAGE-D4 (MAGED4) mRNA, partial cds.
HSAP0406S00035977	BC001207	chrX	51637960	51645351	MAGED4; MAGE-D4 protein; Homo sapiens melanoma antigen, family D, 4, mRNA (cDNA clone IMAGE:3502168), complete cds.
HSAP0406S00035978	AB040529	chrX	51637958	51645315	MAGE-E1c; Homo sapiens MAGE-E1c mRNA, complete cds.
HSAP0406S00035981	AF320908	chrX	51765520	51767659	MAGED4; MAGE-D4; Homo sapiens MAGE-D4 (MAGED4) mRNA, partial cds.
HSAP0406S00036196	NM_006639	chrX	77334275	77389232	CYSLTR1; cysteinyl leukotriene receptor 1; Homo sapiens cysteinyl leukotriene receptor 1 (CYSLTR1), mRNA.
HSAP0406S00036298	AF063606	chrX	101186854	101188828	brain my048 protein; Homo sapiens brain my048 protein mRNA, complete cds.
HSAP0406S00036309	NM_001004051	chrX	101773484	101778805	GPRASP2; G protein-coupled receptor associated sorting protein 2; Homo sapiens G protein-coupled receptor associated sorting protein 2 (GPRASP2), transcript variant 1, mRNA.
HSAP0406S00036310	AK096067	chrX	101775748	101778804	Homo sapiens cDNA FLJ38748 fis, clone KIDNE2012440.
HSAP0406S00036362	BC016327	chrX	106172855	106255808	FLJ20130; hypothetical protein FLJ20130; Homo sapiens hypothetical protein FLJ20130, mRNA (cDNA clone MGC:23732 IMAGE:4102213), complete cds.
HSAP0406S00036495	NM_002351	chrX	123205728	123232540	SH2D1A; SH2 domain protein 1A; Homo sapiens SH2 domain protein 1A, Duncan's disease (lymphoproliferative syndrome) (SH2D1A), mRNA.
HSAP0406S00036600	X67878	chrX	135455882	135468068	CD40 ligand; H.sapiens mRNA for CD40 ligand.
HSAP0406S00036601	S66178	chrX	135458043	135464066	CD40 ligand; CD40 ligand [58 bp deletion between residues 288-289] [human, HIGMX-1 patient, peripheral blood mononuclear cells, mRNA PartialMutant, 64 nt].
HSAP0406S00036668	AK126859	chrX	149605382	149610692	Homo sapiens cDNA FLJ44911 fis, clone BRAMY3009158.
HSAP0406S00036669	BC013029	chrX	149615942	149670289	CD99L2; CD99L2 protein; Homo sapiens CD99 antigen-like 2, mRNA (cDNA clone IMAGE:3532313), partial cds.
HSAP0406S00036670	BC025729	chrX	149605377	149737671	CD99L2; CD99L2 protein; Homo sapiens CD99 antigen-like 2, mRNA (cDNA clone MGC:34116 IMAGE:5203087), complete cds.

Supplemental Table S7. Correlation of the commitment-associated epigenetic signature score with mutations of known epigenetic modifiers.

	ECOG1900 high methylation signature score	ECOG1900 low methylation signature score
DNMT3A		
mutated	43	41
wildtype	111	149
p-value Pearson/ Fisher Exact	0.2166	0.2069
TET2		
mutated	14	21
wildtype	141	169
p-value Pearson/ Fisher Exact	0.6607	0.5936
IDH1		
mutated	10	9
wildtype	144	180
p-value Pearson/ Fisher Exact	0.6455	0.4891
IDH2		
mutated	16	11
wildtype	138	178
p-value Pearson/ Fisher Exact	0.1733	0.1576
ASXL1		
mutated	5	6
wildtype	149	184
p-value Pearson/ Fisher Exact	1	1

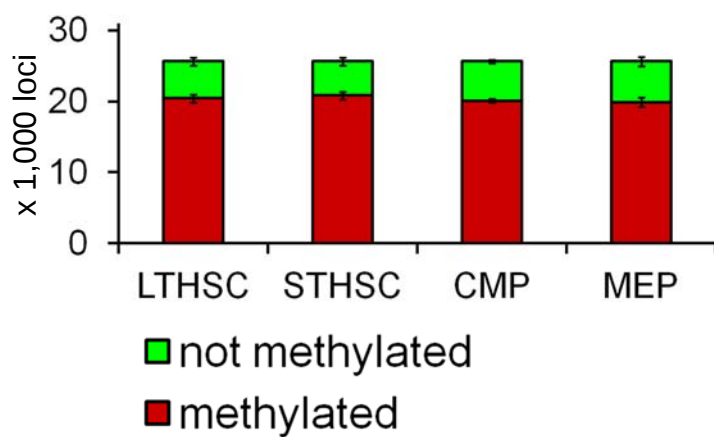
Supplemental Table S8. Enriched DNA motifs found near the commitment-associated differentially methylated regions (DMR).

Motif Name	Consensus	P-value	Log P-value	q-value (Benjamini)	# of Target Sequences with Motif (of 560)	% of Target Sequences with Motif	# of Background Sequences with Motif (of 25567)	% of Background Sequences with Motif
Gata1(Zf)/K562-GATA1-ChIP-Seq/Homer	SAGATAAGRV	1E-11	-27.26	0	0	86 15.36%	1705.3	6.67%
Gata1(Zf)/K562-GATA1-ChIP-Seq/Homer	SAGATAAGRV	1E-11	-27.26	0	0	86 15.36%	1705.3	6.67%
GATA3(Zf)/iTreg-Gata3-ChIP-Seq(GSE20898)/Homer	AGATAASR	1E-11	-26.27	0	0	169 30.18%	4614	18.04%
GATA3(Zf)/iTreg-Gata3-ChIP-Seq(GSE20898)/Homer	AGATAASR	1E-11	-26.27	0	0	169 30.18%	4614	18.04%
Gata2(Zf)/K562-GATA2-ChIP-Seq/Homer	BBCTTATCTS	1E-09	-22.77	0	0	86 15.36%	1867.9	7.30%
Gata2(Zf)/K562-GATA2-ChIP-Seq/Homer	BBCTTATCTS	1E-09	-22.77	0	0	86 15.36%	1867.9	7.30%
Gata4(Zf)/Heart-Gata4-ChIP-Seq(GSE35151)/Homer	NBWGATAAGR	1E-09	-22.36	0	0	117 20.89%	2930.7	11.46%
Gata4(Zf)/Heart-Gata4-ChIP-Seq(GSE35151)/Homer	NBWGATAAGR	1E-09	-22.36	0	0	117 20.89%	2930.7	11.46%
PQM-1(?)/cElegans-L3-ChIP-Seq(modEncode)/Homer	ACTGATAAGA	1E-07	-16.32	0	0	49 8.75%	953.2	3.73%
ELT-3(Gata)/cElegans-L1-ELT3-ChIP-Seq(modEncode)/Homer	AWTGATAAGA	0.00001	-12.82	0.0001	0	48 8.57%	1050.9	4.11%
MafF(bZIP)/HepG2-MafF-ChIP-Seq(GSE31477)/Homer	HWWGTCAGCAWWTTT	0.001	-6.935	0.0401	0	31 5.54%	758.6	2.97%
MafF(bZIP)/HepG2-MafF-ChIP-Seq(GSE31477)/Homer	HWWGTCAGCAWWTTT	0.001	-6.935	0.0401	0	31 5.54%	758.6	2.97%
Klf4(Zf)/mES-Klf4-ChIP-Seq/Homer	GCCACACCCA	0.01	-6.559	0.0501	0	94 16.79%	3152.2	12.33%
Klf4(Zf)/mES-Klf4-ChIP-Seq/Homer	GCCACACCCA	0.01	-6.559	0.0501	0	94 16.79%	3152.2	12.33%
ABF1/SacCer-Promoters/Homer	CGTRNAAARTGA	0.01	-5.844	0.0956	0	32 5.71%	851.8	3.33%
GATA:SCL/Ter119-SCL-ChIP-Seq/Homer	CRGCTGBNGSNNSAGATAA	0.01	-5.791	0.0956	0	19 3.39%	418.9	1.64%
GATA:SCL/Ter119-SCL-ChIP-Seq/Homer	CRGCTGBNGSNNSAGATAA	0.01	-5.791	0.0956	0	19 3.39%	418.9	1.64%
Smad2(MAD)/ES-SMAD2-ChIP-Seq(GSE29422)/Homer	CTGTCTGG	0.01	-5.574	0.0988	0	191 34.11%	7359.3	28.78%
Smad2(MAD)/ES-SMAD2-ChIP-Seq(GSE29422)/Homer	CTGTCTGG	0.01	-5.574	0.0988	0	191 34.11%	7359.3	28.78%
Maz(Zf)/HepG2-Maz-ChIP-Seq(GSE31477)/Homer	GGGGGGGG	0.01	-4.929	0.1705	0	264 47.14%	10709.9	41.88%
Maz(Zf)/HepG2-Maz-ChIP-Seq(GSE31477)/Homer	GGGGGGGG	0.01	-4.929	0.1705	0	264 47.14%	10709.9	41.88%
Unknown5/Drosophila-Promoters/Homer	GCTGATAASV	0.01	-4.857	0.1749	0	60 10.71%	1979.4	7.74%

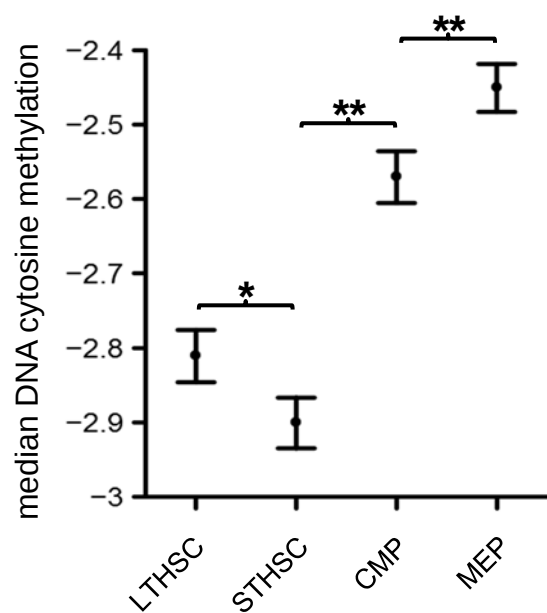


Supplemental Figure S1

A



B



Supplemental Figure S2