

## Appendix A. Human Ensembl genes and their mouse orthologues for known cancer genes in the Cancer Gene Census.

Abbreviations:

Tissue type: E=epithelial, L=leukaemia/lymphoma, M=mesenchymal, O=other

Dom/Rec: Dom=dominant, Rec=recessive

Mutation type: A=amplification, D=large deletion, F=frameshift, Mis=missense, N=nonsense, S=splice site, T=translocation

Human Ensembl ID	Mouse Ensembl ID	Gene name	Somatic mutation	Germline mutation	Tissue type	Dom/Rec	Mutation type
ENSG00000136754	ENSMUSG00000058835	<i>ABL1</i>	yes		L	Dom	T
ENSG00000097007	ENSMUSG00000026842	<i>ABL1</i>	yes		L	Dom	T, Mis
ENSG00000143322	ENSMUSG00000026596	<i>ABL2</i>	yes		L	Dom	T
ENSG00000164398	ENSMUSG00000020333	<i>ACSL6</i>	yes		L	Dom	T
ENSG00000143443	ENSMUSG00000068860	<i>AF1q</i>	yes		L	Dom	T
ENSG00000172493	ENSMUSG00000029313	<i>AFF1</i>	yes		L	Dom	T
ENSG00000144218	ENSMUSG00000037138	<i>AFF3</i>	yes		L	Dom	T
ENSG00000072364	ENSMUSG00000049470	<i>AFF4</i>	yes		L	Dom	T
ENSG00000127914	ENSMUSG00000040407	<i>AKAP9</i>	yes		E	Dom	T
ENSG00000105221	ENSMUSG00000040456	<i>AKT2</i>	yes		E	Dom	A
ENSG00000105221	ENSMUSG00000073134	<i>AKT2</i>	yes		E	Dom	A
ENSG00000171094	ENSMUSG00000055471	<i>ALK</i>	yes		L	Dom	T
ENSG00000134982	ENSMUSG00000005871	<i>APC</i>	yes	yes	E, M, O	Rec	D, Mis, N, F, S
ENSG00000145819	ENSMUSG00000036452	<i>ARHGAP26</i>	yes		L	Dom	T, F, S
ENSG00000196914	ENSMUSG00000059495	<i>ARHGEF12</i>	yes		L	Dom	T
ENSG00000143437	ENSMUSG00000015522	<i>ARNT</i>	yes		L	Dom	T
ENSG00000169696	ENSMUSG00000025142	<i>ASPSCR1</i>	yes		M	Dom	T
ENSG00000123268	ENSMUSG00000055574	<i>ATF1</i>	yes		E, M	Dom	T
ENSG00000123268	ENSMUSG00000023027	<i>ATF1</i>	yes		E, M	Dom	T
ENSG00000138363	ENSMUSG00000026192	<i>ATIC</i>	yes		L	Dom	T
ENSG00000149311	ENSMUSG00000034218	<i>ATM</i>	yes	yes	L, O	Rec	D, Mis, N, F, S
ENSG00000142867	ENSMUSG00000028191	<i>BCL10</i>	yes		L	Dom	T
ENSG00000119866	ENSMUSG00000000861	<i>BCL11A</i>	yes		L	Dom	T
ENSG00000127152	ENSMUSG00000048251	<i>BCL11B</i>	yes		L	Dom	T
ENSG00000171791	ENSMUSG00000057329	<i>BCL2</i>	yes		L	Dom	T
ENSG00000069399	ENSMUSG00000053175	<i>BCL3</i>	yes		L	Dom	T
ENSG00000113916	ENSMUSG00000022508	<i>BCL6</i>	yes		L	Dom	T, Mis
ENSG00000110987	ENSMUSG00000029438	<i>BCL7A</i>	yes		L	Dom	T
ENSG00000116128	ENSMUSG00000038256	<i>BCL9</i>	yes		L	Dom	T
ENSG00000186716	ENSMUSG00000009681	<i>BCR</i>	yes		L	Dom	T
ENSG00000023445	ENSMUSG00000032000	<i>BIRC3</i>	yes		L	Dom	T
ENSG00000197299	ENSMUSG00000030528	<i>BLM</i>	yes	yes	L, E	Rec	Mis, N, F
ENSG00000157764	ENSMUSG00000002413	<i>BRAF</i>	yes		E	Dom	Mis, T
ENSG0000012048	ENSMUSG00000017146	<i>BRCA1</i>	yes	yes	E	Rec	D, Mis, N, F, S
ENSG00000139618	ENSMUSG00000041147	<i>BRCA2</i>	yes	yes	L, E	Rec	D, Mis, N, F, S
ENSG00000141867	ENSMUSG00000024002	<i>BRD4</i>	yes		E	Dom	T
ENSG00000136492	ENSMUSG00000034329	<i>BRIP1</i>	yes	yes	L, E	Rec	F, N, Mis
ENSG00000133639	ENSMUSG00000036478	<i>BTG1</i>	yes		L	Dom	T
ENSG00000156970	ENSMUSG00000040084	<i>BUB1B</i>	yes	yes	M	Rec	Mis, N, F, S
ENSG00000110619	ENSMUSG00000010755	<i>CARS</i>	yes		L	Dom	T
ENSG00000137812	ENSMUSG00000027326	<i>CASC5</i>	yes		L	Dom	T
ENSG00000129993	ENSMUSG00000006362	<i>CBFA2T3</i>	yes		L	Dom	T
ENSG00000067955	ENSMUSG00000031885	<i>CBFB</i>	yes		L	Dom	T
ENSG00000110395	ENSMUSG00000034342	<i>CBL</i>	yes		L	Dom	T
ENSG00000100814	ENSMUSG00000071470	<i>CCNB1IP1</i>	yes		M	Dom	T
ENSG00000110092	ENSMUSG00000070348	<i>CCND1</i>	yes		L, E	Dom	T
ENSG00000118971	ENSMUSG00000000184	<i>CCND2</i>	yes		L	Dom	T
ENSG00000112576	ENSMUSG00000034165	<i>CCND3</i>	yes		L	Dom	T
ENSG00000163660	ENSMUSG00000027829	<i>CCNL1</i>	yes		E	Dom	T
ENSG00000128283	ENSMUSG00000049521	<i>CDC42EP1</i>	yes		L	Dom	T
ENSG00000134371	ENSMUSG00000026361	<i>CDC73</i>	yes	yes	E, M	Rec	Mis, N, F
ENSG00000039068	ENSMUSG00000000303	<i>CDH1</i>	yes	yes	E	Rec	Mis, N, F, S
ENSG00000140937	ENSMUSG00000031673	<i>CDH11</i>	yes		M	Dom	T
ENSG00000135446	ENSMUSG00000006728	<i>CDK4</i>	yes	yes	E	Dom	Mis
ENSG00000105810	ENSMUSG00000040274	<i>CDK6</i>	yes		L	Dom	T
ENSG00000147889	ENSMUSG00000044303	<i>CDKN2A</i>	yes	yes	L, E, M, O	Rec	D, S
ENSG00000165556	ENSMUSG00000029646	<i>CDX2</i>	yes		L	Dom	T
ENSG00000183765	ENSMUSG00000029521	<i>CHEK2</i>	yes	yes	E	Rec	F
ENSG00000109220	ENSMUSG00000029229	<i>CHIC2</i>	yes		L	Dom	T
ENSG00000128656	ENSMUSG00000056486	<i>CHN1</i>	yes		M	Dom	T
ENSG00000179583	ENSMUSG00000022504	<i>CIITA</i>	yes		L	Dom	T
ENSG00000172409	ENSMUSG00000027079	<i>CLP1</i>	yes		L	Dom	T
ENSG00000141367	ENSMUSG00000047126	<i>CLTC</i>	yes		L	Dom	T
ENSG00000169714	ENSMUSG00000030057	<i>CNBP</i>	yes		M	Dom	T
ENSG00000108821	ENSMUSG00000001506	<i>COL1A1</i>	yes		M	Dom	T
ENSG00000164919	ENSMUSG00000066491	<i>COX6C</i>	yes		M	Dom	T
ENSG00000164919	ENSMUSG00000014313	<i>COX6C</i>	yes		M	Dom	T
ENSG00000164919	ENSMUSG00000069096	<i>COX6C</i>	yes		M	Dom	T
ENSG00000118260	ENSMUSG00000025958	<i>CREB1</i>	yes		M	Dom	T
ENSG00000005339	ENSMUSG00000022521	<i>CREBBP</i>	yes		L	Dom	T
ENSG00000105662	ENSMUSG0000003575	<i>CRTC1</i>	yes		E	Dom	T
ENSG00000168036	ENSMUSG0000006932	<i>CTNNB1</i>	yes		E, M, O	Dom	H, Mis
ENSG00000144476	ENSMUSG00000044337	<i>CXCR7</i>	yes		M	Dom	T
ENSG00000138336	ENSMUSG00000075011	<i>CXXC6</i>	yes		L	Dom	T
ENSG00000083799	ENSMUSG00000036712	<i>CYLD</i>	yes	yes	E	Rec	Mis, N, F, S
ENSG00000108091	ENSMUSG00000048701	<i>D10S170</i>	yes		E	Dom	T
ENSG00000134574	ENSMUSG00000002109	<i>DDB2</i>	yes	yes	E	Rec	Mis, N
ENSG00000175197	ENSMUSG00000025408	<i>DDIT3</i>	yes		M	Dom	T

ENSMUG00000178105	ENSMUSG00000053289	DDX10	yes		L	Dom	T
ENSMUG00000110367	ENSMUSG00000059707	DDX6	yes		L	Dom	T
ENSMUG00000110367	ENSMUSG00000032097	DDX6	yes		L	Dom	T
ENSMUG00000124795	ENSMUSG00000021377	DEK	yes		L	Dom	T
ENSMUG00000146648	ENSMUSG00000020122	EGFR	yes		E, O	Dom	A, O, Mis
ENSMUG00000156976	ENSMUSG00000022884	EIF4A2	yes		L	Dom	T
ENSMUG00000156976	ENSMUSG00000022884	EIF4A2	yes		L	Dom	T
ENSMUG00000102034	ENSMUSG00000031103	ELF4	yes		E	Dom	T
ENSMUG00000105656	ENSMUSG00000070002	ELL	yes		L	Dom	T
ENSMUG00000100393	ENSMUSG00000055024	EP300	yes		L, E	Rec	T
ENSMUG00000085832	ENSMUSG00000028552	EPS15	yes		L	Dom	T
ENSMUG00000141736	ENSMUSG00000062312	ERBB2	yes		E	Dom	A, Mis, O
ENSMUG00000104884	ENSMUSG00000030400	ERCC2		yes	E	Rec	Mis, N, F, S
ENSMUG00000163161	ENSMUSG00000024382	ERCC3		yes	E	Rec	Mis, S
ENSMUG00000175595	ENSMUSG00000022545	ERCC4		yes	E	Rec	Mis, N, F
ENSMUG00000134899	ENSMUSG00000026048	ERCC5		yes	E	Rec	Mis, N, F
ENSMUG00000157554	ENSMUSG00000040732	ERG	yes		M, E, L	Dom	T
ENSMUG00000006468	ENSMUSG00000047643	ETV1	yes		M, E	Dom	T
ENSMUG00000006468	ENSMUSG00000004151	ETV1	yes		M, E	Dom	T
ENSMUG00000175832	ENSMUSG00000017724	ETV4	yes		M	Dom	T
ENSMUG00000139083	ENSMUSG00000030199	ETV6	yes		L, E, M	Dom	T
ENSMUG00000085276	ENSMUSG00000027684	EV11	yes		L	Dom	T
ENSMUG00000182944	ENSMUSG00000038649	EWSR1	yes		L, M	Dom	T
ENSMUG00000182944	ENSMUSG00000070829	EWSR1	yes		L, M	Dom	T
ENSMUG00000182944	ENSMUSG00000009079	EWSR1	yes		L, M	Dom	T
ENSMUG00000182197	ENSMUSG00000061731	EXT1		yes	M	Rec	Mis, N, F, S
ENSMUG00000151348	ENSMUSG00000027198	EXT2		yes	M	Rec	Mis, N, F, S
ENSMUG00000187741	ENSMUSG00000032815	FANCA		yes	L	Rec	D, Mis, N, F, S
ENSMUG00000158169	ENSMUSG00000021461	FANCC		yes	L	Rec	D, Mis, N, F, S
ENSMUG00000144554	ENSMUSG00000034023	FANCD2		yes	L	Rec	D, Mis, N, F
ENSMUG00000112039	ENSMUSG00000007570	FANCE		yes	L	Rec	N, F, S
ENSMUG00000183161	ENSMUSG00000043480	FANCF		yes	L	Rec	N, F
ENSMUG00000165281	ENSMUSG00000028453	FANCG		yes	L	Rec	Mis, N, F, S
ENSMUG00000026103	ENSMUSG00000024778	FAS	yes		L, E, O	Rec	Mis
ENSMUG00000109670	ENSMUSG00000028086	FBXW7	yes		E	Dom	Mis, N
ENSMUG00000072694	ENSMUSG00000026656	FCGR2B	yes		L	Dom	T
ENSMUG00000072694	ENSMUSG00000059498	FCGR2B	yes		L	Dom	T
ENSMUG00000163497	ENSMUSG00000055197	FEV	yes		M	Dom	T
ENSMUG00000077782	ENSMUSG00000031565	FGFR1	yes		L	Dom	T
ENSMUG00000112486	ENSMUSG00000069135	FGFR1OP	yes		L	Dom	T
ENSMUG00000066468	ENSMUSG00000030849	FGFR2	yes		E	Dom	Mis
ENSMUG00000068078	ENSMUSG00000054252	FGFR3	yes		L, E	Dom	Mis, T
ENSMUG00000091483	ENSMUSG00000026526	FH		yes	E, M	Rec	Mis, N, F
ENSMUG00000091483	ENSMUSG00000037498	FH		yes	E, M	Rec	Mis, N, F
ENSMUG00000145216	ENSMUSG00000029227	FIP1L1	yes		L	Dom	T
ENSMUG00000154803	ENSMUSG00000032633	FLCN		yes	E, M	Rec?	Mis, N, F
ENSMUG00000122025	ENSMUSG00000042817	FLT3	yes		L	Dom	Mis, O
ENSMUG00000187239	ENSMUSG00000075415	FNBP1	yes		L	Dom	T
ENSMUG00000150907	ENSMUSG00000044167	FOXO1A	yes		M	Dom	T
ENSMUG00000118689	ENSMUSG00000048756	FOXO3A	yes		L	Dom	T
ENSMUG00000070404	ENSMUSG00000020325	FSTL3	yes		L	Dom	T
ENSMUG00000089280	ENSMUSG00000066554	FUS	yes		M, L	Dom	T
ENSMUG00000089280	ENSMUSG00000030795	FUS	yes		M, L	Dom	T
ENSMUG00000119537	ENSMUSG00000009905	FVT1	yes		L	Dom	T
ENSMUG00000007237	ENSMUSG00000033066	GAS7	yes		L	Dom	T
ENSMUG00000102145	ENSMUSG00000031162	GATA1	yes		L	Dom	Mis, F
ENSMUG00000163655	ENSMUSG00000027823	GMPS	yes		L	Dom	T
ENSMUG00000087460	ENSMUSG00000027523	GNAS	yes		E	Dom	Mis
ENSMUG00000066455	ENSMUSG00000021192	GOLGA5	yes		E	Dom	T
ENSMUG00000047932	ENSMUSG00000019861	GOPC	yes		O	Dom	O
ENSMUG00000147257	ENSMUSG00000055653	GPC3		yes	O	X-linked	T, D, Mis, N, F, S
ENSMUG00000171723	ENSMUSG00000047454	GPHN	yes		L	Dom	T
ENSMUG00000127946	ENSMUSG00000039959	HIP1	yes		L	Dom	T
ENSMUG00000198339	ENSMUSG00000069305	HIST1H4I	yes		L	Dom	T
ENSMUG00000108924	ENSMUSG00000003949	HLF	yes		L	Dom	T
ENSMUG00000130675	ENSMUSG00000001566	HLXB9	yes		L	Dom	T
ENSMUG00000149948	ENSMUSG00000056758	HMG2	yes		M	Dom	T
ENSMUG00000005073	ENSMUSG00000038210	HOXA11	yes		L	Dom	T
ENSMUG00000106031	ENSMUSG00000038203	HOXA13	yes		L	Dom	T
ENSMUG00000078399	ENSMUSG00000038227	HOXA9	yes		L	Dom	T
ENSMUG00000123388	ENSMUSG00000001656	HOXC11	yes		L	Dom	T
ENSMUG00000123364	ENSMUSG00000001655	HOXC13	yes		L	Dom	T
ENSMUG00000128713	ENSMUSG00000042499	HOXD11	yes		L	Dom	T
ENSMUG00000128714	ENSMUSG00000001819	HOXD13	yes		L	Dom	T
ENSMUG00000174775	ENSMUSG00000025499	HRAS	yes		E, L, M	Dom	Mis
ENSMUG00000185811	ENSMUSG00000018654	IKZF1	yes		L	Dom	T
ENSMUG00000109471	ENSMUSG00000027720	IL2	yes		L	Dom	T
ENSMUG00000103522	ENSMUSG00000030745	IL21R	yes		L	Dom	T
ENSMUG00000137265	ENSMUSG00000021356	IRF4	yes		L	Dom	T
ENSMUG00000113263	ENSMUSG00000020395	ITK	yes		L	Dom	T
ENSMUG00000096968	ENSMUSG00000024789	JAK2	yes		L	Dom	T, Mis, O
ENSMUG00000153814	ENSMUSG00000063568	JAZF1	yes		M	Dom	T
ENSMUG00000157404	ENSMUSG00000005672	KIT	yes		L, M, O	Dom	Mis, O
ENSMUG00000067082	ENSMUSG00000000078	KLF6	yes		E, O	Rec	Mis, N
ENSMUG00000133703	ENSMUSG00000030265	KRAS	yes		L, E, M, O	Dom	Mis
ENSMUG00000126777	ENSMUSG00000021843	KTN1	yes		E	Dom	T
ENSMUG00000002834	ENSMUSG00000038366	LASP1	yes		L	Dom	T
ENSMUG00000002834	ENSMUSG00000037792	LASP1	yes		L	Dom	T
ENSMUG00000182866	ENSMUSG00000000409	LCK	yes		L	Dom	T
ENSMUG00000136167	ENSMUSG00000021998	LCP1	yes		L	Dom	T
ENSMUG00000183722	ENSMUSG00000048332	LHFP	yes		M	Dom	T
ENSMUG00000113594	ENSMUSG00000054263	LIFR	yes		E	Dom	T
ENSMUG00000166407	ENSMUSG00000036111	LMO1	yes		L	Dom	T
ENSMUG00000135363	ENSMUSG00000032698	LMO2	yes		L	Dom	T

ENSG00000145012	ENSMUSG00000033306	LPP	yes		L, M	Dom	T
ENSG00000104903	ENSMUSG00000034041	LYL1	yes		L	Dom	T
ENSG00000178573	ENSMUSG00000055435	MAF	yes		L	Dom	T
ENSG00000204103	ENSMUSG00000074622	MAFB	yes		L	Dom	T
ENSG00000172175	ENSMUSG00000032688	MALT1	yes		L	Dom	T
ENSG00000184384	ENSMUSG00000031925	MAML2	yes		E	Dom	T
ENSG00000065559	ENSMUSG00000033352	MAP2K4	yes		E	Rec	D, Mis, N
ENSG00000206115	ENSMUSG00000051636	MDS1	yes		L	Dom	T
ENSG00000133895	ENSMUSG00000024947	MEN1	yes	yes	E	Rec	D, Mis, N, F, S
ENSG00000105976	ENSMUSG00000009376	MET	yes		E	Dom	Mis
ENSG00000162775	ENSMUSG00000048109	MKL1	yes		L	Dom	T
ENSG00000178053	ENSMUSG00000048416	MLF1	yes		L	Dom	T
ENSG00000076242	ENSMUSG00000032498	MLH1	yes	yes	E, O	Rec	D, Mis, N, F, S
ENSG00000118058	ENSMUSG00000002028	MLL	yes		L	Dom	T, O
ENSG00000130382	ENSMUSG00000024212	MLL1	yes		L	Dom	T
ENSG00000078403	ENSMUSG00000026743	MLL10	yes		L	Dom	T
ENSG00000171843	ENSMUSG00000028496	MLL13	yes		L	Dom	T
ENSG00000130396	ENSMUSG00000068036	MLL14	yes		L	Dom	T
ENSG00000108292	ENSMUSG00000038437	MLL16	yes		L	Dom	T
ENSG00000184481	ENSMUSG00000042903	MLL17	yes		L	Dom	T
ENSG00000169184	ENSMUSG00000070576	MN1	yes		L, O	Dom	T
ENSG00000117400	ENSMUSG00000006389	MPL	yes	yes	L	Dom	Mis
ENSG00000095002	ENSMUSG00000024151	MSH2	yes	yes	E	Rec	D, Mis, N, F, S
ENSG00000116062	ENSMUSG00000005370	MSH6	yes	yes	E	Rec	Mis, N, F, S
ENSG00000153944	ENSMUSG00000069769	MSI2	yes		L	Dom	T
ENSG00000147065	ENSMUSG00000031207	MSN	yes		L	Dom	T
ENSG00000182712	ENSMUSG00000031200	MTCP1	yes		L	Dom	T
ENSG00000185499	ENSMUSG00000042784	MUC1	yes		L	Dom	T
ENSG00000132781	ENSMUSG00000028687	MUTYH		yes	E	Rec	Mis
ENSG00000136997	ENSMUSG00000022346	MYC	yes		L, E	Dom	A, T
ENSG00000116990	ENSMUSG00000028654	MYCL1	yes		E	Dom	A
ENSG00000134323	ENSMUSG00000037169	MYCN	yes		O	Dom	A
ENSG00000133392	ENSMUSG00000018830	MYH11	yes		L	Dom	T
ENSG00000100345	ENSMUSG00000022443	MYH9	yes		L	Dom	T
ENSG00000083168	ENSMUSG00000031540	MYST3	yes		L	Dom	T
ENSG00000156650	ENSMUSG00000021767	MYST4	yes		L	Dom	T
ENSG00000104320	ENSMUSG00000028224	NBN		yes	L, E, M, O	Rec	Mis, N, F
ENSG00000140396	ENSMUSG00000005886	NCOA2	yes		L	Dom	T
ENSG00000138293	ENSMUSG00000021908	NCOA4	yes		E	Dom	T
ENSG00000138293	ENSMUSG00000056234	NCOA4	yes		E	Dom	T
ENSG00000196712	ENSMUSG00000020716	NF1	yes	yes	O	Rec	D, Mis, N, F, S, O
ENSG00000186575	ENSMUSG00000009073	NF2	yes	yes	O	Rec	D, Mis, N, F, S, O
ENSG00000077150	ENSMUSG00000025225	NFKB2	yes		L	Dom	T
ENSG00000100503	ENSMUSG00000021068	NIN	yes		L	Dom	T
ENSG00000147140	ENSMUSG00000067514	NONO	yes		E	Dom	T
ENSG00000147140	ENSMUSG00000031311	NONO	yes		E	Dom	T
ENSG00000148400	ENSMUSG00000026923	NOTCH1	yes		L	Dom	T, Mis, O
ENSG00000119508	ENSMUSG00000028341	NR4A3	yes		M	Dom	T
ENSG00000009307	ENSMUSG00000072420	NRAS	yes		L, E	Dom	Mis
ENSG00000009307	ENSMUSG00000068823	NRAS	yes		L, E	Dom	Mis
ENSG00000009307	ENSMUSG00000047588	NRAS	yes		L, E	Dom	Mis
ENSG00000165671	ENSMUSG00000021488	NSD1	yes		L	Dom	T
ENSG00000198400	ENSMUSG00000028072	NTRK1	yes		E	Dom	T
ENSG00000140538	ENSMUSG00000059146	NTRK3	yes		E, M	Dom	T
ENSG00000137497	ENSMUSG00000066306	NUMA1	yes		L	Dom	T
ENSG00000110713	ENSMUSG00000063550	NUP98	yes		L	Dom	T
ENSG00000184507	ENSMUSG00000041358	NUT	yes		E	Dom	T
ENSG00000205927	ENSMUSG00000039830	OLIG2	yes		L	Dom	T
ENSG00000127083	ENSMUSG00000048368	OMD	yes		M	Dom	T
ENSG00000168092	ENSMUSG00000003131	PAFAH1B2	yes		L	Dom	T
ENSG00000083093	ENSMUSG00000044702	PALB2		yes	L, O, E	Rec	F, N, Mis
ENSG00000100105	ENSMUSG00000020453	PATZ1	yes		M	Dom	T
ENSG00000135903	ENSMUSG00000004872	PAX3	yes		M	Dom	T
ENSG00000196092	ENSMUSG00000014030	PAX5	yes		L	Dom	T
ENSG00000009709	ENSMUSG00000028736	PAX7	yes		M	Dom	T
ENSG00000125618	ENSMUSG00000026976	PAX8	yes		E	Dom	T
ENSG00000185630	ENSMUSG00000052534	PBX1	yes		L	Dom	T
ENSG00000078674	ENSMUSG00000031592	PCM1	yes		E	Dom	T
ENSG00000160613	ENSMUSG00000035382	PCSK7	yes		L	Dom	T
ENSG00000178104	ENSMUSG00000038170	PDE4DIP	yes		L	Dom	T
ENSG00000100311	ENSMUSG00000000489	PDGFB	yes		M	Dom	T
ENSG00000134853	ENSMUSG00000029231	PDGFRA	yes		L, M, O	Dom	Mis, O, T
ENSG00000113721	ENSMUSG00000024620	PDGFRB	yes		L	Dom	T
ENSG00000179094	ENSMUSG00000020893	PER1	yes		L	Dom	T
ENSG00000109132	ENSMUSG00000012520	PHOX2B	yes	yes	O	Rec	Mis, F
ENSG00000073921	ENSMUSG00000039361	PICALM	yes		L	Dom	T
ENSG00000121879	ENSMUSG00000027665	PIK3CA	yes		E, O	Dom	Mis
ENSG00000137193	ENSMUSG00000024014	PIM1	yes		L	Dom	T
ENSG00000181690	ENSMUSG00000003282	PLAG1	yes		E	Dom	T
ENSG00000140464	ENSMUSG00000036986	PML	yes		L	Dom	T
ENSG00000064933	ENSMUSG00000026098	PMS1		yes	E	Rec	Mis, N
ENSG00000110777	ENSMUSG00000032053	POU2AF1	yes		L	Dom	T
ENSG00000204531	ENSMUSG00000024406	POU5F1	yes		M	Dom	T
ENSG00000132170	ENSMUSG00000000440	PPARG	yes		E	Dom	T
ENSG00000143294	ENSMUSG00000004895	PRCC	yes		E	Dom	T
ENSG00000142611	ENSMUSG00000039410	PRDM16	yes		L	Dom	T
ENSG00000108946	ENSMUSG00000020612	PRKAR1A	yes	yes	E, M	Rec	T, Mis, N, F, S
ENSG00000116132	ENSMUSG00000026586	PRRX1	yes		L	Dom	T
ENSG00000164985	ENSMUSG00000034033	PSIP1	yes		L	Dom	T
ENSG00000164985	ENSMUSG00000028484	PSIP1	yes		L	Dom	T
ENSG00000185920	ENSMUSG00000021466	PTCH1	yes	yes	E, M	Rec	Mis, N, F, S
ENSG00000171862	ENSMUSG00000013663	PTEN	yes	yes	L, E, M, O	Rec	D, Mis, N, F, S

ENSG00000179295	ENSMUSG00000043733	<i>PTPN11</i>	yes		L	Dom	Mis
ENSG0000029725	ENSMUSG00000020817	<i>RABEP1</i>	yes		L	Dom	T
ENSG00000182185	ENSMUSG00000059060	<i>RAD51L1</i>	yes		M	Dom	T
ENSG00000204764	ENSMUSG00000040594	<i>RANBP17</i>	yes		L	Dom	T
ENSG00000138698	ENSMUSG00000028149	<i>RAP1GDS1</i>	yes		L	Dom	T
ENSG00000131759	ENSMUSG00000037992	<i>RARA</i>	yes		L	Dom	T
ENSG00000139687	ENSMUSG00000022105	<i>RB1</i>	yes	yes	L, E, M, O	Rec	D, Mis, N, F, S
ENSG00000162775	ENSMUSG00000048109	<i>RBM15</i>	yes		L	Dom	T
ENSG00000160957	ENSMUSG00000033762	<i>RECQL4</i>		yes	M	Rec	N, F, S
ENSG00000162924	ENSMUSG00000020275	<i>REL</i>	yes		L	Dom	A
ENSG00000165731	ENSMUSG00000030110	<i>RET</i>	yes	yes	E, O	Dom	T, Mis, N, F
ENSG00000168421	ENSMUSG00000029204	<i>RHOH</i>	yes		L	Dom	T
ENSG00000047936	ENSMUSG00000019893	<i>ROS1</i>	yes		O	Dom	T
ENSG00000116251	ENSMUSG00000028936	<i>RPL22</i>	yes		L	Dom	T
ENSG00000163902	ENSMUSG00000030062	<i>RPNI</i>	yes		L	Dom	T
ENSG00000159216	ENSMUSG00000022952	<i>RUNX1</i>	yes		L	Dom	T
ENSG00000079102	ENSMUSG0000006586	<i>RUNX1T1</i>	yes		L	Dom	T
ENSG00000126524	ENSMUSG00000025337	<i>SBDS</i>	yes	yes	L	Rec	Gene Conversion
ENSG00000117118	ENSMUSG00000009863	<i>SDHB</i>	yes		O	Rec	Mis, N, F
ENSG00000143252	ENSMUSG00000058076	<i>SDHC</i>	yes		O	Rec	Mis, N, F
ENSG00000204370	ENSMUSG00000000171	<i>SDHD</i>	yes	yes	O	Rec	Mis, N, F, S
ENSG00000184702	ENSMUSG00000072214	<i>SEPT5</i>	yes		L	Dom	T
ENSG00000125354	ENSMUSG00000050379	<i>SEPT6</i>	yes		L	Dom	T
ENSG00000184640	ENSMUSG00000059248	<i>SEPT9</i>	yes		L	Dom	T
ENSG00000116560	ENSMUSG00000028820	<i>SFPQ</i>	yes		E	Dom	T
ENSG00000141985	ENSMUSG00000003200	<i>SH3GL1</i>	yes		L	Dom	T
ENSG000000008300	ENSMUSG00000023473	<i>SLC26A6</i>	yes		L	Dom	T
ENSG00000141646	ENSMUSG00000024515	<i>SMAD4</i>	yes	yes	E	Rec	D, Mis, N, F
ENSG00000099956	ENSMUSG00000000902	<i>SMARCB1</i>	yes	yes	M	Rec	D, N, F, S
ENSG00000128602	ENSMUSG00000001761	<i>SMO</i>	yes		E	Dom	Mis
ENSG00000185338	ENSMUSG00000038037	<i>SOCS1</i>	yes		L	Rec	F, O
ENSG00000128487	ENSMUSG00000042331	<i>SPECC1</i>	yes		L	Dom	T
ENSG00000141380	ENSMUSG00000037013	<i>SS18</i>	yes		M	Dom	T
ENSG00000184402	ENSMUSG00000039086	<i>SS18L1</i>	yes		M	Dom	T
ENSG00000126752	ENSMUSG00000035371	<i>SSX1</i>	yes		M	Dom	T
ENSG00000126752	ENSMUSG00000071816	<i>SSX1</i>	yes		M	Dom	T
ENSG00000126752	ENSMUSG00000023165	<i>SSX1</i>	yes		M	Dom	T
ENSG00000126752	ENSMUSG00000068218	<i>SSX1</i>	yes		M	Dom	T
ENSG00000126752	ENSMUSG00000062814	<i>SSX1</i>	yes		M	Dom	T
ENSG00000126752	ENSMUSG00000068219	<i>SSX1</i>	yes		M	Dom	T
ENSG00000187754	ENSMUSG00000035371	<i>SSX2</i>	yes		M	Dom	T
ENSG00000187754	ENSMUSG00000071816	<i>SSX2</i>	yes		M	Dom	T
ENSG00000187754	ENSMUSG00000023165	<i>SSX2</i>	yes		M	Dom	T
ENSG00000187754	ENSMUSG00000068218	<i>SSX2</i>	yes		M	Dom	T
ENSG00000187754	ENSMUSG00000062814	<i>SSX2</i>	yes		M	Dom	T
ENSG00000187754	ENSMUSG00000068219	<i>SSX2</i>	yes		M	Dom	T
ENSG00000204645	ENSMUSG00000035371	<i>SSX4</i>	yes		M	Dom	T
ENSG00000204645	ENSMUSG00000071816	<i>SSX4</i>	yes		M	Dom	T
ENSG00000204645	ENSMUSG00000023165	<i>SSX4</i>	yes		M	Dom	T
ENSG00000204645	ENSMUSG00000068218	<i>SSX4</i>	yes		M	Dom	T
ENSG00000204645	ENSMUSG00000062814	<i>SSX4</i>	yes		M	Dom	T
ENSG00000204645	ENSMUSG00000068219	<i>SSX4</i>	yes		M	Dom	T
ENSG00000123473	ENSMUSG00000028718	<i>STIL</i>	yes		L	Dom	T
ENSG00000118046	ENSMUSG00000030368	<i>STK11</i>	yes	yes	E, M, O	Rec	D, Mis, N, F, S
ENSG00000107882	ENSMUSG00000025231	<i>SUFU</i>	yes	yes	O	Rec	D, F, S
ENSG00000178691	ENSMUSG00000017548	<i>SUZ12</i>	yes		M	Dom	T
ENSG00000165025	ENSMUSG00000021457	<i>SYK</i>	yes		L	Dom	T
ENSG00000172660	ENSMUSG00000020680	<i>TAF15</i>	yes		L, M	Dom	T
ENSG00000162367	ENSMUSG00000028717	<i>TAL1</i>	yes		L	Dom	T
ENSG00000186051	ENSMUSG00000028417	<i>TAL2</i>	yes		L	Dom	T
ENSG00000187735	ENSMUSG00000033813	<i>TCEA1</i>	yes		E	Dom	T
ENSG00000135100	ENSMUSG00000029556	<i>TCF1</i>	yes	yes	E	Rec	Mis, F
ENSG00000140262	ENSMUSG00000032228	<i>TCF12</i>	yes		M	Dom	T
ENSG00000071564	ENSMUSG00000020167	<i>TCF3</i>	yes		L	Dom	T
ENSG00000100721	ENSMUSG00000041359	<i>TCL1A</i>	yes		L	Dom	T
ENSG00000135605	ENSMUSG00000029217	<i>TEC</i>	yes		M	Dom	T
ENSG00000068323	ENSMUSG00000000134	<i>TFE3</i>	yes		E	Dom	T
ENSG00000112561	ENSMUSG00000023990	<i>TFEB</i>	yes		E, M	Dom	T
ENSG00000114354	ENSMUSG00000022757	<i>TFG</i>	yes		E, L	Dom	T
ENSG00000105619	ENSMUSG00000006335	<i>TFPT</i>	yes		L	Dom	T
ENSG00000072274	ENSMUSG00000022797	<i>TFRC</i>	yes		L	Dom	T
ENSG00000054118	ENSMUSG00000072862	<i>THRAP3</i>	yes		M	Dom	T
ENSG00000054118	ENSMUSG00000043962	<i>THRAP3</i>	yes		M	Dom	T
ENSG00000107807	ENSMUSG00000025215	<i>TLX1</i>	yes		L	Dom	T
ENSG00000164438	ENSMUSG00000040610	<i>TLX3</i>	yes		L	Dom	T
ENSG00000184012	ENSMUSG00000000385	<i>TMPPRSS2</i>	yes		E	Dom	T
ENSG00000048462	ENSMUSG00000022496	<i>TNFRSF17</i>	yes		L	Dom	T
ENSG00000198900	ENSMUSG00000070544	<i>TOP1</i>	yes		L	Dom	T
ENSG00000141510	ENSMUSG00000059552	<i>TP53</i>	yes	yes	L, E, M, O	Rec	Mis, N, F
ENSG00000167460	ENSMUSG00000031799	<i>TPM4</i>	yes		L	Dom	T
ENSG00000047410	ENSMUSG00000006005	<i>TPR</i>	yes		E	Dom	T
ENSG00000122779	ENSMUSG00000029833	<i>TRIM24</i>	yes		L	Dom	T
ENSG00000197323	ENSMUSG00000033014	<i>TRIM33</i>	yes		E	Dom	T
ENSG00000100815	ENSMUSG00000021188	<i>TRIP11</i>	yes		L	Dom	T
ENSG00000165699	ENSMUSG00000026812	<i>TSC1</i>	yes	yes	E, O	Rec	D, Mis, N, F, S
ENSG00000103197	ENSMUSG00000002496	<i>TSC2</i>	yes	yes	E, O	Rec	D, Mis, N, F, S
ENSG00000165409	ENSMUSG00000020963	<i>TSHR</i>	yes	yes	E	Dom	Mis
ENSG00000114999	ENSMUSG00000027394	<i>TTL</i>	yes		L	Dom	T
ENSG00000129204	ENSMUSG00000000804	<i>USP6</i>	yes		M	Dom	T
ENSG00000134086	ENSMUSG00000033933	<i>VHL</i>	yes	yes	E, M, O	Rec	D, Mis, N, F, S
ENSG00000015285	ENSMUSG00000031165	<i>WAS</i>			L	Rec	Mis, N, F, S
ENSG00000109685	ENSMUSG00000057406	<i>WHSC1</i>	yes		L	Dom	T
ENSG00000147548	ENSMUSG00000054823	<i>WHSC1L1</i>	yes		L	Dom	T

ENSG00000165392	ENSMUSG00000031583	<i>WRN</i>		yes	L, E, M, O	Rec	Mis, N, F, S
ENSG00000184937	ENSMUSG00000016458	<i>WT1</i>	yes	yes	O	Rec	D, Mis, N, F, S
ENSG00000136936	ENSMUSG00000028329	<i>XPA</i>		yes	E	Rec	Mis, N, F, S
ENSG00000154767	ENSMUSG00000030094	<i>XPC</i>		yes	E	Rec	Mis, N, F, S
ENSG00000109906	ENSMUSG00000066687	<i>ZBTB16</i>	yes		L	Dom	T
ENSG00000121741	ENSMUSG00000021945	<i>ZMYM2</i>	yes		L	Dom	T
ENSG00000126746	ENSMUSG00000038346	<i>ZNF384</i>	yes		L	Dom	T

## Appendix B1. *Sleeping Beauty* CISs and predicted CIS genes obtained using the kernel convolution-based framework with a kernel width of 30 kb.

“None” is used where there is no obvious candidate gene associated with the CIS.  
 “CIS chr” and “CIS position” are the chromosome and base pair coordinates of the CIS, which correspond to the centre of the peak in insertion density identified by the kernel convolution-based method.

“Biotype” indicates whether the gene encodes a protein or miRNA.

“Real” indicates whether the gene is believed to be a real cancer gene candidate.

CIS chr	CIS position	Gene name	Ensembl ID	Biotype	Real?
1	161802810	<i>Tnr</i>	ENSMUSG00000015829	protein_coding	N
1	162750720	None	N/A	N/A	N
1	162810060	<i>Rc3h1</i>	ENSMUSG00000040423	protein_coding	N
1	162918420	<i>Cenpl</i>	ENSMUSG00000026708	protein_coding	N
1	164494053	<i>Q3UWS6_mouse</i>	ENSMUSG00000073516	protein_coding	N
2	26289038	<i>Notch1</i>	ENSMUSG00000026923	protein_coding	Y
2	98464591		ENSMUSG00000075015	protein_coding	Y
3	136852080	<i>Ppp3ca</i>	ENSMUSG00000028161	protein_coding	Y
5	28500825	<i>En2</i>	ENSMUSG00000039095	protein_coding	N
7	27307506	<i>Akt2</i>	ENSMUSG00000004056	protein_coding	Y
9	32222013	<i>Fli1</i>	ENSMUSG00000016087	protein_coding	Y
9	45939227	<i>BC033915</i>	ENSMUSG00000034135	protein_coding	Y
10	20825984	<i>Myb</i>	ENSMUSG00000019982	protein_coding	Y
11	11653286	<i>Ikzf1</i>	ENSMUSG00000018654	protein_coding	Y
13	31634753	<i>Foxf2</i>	ENSMUSG00000038402	protein_coding	N
15	3434345	<i>Ghr</i>	ENSMUSG00000055737	protein_coding	N
15	3536237	<i>Ghr</i>	ENSMUSG00000055737	protein_coding	N
15	28104183	<i>ENSMUSESTG00003714390</i>	N/A	EST	N
15	39369050	<i>Rims2</i>	ENSMUSG00000037386	protein_coding	N
16	95500025	<i>Erg</i>	ENSMUSG00000040732	protein_coding	Y
19	32868157	<i>Pten</i>	ENSMUSG00000013663	protein_coding	Y

## Appendix B2. MuLV CISs and predicted CIS genes obtained using the kernel convolution-based framework with a kernel width of 30 kb.

“CIS chr” and “CIS” position are the chromosome and base pair coordinates of the CIS, which correspond to the centre of the peak in insertion density identified by the kernel convolution-based method.

“Biotype” indicates whether the gene encodes a protein or miRNA.

CIS chr	CIS position	Gene name	Ensembl ID	Biotype
1	36867188	<i>Tmem131</i>	ENSMUSG00000026116	protein_coding
1	37429920	<i>Mgat4a</i>	ENSMUSG00000026110	protein_coding
1	88266570	<i>1700019017Rik</i>	ENSMUSG00000036574	protein_coding
1	92886988	<i>Lrrfip1</i>	ENSMUSG00000026305	protein_coding
1	93017760	<i>Ramp1</i>	ENSMUSG00000034353	protein_coding
1	127266450	<i>Actr3</i>	ENSMUSG00000026341	protein_coding
1	130440120	<i>Cxcr4</i>	ENSMUSG00000045382	protein_coding
1	135882360	<i>Btg2</i>	ENSMUSG00000020423	protein_coding
1	138068640	<i>5730559C18Rik</i>	ENSMUSG00000041605	protein_coding
1	139624096	<i>A130050007Rik</i>	ENSMUSG00000051480	protein_coding
1	139988370	<i>Ptpnc1</i>	ENSMUSG00000026395	protein_coding
1	158862420	<i>ENSMUSG00000073531</i>	ENSMUSG00000073531	protein_coding
1	163733040	<i>A1848100</i>	ENSMUSG00000040297	protein_coding
1	165910570	<i>Sell</i>	ENSMUSG00000026581	protein_coding
1	167543910	<i>Rcsd1</i>	ENSMUSG00000040723	protein_coding
1	173513310	<i>Cd48</i>	ENSMUSG00000015355	protein_coding
1	173513310	<i>Slamf7</i>	ENSMUSG00000038179	protein_coding
1	173759850	<i>Slamf6</i>	ENSMUSG00000015314	protein_coding
1	174351491	<i>Ccdc19</i>	ENSMUSG00000026546	protein_coding
1	182195685	<i>Itpkb</i>	ENSMUSG00000038855	protein_coding
1	182545770	<i>Mixl1</i>	ENSMUSG00000026497	protein_coding
1	183688021	<i>EG433384</i>	ENSMUSG00000056699	protein_coding
1	193218780	<i>Ppp2r5a</i>	ENSMUSG00000026626	protein_coding
2	6625263	<i>Cugbp2</i>	ENSMUSG00000002107	protein_coding
2	11544848	<i>Il2ra</i>	ENSMUSG00000026770	protein_coding
2	18526199		ENSMUSG00000046809	protein_coding
2	26286578	<i>Notch1</i>	ENSMUSG00000026923	protein_coding
2	26391458	<i>Egfl7</i>	ENSMUSG00000026921	protein_coding
2	28422542	<i>Gfi1b</i>	ENSMUSG00000026815	protein_coding
2	29890628	<i>Set</i>	ENSMUSG00000054766	protein_coding
2	30074651	<i>Phyhd1</i>	ENSMUSG00000007476	protein_coding
2	30478556	<i>Cstad</i>	ENSMUSG00000047363	protein_coding
2	30515798	<i>OTTMUSG00000016805</i>	ENSMUSG00000075416	protein_coding
2	31883557	<i>A130092J06Rik</i>	ENSMUSG00000050592	protein_coding
2	31883557	<i>Nup214</i>	ENSMUSG00000001855	protein_coding

2	32463278	<i>Eng</i>	ENSMUSG00000026814	protein_coding
2	32463278	<i>Ak1</i>	ENSMUSG00000026817	protein_coding
2	35322278	<i>Ggta1</i>	ENSMUSG00000035778	protein_coding
2	44747181	<i>Zeb2</i>	ENSMUSG00000026872	protein_coding
2	44933888	<i>OTTMUSG00000012358</i>	ENSMUSG00000052248	protein_coding
2	45088748	<i>OTTMUSG00000012358</i>	ENSMUSG00000052248	protein_coding
2	62199128	<i>Dpp4</i>	ENSMUSG00000035000	protein_coding
2	72205228	<i>B230120H23Rik</i>	ENSMUSG0000004085	protein_coding
2	90880286	<i>Slc39a13</i>	ENSMUSG00000002105	protein_coding
2	103740068	<i>Lmo2</i>	ENSMUSG00000032698	protein_coding
2	117035648	<i>Rasgrp1</i>	ENSMUSG00000027347	protein_coding
2	117102556	<i>Rasgrp1</i>	ENSMUSG00000027347	protein_coding
2	126612068	<i>2010106G01Rik</i>	ENSMUSG00000027366	protein_coding
2	131712974	<i>Rassf2</i>	ENSMUSG00000027339	protein_coding
2	132201420	<i>ENSMUSG00000074787</i>	ENSMUSG00000074787	protein_coding
2	152476268	<i>Bcl2l1</i>	ENSMUSG00000007659	protein_coding
2	156577123	<i>Sla2</i>	ENSMUSG00000027636	protein_coding
2	156894698	<i>Ndrp3</i>	ENSMUSG00000027634	protein_coding
2	158413178	<i>Ppp1r16b</i>	ENSMUSG00000037754	protein_coding
2	163335883	<i>Serinc3</i>	ENSMUSG00000017707	protein_coding
2	163772315	<i>Stk4</i>	ENSMUSG00000018209	protein_coding
2	165576218	<i>Prkcbp1</i>	ENSMUSG00000039671	protein_coding
2	165645467	<i>Ncoa3</i>	ENSMUSG00000027678	protein_coding
2	167395179	<i>A530013C23Rik</i>	ENSMUSG00000006462	protein_coding
2	167496748	<i>A530013C23Rik</i>	ENSMUSG00000006462	protein_coding
2	167541311	<i>A530013C23Rik</i>	ENSMUSG00000006462	protein_coding
2	169859468	<i>Zfp217</i>	ENSMUSG00000052056	protein_coding
3	9136653	<i>Tpd52</i>	ENSMUSG00000027506	protein_coding
3	9865266	<i>Pag1</i>	ENSMUSG00000027508	protein_coding
3	30204130	<i>Evi1</i>	ENSMUSG00000027684	protein_coding
3	30293163	<i>Evi1</i>	ENSMUSG00000027684	protein_coding
3	86192646	<i>Sh3d19</i>	ENSMUSG00000028082	protein_coding
3	88228899	<i>Mef2d</i>	ENSMUSG00000001419	protein_coding
3	89472216	<i>Zbtb7b</i>	ENSMUSG00000028042	protein_coding
3	94464096	<i>Rorc</i>	ENSMUSG00000028150	protein_coding
3	95758692	<i>Mcl1</i>	ENSMUSG00000038612	protein_coding
3	96052686	<i>Anp32e</i>	ENSMUSG00000015749	protein_coding
3	101406666	<i>Cd2</i>	ENSMUSG00000027863	protein_coding
3	102859296	<i>Tspan2</i>	ENSMUSG00000027858	protein_coding
3	103913316	<i>Hjpk1</i>	ENSMUSG00000008730	protein_coding
3	106915709	<i>Cd53</i>	ENSMUSG00000040747	protein_coding
3	107215144	<i>A930002I21Rik</i>	ENSMUSG00000050179	protein_coding
3	115671696	<i>Edg1</i>	ENSMUSG00000045092	protein_coding
3	130929576	<i>Lef1</i>	ENSMUSG00000027985	protein_coding
3	130965711	<i>Lef1</i>	ENSMUSG00000027985	protein_coding
3	135539739	<i>Nfkb1</i>	ENSMUSG00000028163	protein_coding
3	152867598	<i>St6galnac5</i>	ENSMUSG00000039037	protein_coding
4	3880368	<i>Chchd7</i>	ENSMUSG00000042198	protein_coding
4	8849854	<i>Chd7</i>	ENSMUSG00000041235	protein_coding
4	11076294	<i>Trp53inp1</i>	ENSMUSG00000028211	protein_coding
4	43483494	<i>Cd72</i>	ENSMUSG00000028459	protein_coding
4	46597074	<i>Coro2a</i>	ENSMUSG00000028337	protein_coding
4	59536494	<i>A2AN91_MOUSE</i>	ENSMUSG00000038578	protein_coding
4	62886131	<i>Akna</i>	ENSMUSG00000039158	protein_coding
4	106332684	<i>Acot11</i>	ENSMUSG00000034853	protein_coding
4	106408884	<i>Ssbp3</i>	ENSMUSG00000061887	protein_coding
4	117956382	<i>Mpl</i>	ENSMUSG00000006389	protein_coding
4	124626818	<i>Zc3h12a</i>	ENSMUSG00000042677	protein_coding
4	129061985	<i>Lck</i>	ENSMUSG00000000409	protein_coding
4	129313443	<i>Ptp4a2</i>	ENSMUSG00000028788	protein_coding
4	132248912	<i>Fgr</i>	ENSMUSG00000028874	protein_coding
4	132364674	<i>Wasf2</i>	ENSMUSG00000028868	protein_coding
4	132943044	<i>Pigv</i>	ENSMUSG00000043257	protein_coding
4	133027869	<i>Arid1a</i>	ENSMUSG00000007880	protein_coding
4	133088622	<i>Arid1a</i>	ENSMUSG00000007880	protein_coding
4	133384494	<i>Ubx5</i>	ENSMUSG00000012126	protein_coding
4	133674693	<i>Stmn1</i>	ENSMUSG00000028832	protein_coding
4	134350074	<i>Runx3</i>	ENSMUSG00000070691	protein_coding
4	134479185	<i>Runx3</i>	ENSMUSG00000070691	protein_coding
4	135302163	<i>Tceb3</i>	ENSMUSG00000028668	protein_coding
4	135361554	<i>Rpl11</i>	ENSMUSG00000059291	protein_coding
4	135449154	<i>E2f2</i>	ENSMUSG00000018983	protein_coding
4	139870464	<i>Arhgef10l</i>	ENSMUSG00000040964	protein_coding
4	140215854	<i>Padi2</i>	ENSMUSG00000028927	protein_coding
4	144278324	<i>Vps13d</i>	ENSMUSG00000020220	protein_coding
4	148545129	<i>Pik3cd</i>	ENSMUSG00000039936	protein_coding
4	149758314	<i>Park7</i>	ENSMUSG00000028964	protein_coding
4	153385044	<i>Prdm16</i>	ENSMUSG00000039410	protein_coding
4	154073934	<i>Ski</i>	ENSMUSG00000029050	protein_coding
4	154914733	<i>Ttll10</i>	ENSMUSG00000029074	protein_coding
5	34003443	<i>Fgfr3</i>	ENSMUSG00000054252	protein_coding
5	64884363	<i>Tbc1d1</i>	ENSMUSG00000029174	protein_coding
5	65091206	<i>Klf3</i>	ENSMUSG00000029178	protein_coding
5	66139051	<i>Rhoh</i>	ENSMUSG00000029204	protein_coding
5	66198603	<i>Rhoh</i>	ENSMUSG00000029204	protein_coding
5	76017843	<i>Kit</i>	ENSMUSG00000005672	protein_coding
5	76117974	<i>Kdr</i>	ENSMUSG00000062960	protein_coding
5	78014613	<i>Paics</i>	ENSMUSG00000029247	protein_coding
5	100814883	<i>Plac8</i>	ENSMUSG00000029322	protein_coding
5	105886383	<i>Lrrc8c</i>	ENSMUSG00000054720	protein_coding
5	107894133	<i>Tgfb3</i>	ENSMUSG00000029287	protein_coding
5	107974475	<i>Evi5</i>	ENSMUSG00000011831	protein_coding
5	107974475	<i>Gfi1</i>	ENSMUSG00000029275	protein_coding
5	111746943	<i>C130026L21Rik</i>	ENSMUSG00000052848	protein_coding
5	111746943	<i>NP_001074704.1</i>	ENSMUSG00000070576	protein_coding

5	115425603	<i>2410014A08Rik</i>	ENSMUSG00000048578	protein_coding
5	115786225	<i>Pxn</i>	ENSMUSG00000029528	protein_coding
5	122492313	<i>Hvcn1</i>	ENSMUSG00000064267	protein_coding
5	123399652	<i>4932422M17Rik</i>	ENSMUSG00000062946	protein_coding
5	124332723	<i>Abcb9</i>	ENSMUSG00000029408	protein_coding
5	124482875	<i>Pitpnm2</i>	ENSMUSG00000029406	protein_coding
5	124740393	<i>6330548G22Rik</i>	ENSMUSG00000029402	protein_coding
5	136456199	<i>Orai2</i>	ENSMUSG00000039747	protein_coding
5	136908642	<i>Mylc2pl</i>	ENSMUSG00000005474	protein_coding
5	137925903	<i>Hrbl</i>	ENSMUSG00000029722	protein_coding
5	137967993	<i>6430598A04Rik</i>	ENSMUSG00000045348	protein_coding
5	139635153	<i>3110082I17Rik</i>	ENSMUSG00000053553	protein_coding
5	140035023	<i>Mafk</i>	ENSMUSG00000018143	protein_coding
5	140464293	<i>Mad1l1</i>	ENSMUSG00000029554	protein_coding
5	140850741	<i>Lfn3</i>	ENSMUSG00000029570	protein_coding
5	142625943	<i>Sdk1</i>	ENSMUSG00000039683	protein_coding
5	147673695	<i>Flt3</i>	ENSMUSG00000042817	protein_coding
5	149285433	<i>Katnal1</i>	ENSMUSG00000041298	protein_coding
6	29247822	<i>2310016C08Rik</i>	ENSMUSG00000043421	protein_coding
6	31094170		ENSMUSG00000052894	protein_coding
6	31149400	<i>AB041803</i>	ENSMUSG00000044471	protein_coding
6	34876806	<i>Stra8</i>	ENSMUSG00000029848	protein_coding
6	34876806	<i>2010107G12Rik</i>	ENSMUSG00000029847	protein_coding
6	48618880	<i>Gimap4</i>	ENSMUSG00000054435	protein_coding
6	48618880	<i>Gimap6</i>	ENSMUSG00000047867	protein_coding
6	52145472	<i>Hoxa7</i>	ENSMUSG00000038236	protein_coding
6	52574318	<i>Hibadh</i>	ENSMUSG00000029776	protein_coding
6	52836602	<i>Jazf1</i>	ENSMUSG00000063568	protein_coding
6	72313232	<i>Vamp8</i>	ENSMUSG00000050732	protein_coding
6	91077280	<i>Nup210</i>	ENSMUSG00000030091	protein_coding
6	99231728	<i>Foxp1</i>	ENSMUSG00000030067	protein_coding
6	99350416	<i>Foxp1</i>	ENSMUSG00000030067	protein_coding
6	115936008	<i>Plxnd1</i>	ENSMUSG00000030123	protein_coding
6	117854680	<i>Hnrpf</i>	ENSMUSG00000042079	protein_coding
6	120536200	<i>Cecr5</i>	ENSMUSG00000058979	protein_coding
6	120896025	<i>Bid</i>	ENSMUSG00000044446	protein_coding
6	120896025	<i>BC030863</i>	ENSMUSG00000051586	protein_coding
6	121193790	<i>Tuba8</i>	ENSMUSG00000030137	protein_coding
6	125199490	<i>Cd27</i>	ENSMUSG00000030336	protein_coding
6	127120398	<i>Ccnd2</i>	ENSMUSG00000000184	protein_coding
6	127120398		ENSMUSG00000067988	protein_coding
6	127218280		ENSMUSG00000072757	protein_coding
6	127299190	<i>ENSMUSG00000072756</i>	ENSMUSG00000072756	protein_coding
6	129195516	<i>Clec2d</i>	ENSMUSG00000030157	protein_coding
6	134158510	<i>Etv6</i>	ENSMUSG00000030199	protein_coding
6	134894031		ENSMUSG00000072697	protein_coding
6	136905370	<i>Arhgdib</i>	ENSMUSG00000030220	protein_coding
6	146471350	<i>Itpr2</i>	ENSMUSG00000030287	protein_coding
7	24088656	<i>Kcnn4</i>	ENSMUSG00000054342	protein_coding
7	25365205	<i>Exosc5</i>	ENSMUSG00000061286	protein_coding
7	28499665	<i>Sirt2</i>	ENSMUSG00000015149	protein_coding
7	37893655	<i>1600014C10Rik</i>	ENSMUSG00000054676	protein_coding
7	45787645	<i>Emp3</i>	ENSMUSG00000040212	protein_coding
7	46707317	<i>Ldha</i>	ENSMUSG00000063229	protein_coding
7	63884467	<i>Trpm1</i>	ENSMUSG00000030523	protein_coding
7	68149465	<i>C330024D12Rik</i>	ENSMUSG00000030553	protein_coding
7	73477495	<i>Chd2</i>	ENSMUSG00000025788	protein_coding
7	75456595	<i>Akap13</i>	ENSMUSG00000066406	protein_coding
7	75669385	<i>Klhl25</i>	ENSMUSG00000055652	protein_coding
7	79917073	<i>Zfp710</i>	ENSMUSG00000048897	protein_coding
7	80018807	<i>Sema4b</i>	ENSMUSG00000030539	protein_coding
7	80078065	<i>Sema4b</i>	ENSMUSG00000030539	protein_coding
7	83533892	<i>Il16</i>	ENSMUSG00000001741	protein_coding
7	100958305	<i>Fchsd2</i>	ENSMUSG00000030691	protein_coding
7	101212495	<i>Stard10</i>	ENSMUSG00000030688	protein_coding
7	101438455	<i>Art2b</i>	ENSMUSG00000030651	protein_coding
7	110744965	<i>Mrv11</i>	ENSMUSG00000005611	protein_coding
7	113952958	<i>Rras2</i>	ENSMUSG00000055723	protein_coding
7	114089008	<i>Psma1</i>	ENSMUSG00000030751	protein_coding
7	125282161	<i>Nsmce1</i>	ENSMUSG00000030750	protein_coding
7	125421045	<i>Il21r</i>	ENSMUSG00000030745	protein_coding
7	126145721	<i>Lat</i>	ENSMUSG00000030742	protein_coding
7	126935011	<i>Spn</i>	ENSMUSG00000051457	protein_coding
7	126975488	<i>Spn</i>	ENSMUSG00000051457	protein_coding
7	129572365	<i>Fgfr2</i>	ENSMUSG00000030849	protein_coding
7	135434206	<i>Ptpre</i>	ENSMUSG00000041836	protein_coding
7	144752546	<i>Ccnd1</i>	ENSMUSG00000070348	protein_coding
7	144785845	<i>Ccnd1</i>	ENSMUSG00000070348	protein_coding
7	144855464	<i>Ccnd1</i>	ENSMUSG00000070348	protein_coding
7	144917305	<i>Ccnd1</i>	ENSMUSG00000070348	protein_coding
8	10928751	<i>3930402G23Rik</i>	ENSMUSG00000038917	protein_coding
8	26567421	<i>Plekha2</i>	ENSMUSG00000031557	protein_coding
8	86631381	<i>Cd97</i>	ENSMUSG00000002885	protein_coding
8	87090501	<i>mmu-mir-181c</i>	ENSMUSG00000065483	miRNA
8	87090501	<i>mmu-mir-23a</i>	ENSMUSG00000065611	miRNA
8	87550590	<i>Ier2</i>	ENSMUSG00000053560	protein_coding
8	87615283	<i>Nfix</i>	ENSMUSG00000001911	protein_coding
8	97863021	<i>Gpr56</i>	ENSMUSG00000031785	protein_coding
8	108503751	<i>2310066E14Rik</i>	ENSMUSG00000038604	protein_coding
8	114480441	<i>Znrf1</i>	ENSMUSG00000033545	protein_coding
8	118116064	<i>Wwox</i>	ENSMUSG00000004637	protein_coding
8	123373041	<i>Gse1</i>	ENSMUSG00000031822	protein_coding
8	123424581	<i>Gse1</i>	ENSMUSG00000031822	protein_coding
8	125353476	<i>Rnf166</i>	ENSMUSG00000014470	protein_coding
8	125592411	<i>Cbfa2t3</i>	ENSMUSG00000006362	protein_coding

8	126293180	<i>Tcf25</i>	ENSMUSG00000001472	protein_coding
8	129550574	<i>Ifi2bp2</i>	ENSMUSG000000051495	protein_coding
8	129725139	<i>A630001O12Rik</i>	ENSMUSG000000074025	protein_coding
9	3015310		ENSMUSG000000074565	protein_coding
9	7253103		ENSMUSG000000076378	miRNA
9	14649123		ENSMUSG000000059658	protein_coding
9	32260042	<i>Fli1</i>	ENSMUSG000000016087	protein_coding
9	32361388	<i>Ets1</i>	ENSMUSG000000032035	protein_coding
9	32677124	<i>Ets1</i>	ENSMUSG000000032035	protein_coding
9	43776933	<i>Thy1</i>	ENSMUSG000000032011	protein_coding
9	43989290	<i>Cbl</i>	ENSMUSG000000034342	protein_coding
9	44252133	<i>Bcl9l</i>	ENSMUSG000000063382	protein_coding
9	44402613	<i>Treh</i>	ENSMUSG000000032098	protein_coding
9	44741223	<i>Cd3e</i>	ENSMUSG000000032093	protein_coding
9	57440949	<i>Csk</i>	ENSMUSG000000032312	protein_coding
9	58049343	<i>Pml</i>	ENSMUSG000000036986	protein_coding
9	60795243	<i>ENSMUSG00000074256</i>	ENSMUSG000000074256	protein_coding
9	60925102	<i>ENSMUSG00000074256</i>	ENSMUSG000000074256	protein_coding
9	63303429	<i>Iqch</i>	ENSMUSG000000037801	protein_coding
9	65342463		ENSMUSG000000066510	protein_coding
9	69262560	<i>Anxa2</i>	ENSMUSG000000032231	protein_coding
9	70960083	<i>Aqp9</i>	ENSMUSG000000032204	protein_coding
9	72192475	<i>Mns1</i>	ENSMUSG000000032221	protein_coding
9	96761643	<i>Spsb4</i>	ENSMUSG000000046997	protein_coding
9	107835483	<i>Ube1l</i>	ENSMUSG000000032596	protein_coding
9	108912277	<i>Scotin</i>	ENSMUSG000000025647	protein_coding
9	112063923	<i>Arpp21</i>	ENSMUSG000000032503	protein_coding
10	20683844	<i>Ahi1</i>	ENSMUSG000000019986	protein_coding
10	20769944	<i>Myb</i>	ENSMUSG000000019982	protein_coding
10	20926098		ENSMUSG000000059894	protein_coding
10	43510904		ENSMUSG000000071320	protein_coding
10	57764624	<i>Lims1</i>	ENSMUSG000000019920	protein_coding
10	59562434	<i>Chst3</i>	ENSMUSG000000057337	protein_coding
10	59771804	<i>4632428N05Rik</i>	ENSMUSG000000020101	protein_coding
10	61900544	<i>Srgn</i>	ENSMUSG000000020077	protein_coding
10	79255214	<i>Ptbp1</i>	ENSMUSG000000006498	protein_coding
10	79331066	<i>Arid3a</i>	ENSMUSG000000019564	protein_coding
10	79559572	<i>Midn</i>	ENSMUSG000000035621	protein_coding
10	80085434	<i>Mknk2</i>	ENSMUSG000000020190	protein_coding
10	80085434	<i>Mobkl2a</i>	ENSMUSG000000003348	protein_coding
10	80333647	<i>Gadd45b</i>	ENSMUSG000000015312	protein_coding
10	80729264	<i>Tbxa2r</i>	ENSMUSG000000034881	protein_coding
10	80906834	<i>Gna15</i>	ENSMUSG000000034792	protein_coding
10	83148554	<i>Appl2</i>	ENSMUSG000000020263	protein_coding
10	92559224	<i>Pctk2</i>	ENSMUSG000000020015	protein_coding
10	120086745	<i>ENSMUSG00000074675</i>	ENSMUSG000000074675	protein_coding
10	127706760	<i>Usp52</i>	ENSMUSG000000005682	protein_coding
11	11613558	<i>Ikzf1</i>	ENSMUSG000000018654	protein_coding
11	22713536	<i>B3gnt2</i>	ENSMUSG000000051650	protein_coding
11	24147350	<i>Bcl11a</i>	ENSMUSG000000000861	protein_coding
11	48925646	<i>Olfir56</i>	ENSMUSG000000040328	protein_coding
11	49090466	<i>Mgat1</i>	ENSMUSG000000020346	protein_coding
11	51485800	<i>C330016O10Rik</i>	ENSMUSG000000001053	protein_coding
11	51918686	<i>Cdkl3</i>	ENSMUSG000000020389	protein_coding
11	52162416	<i>Vdac1</i>	ENSMUSG000000020402	protein_coding
11	52162416	<i>Tcf7</i>	ENSMUSG000000000782	protein_coding
11	54965779	<i>Slc36a3</i>	ENSMUSG000000049491	protein_coding
11	58249556	<i>OTTMUSG00000005737</i>	ENSMUSG000000058287	protein_coding
11	59445765	<i>AA536749</i>	ENSMUSG000000005417	protein_coding
11	62365226	<i>Prr6</i>	ENSMUSG000000018509	protein_coding
11	68016822	<i>Ntn1</i>	ENSMUSG000000020902	protein_coding
11	68246923	<i>Pik3r5</i>	ENSMUSG000000020901	protein_coding
11	74830706	<i>Smg6</i>	ENSMUSG000000038290	protein_coding
11	74991866	<i>Ovca2</i>	ENSMUSG000000038268	protein_coding
11	75094676	<i>Rtn4r1</i>	ENSMUSG000000045287	protein_coding
11	75352973	<i>Slc43a2</i>	ENSMUSG000000038178	protein_coding
11	77334143	<i>1300007F04Rik</i>	ENSMUSG000000000686	protein_coding
11	77603558	<i>Myo18a</i>	ENSMUSG000000000631	protein_coding
11	78820796	<i>Lgals9</i>	ENSMUSG000000001123	protein_coding
11	78820796	<i>Ksr1</i>	ENSMUSG000000018334	protein_coding
11	79340216	<i>Evi2b</i>	ENSMUSG000000070354	protein_coding
11	86223896	<i>Med13</i>	ENSMUSG000000034297	protein_coding
11	86402486	<i>Tmem49</i>	ENSMUSG000000018171	protein_coding
11	86709049	<i>Dhx40</i>	ENSMUSG000000018425	protein_coding
11	87560521	<i>mmu-mir-142</i>	ENSMUSG000000065420	miRNA
11	87560521	<i>Rnf43</i>	ENSMUSG000000034177	protein_coding
11	88890550	<i>Gm525</i>	ENSMUSG000000072553	protein_coding
11	98292206	<i>Ikzf3</i>	ENSMUSG000000018168	protein_coding
11	98561306	<i>Thra</i>	ENSMUSG000000058756	protein_coding
11	98760020	<i>Rara</i>	ENSMUSG000000037992	protein_coding
11	98971556	<i>Ccr7</i>	ENSMUSG000000037944	protein_coding
11	100220216	<i>Jup</i>	ENSMUSG000000001552	protein_coding
11	100220216	<i>1110036O03Rik</i>	ENSMUSG000000006931	protein_coding
11	100665059	<i>Stat5b</i>	ENSMUSG000000020919	protein_coding
11	100665059	<i>Stat5a</i>	ENSMUSG000000004043	protein_coding
11	102990952	<i>Fmn1l</i>	ENSMUSG000000055805	protein_coding
11	106488626	<i>Pecam1</i>	ENSMUSG000000020717	protein_coding
11	106564886	<i>Pecam1</i>	ENSMUSG000000020717	protein_coding
11	114976084	<i>Rab37</i>	ENSMUSG000000020732	protein_coding
11	115250456	<i>Kctd2</i>	ENSMUSG000000016940	protein_coding
11	115719645	<i>Recql5</i>	ENSMUSG000000020752	protein_coding
11	115907726	<i>Trim47</i>	ENSMUSG000000020773	protein_coding
11	116175931	<i>Rnf157</i>	ENSMUSG000000052949	protein_coding
11	116421746	<i>Rhbdp2</i>	ENSMUSG000000020806	protein_coding
11	117141136	<i>Sept9</i>	ENSMUSG000000059248	protein_coding

11	119660186	<i>4932417H02Rik</i>	ENSMUSG00000025583	protein_coding
11	121502319	<i>Metrn1</i>	ENSMUSG00000039208	protein_coding
11	121502319	<i>B3gnt1</i>	ENSMUSG00000046605	protein_coding
12	12591194	<i>D12ErtD553e</i>	ENSMUSG00000020589	protein_coding
12	12963050	<i>Mycn</i>	ENSMUSG00000037169	protein_coding
12	74496944	<i>Prkch</i>	ENSMUSG00000021108	protein_coding
12	78104114	<i>Fut8</i>	ENSMUSG00000021065	protein_coding
12	85570394	<i>Tmem90a</i>	ENSMUSG00000071234	protein_coding
12	86433840	<i>Jundm2</i>	ENSMUSG00000034271	protein_coding
12	86521836	<i>Jundm2</i>	ENSMUSG00000034271	protein_coding
12	87718814		ENSMUSG00000061115	protein_coding
12	103748676	<i>Asb2</i>	ENSMUSG00000021200	protein_coding
12	105408674	<i>4831426I19Rik</i>	ENSMUSG00000054150	protein_coding
12	107534684		ENSMUSG00000059313	protein_coding
12	108374384	<i>Bcl11b</i>	ENSMUSG00000048251	protein_coding
12	113124164	<i>Akt1</i>	ENSMUSG00000001729	protein_coding
12	113308480	<i>Gpr132</i>	ENSMUSG00000021298	protein_coding
13	13322617	<i>Lyst</i>	ENSMUSG00000019726	protein_coding
13	13322617	<i>Nid1</i>	ENSMUSG00000005397	protein_coding
13	19354435	<i>Stard3nl</i>	ENSMUSG00000003062	protein_coding
13	28955545	<i>Sox19</i>	ENSMUSG00000076431	protein_coding
13	30759835	<i>Irf4</i>	ENSMUSG00000021356	protein_coding
13	30836965	<i>Exoc2</i>	ENSMUSG00000021357	protein_coding
13	37869265	<i>Rreb1</i>	ENSMUSG00000039087	protein_coding
13	51756303	<i>Sema4d</i>	ENSMUSG00000021451	protein_coding
13	52096246	<i>Gadd45g</i>	ENSMUSG00000021453	protein_coding
13	56170108	<i>BC027057</i>	ENSMUSG00000049625	protein_coding
13	64424644	<i>Ccrk</i>	ENSMUSG000000021483	protein_coding
13	113122455	<i>Map3k1</i>	ENSMUSG000000021754	protein_coding
13	113544085	<i>Il6st</i>	ENSMUSG000000021756	protein_coding
14	14966028		ENSMUSG00000071576	protein_coding
14	24133166	<i>Zmiz1</i>	ENSMUSG00000007817	protein_coding
14	24278597	<i>Zmiz1</i>	ENSMUSG00000007817	protein_coding
14	24350627	<i>Zmiz1</i>	ENSMUSG00000007817	protein_coding
14	26187647	<i>Arhgef3</i>	ENSMUSG000000021895	protein_coding
14	30246581	<i>Sh3bp5</i>	ENSMUSG00000021892	protein_coding
14	30385342	<i>Colq</i>	ENSMUSG00000057606	protein_coding
14	39863417	<i>Tspan14</i>	ENSMUSG00000037824	protein_coding
14	53134547	<i>Dad1</i>	ENSMUSG00000022174	protein_coding
14	54145686	<i>Jph4</i>	ENSMUSG00000022208	protein_coding
14	59679497	<i>Spata13</i>	ENSMUSG00000021990	protein_coding
14	68797904	<i>1700081D17Rik</i>	ENSMUSG00000022085	protein_coding
14	71858837	<i>Rcbtb2</i>	ENSMUSG00000022106	protein_coding
14	73916687	<i>Lcp1</i>	ENSMUSG00000021998	protein_coding
14	78008237	<i>1190002H23Rik</i>	ENSMUSG00000022018	protein_coding
14	78257370	<i>Elf1</i>	ENSMUSG00000036461	protein_coding
14	113921387	<i>mmu-mir-17</i>	ENSMUSG00000065508	miRNA
14	117778812	<i>Cldn10a</i>	ENSMUSG00000022132	protein_coding
14	121096162	<i>Ubac2</i>	ENSMUSG00000041765	protein_coding
14	121142627	<i>Ubac2</i>	ENSMUSG00000041765	protein_coding
15	6538277	<i>Fyb</i>	ENSMUSG00000022148	protein_coding
15	8506397	<i>Slc1a3</i>	ENSMUSG00000005360	protein_coding
15	9413447	<i>Capsl</i>	ENSMUSG00000039676	protein_coding
15	61814465	<i>Myc</i>	ENSMUSG00000022346	protein_coding
15	61866994	<i>Pvt1</i>	ENSMUSG00000072566	protein_coding
15	61924727	<i>Pvt1</i>	ENSMUSG00000072566	protein_coding
15	62002017	<i>Pvt1</i>	ENSMUSG00000072566	protein_coding
15	62287787	<i>Pvt1</i>	ENSMUSG00000072566	protein_coding
15	62562732	<i>Pvt1</i>	ENSMUSG00000072566	protein_coding
15	63088217		ENSMUSG00000063435	protein_coding
15	63481547		ENSMUSG00000069082	protein_coding
15	66641961	<i>Sla</i>	ENSMUSG00000022372	protein_coding
15	73562505	<i>Ptp4a3</i>	ENSMUSG00000059895	protein_coding
15	74753147		ENSMUSG00000034596	protein_coding
15	78420675	<i>Pscd4</i>	ENSMUSG00000018008	protein_coding
15	80394347	<i>Grap2</i>	ENSMUSG00000042351	protein_coding
15	81855512	<i>Xrcc6</i>	ENSMUSG00000022471	protein_coding
15	83428377	<i>Scube1</i>	ENSMUSG00000016763	protein_coding
15	84144702	<i>Parvg</i>	ENSMUSG00000022439	protein_coding
15	96478907	<i>Slc38a1</i>	ENSMUSG00000023169	protein_coding
15	97669457	<i>Hdac7a</i>	ENSMUSG00000022475	protein_coding
15	103086193	<i>Nfe2</i>	ENSMUSG00000058794	protein_coding
16	4472427	<i>Tcfap4</i>	ENSMUSG00000005718	protein_coding
16	8659080	<i>Usp7</i>	ENSMUSG00000022710	protein_coding
16	10587300	<i>Clec16a</i>	ENSMUSG00000068663	protein_coding
16	17885456	<i>Vpreb2</i>	ENSMUSG00000059280	protein_coding
16	32108280	<i>Bex6</i>	ENSMUSG00000075269	protein_coding
16	32439060	<i>Zdhhc19</i>	ENSMUSG00000052363	protein_coding
16	49720413	<i>Cd47</i>	ENSMUSG00000055447	protein_coding
16	55872427	<i>Rpl24</i>	ENSMUSG00000022601	protein_coding
16	60578594	<i>Epha6</i>	ENSMUSG00000055540	protein_coding
16	91341300	<i>Ifnar1</i>	ENSMUSG00000022967	protein_coding
16	92638260	<i>Runx1</i>	ENSMUSG00000022952	protein_coding
16	92692779	<i>Runx1</i>	ENSMUSG00000022952	protein_coding
16	92755807	<i>Runx1</i>	ENSMUSG00000022952	protein_coding
16	92815635	<i>Runx1</i>	ENSMUSG00000022952	protein_coding
16	93041760	<i>mmu-mir-802</i>	ENSMUSG00000076457	miRNA
16	93080556	<i>mmu-mir-802</i>	ENSMUSG00000076457	miRNA
16	93705556	<i>Dopey2</i>	ENSMUSG00000022946	protein_coding
16	95560470	<i>Erg</i>	ENSMUSG00000040732	protein_coding
17	6423331	<i>Vil2</i>	ENSMUSG00000052397	protein_coding
17	14738010	<i>Tcte3</i>	ENSMUSG00000036648	protein_coding
17	15382728	<i>Chd1</i>	ENSMUSG00000023852	protein_coding
17	25521271	<i>BC008155</i>	ENSMUSG00000057411	protein_coding
17	27282631	<i>Hmga1</i>	ENSMUSG00000046711	protein_coding

17	28241401	<i>E230001N04Rik</i>	ENSMUSG00000066170	protein_coding
17	29125068	<i>Fgd2</i>	ENSMUSG00000024013	protein_coding
17	29221740	<i>Pim1</i>	ENSMUSG00000024014	protein_coding
17	30355057	<i>Dnahc8</i>	ENSMUSG00000033826	protein_coding
17	30796931	<i>Abcg1</i>	ENSMUSG00000024030	protein_coding
17	30927241	<i>Ubash3a</i>	ENSMUSG00000042345	protein_coding
17	30927241	<i>Tmprss3</i>	ENSMUSG00000024034	protein_coding
17	33731492	<i>Brd2</i>	ENSMUSG00000024335	protein_coding
17	33809236	<i>Tap2</i>	ENSMUSG00000024339	protein_coding
17	33809236	<i>Psmb8</i>	ENSMUSG00000024338	protein_coding
17	34656136	<i>Msh5</i>	ENSMUSG00000007035	protein_coding
17	34814198	<i>Lta</i>	ENSMUSG00000024402	protein_coding
17	34814198	<i>Nfkbil1</i>	ENSMUSG00000042419	protein_coding
17	34960681	<i>H2-D1</i>	ENSMUSG000000073411	protein_coding
17	35524109	<i>Ddr1</i>	ENSMUSG00000003534	protein_coding
17	35630144	<i>Ppp1r10</i>	ENSMUSG00000039220	protein_coding
17	44245111	<i>Supt3h</i>	ENSMUSG00000038954	protein_coding
17	44956111	<i>Aars2</i>	ENSMUSG00000023938	protein_coding
17	46991279	<i>Ccnd3</i>	ENSMUSG00000034165	protein_coding
17	47060071	<i>Ccnd3</i>	ENSMUSG00000034165	protein_coding
17	47504543	<i>1700122O11Rik</i>	ENSMUSG00000042494	protein_coding
17	55928551	<i>Arrdc5</i>	ENSMUSG00000073380	protein_coding
17	71390787	<i>Q8BP09_MOUSE</i>	ENSMUSG00000041913	protein_coding
17	83869302	<i>Hao</i>	ENSMUSG00000000673	protein_coding
17	84056736	<i>Zfp36l2</i>	ENSMUSG00000045817	protein_coding
18	4333434	<i>Map3k8</i>	ENSMUSG00000024235	protein_coding
18	5352149	<i>Zfp438</i>	ENSMUSG00000050945	protein_coding
18	15349211	<i>Aqp4</i>	ENSMUSG00000024411	protein_coding
18	35081394	<i>Hspa9</i>	ENSMUSG00000024359	protein_coding
18	35868041	<i>Tmem173</i>	ENSMUSG00000024349	protein_coding
18	39149231	<i>Arhgap26</i>	ENSMUSG00000036452	protein_coding
18	55115767	<i>Zfp608</i>	ENSMUSG00000052713	protein_coding
18	60880541	<i>Rps14</i>	ENSMUSG00000024608	protein_coding
18	61000211	<i>Tcof1</i>	ENSMUSG00000024613	protein_coding
18	65035691	<i>Nedd4l</i>	ENSMUSG00000024589	protein_coding
18	68349821	<i>D18Ert653e</i>	ENSMUSG00000024544	protein_coding
18	70687614	<i>Mbd2</i>	ENSMUSG00000024513	protein_coding
18	75397751	<i>Dym</i>	ENSMUSG00000035765	protein_coding
18	85017491	<i>Cyb5</i>	ENSMUSG00000024646	protein_coding
19	41444414	<i>Gpr152</i>	ENSMUSG00000044724	protein_coding
19	4299940	<i>Adrbk1</i>	ENSMUSG00000024858	protein_coding
19	5810614	<i>Frmf8</i>	ENSMUSG00000043488	protein_coding
19	5810614	<i>Scyl1</i>	ENSMUSG00000024941	protein_coding
19	5844306	<i>Frmf8</i>	ENSMUSG00000024816	protein_coding
19	6399309	<i>Rasgrp2</i>	ENSMUSG00000032946	protein_coding
19	6399309	<i>Pygm</i>	ENSMUSG00000032648	protein_coding
19	9110974	<i>Ahnak</i>	ENSMUSG00000069833	protein_coding
19	10649744	<i>Cybas3</i>	ENSMUSG00000034445	protein_coding
19	25054444	<i>Dock8</i>	ENSMUSG00000052085	protein_coding
19	36321364	<i>Pcgf5</i>	ENSMUSG00000024805	protein_coding
19	37556224	<i>Hhex</i>	ENSMUSG00000024986	protein_coding
19	37556224	<i>Exoc6</i>	ENSMUSG00000053799	protein_coding
19	41890234	<i>Frat2</i>	ENSMUSG00000047604	protein_coding
19	44437354	<i>Scd1</i>	ENSMUSG00000037071	protein_coding
19	47024957	<i>Ina</i>	ENSMUSG00000034336	protein_coding
19	53487874	<i>ENSMUSG00000074788</i>	ENSMUSG00000074788	protein_coding

## Appendix C1. List showing other cancer-associated datasets in which the MuLV CIS genes appear.

RTCGD (retro) = genes identified by retroviral insertional mutagenesis in the RTCGD database

(RETRO = CIS gene in RTCGD dataset)

RTCGD (SB) = genes identified by transposon-mediated insertional mutagenesis in the RTCGD database (SB = CIS gene in RTCGD dataset)

CGC = Cancer Gene Census (Dom = CIS gene is a dominant cancer gene)

COSMIC = genes mutated in COSMIC database (COSMIC = CIS gene mutated in COSMIC)

Sjjoblom = candidate cancer genes from Sjjoblom *et al.* (2006) (Sjjoblom = CIS gene in Sjjoblom dataset)

Nanog BS = genes with Nanog binding site (Nanog = CIS gene in Nanog dataset)

Oct4 BS = genes with Oct4 binding site (OCT4 = CIS gene in Oct4 dataset)

p53 BS = genes with p53 binding site (p53 (dn) = CIS gene downregulated by p53; p53 (up) = CIS gene upregulated by p53; p53 = effect of p53 binding unknown)

Mullighan Amps/Dels = genes in recurrent amplicons and deletions in acute lymphoblastic leukaemia dataset of Mullighan *et al.* (2007) (AMP = CIS gene in amplicon; DEL = CIS gene in deletion)

n/a is used where the gene has no known human orthologue and cannot be compared to human cancer-associated datasets.

Gene name	Ensembl ID	RTCGD (retro)	RTCGD (SB)	CGC	COSMIC	Sjjoblom	Nanog BS	Oct4 BS	p53 BS	Mullighan Amps / Dels
1110036003Rik	ENSMUSG00000006931	-	-	-	-	-	-	-	-	-
1190002H23Rik	ENSMUSG00000022018	-	-	-	COSMIC	-	-	-	-	-
1300007F04Rik	ENSMUSG00000000686	-	-	-	-	-	-	-	-	-
1600014C10Rik	ENSMUSG000000054676	-	-	-	-	-	-	-	-	-
1700019017Rik	ENSMUSG000000036574	-	-	-	-	-	Nanog	-	-	-
1700081D17Rik	ENSMUSG000000022085	-	-	-	-	-	-	-	-	-
1700122011Rik	ENSMUSG000000042494	-	-	n/a	n/a	n/a	-	-	n/a	n/a
2010106G01Rik	ENSMUSG000000027366	-	-	-	-	-	-	-	-	-
2010107G12Rik	ENSMUSG000000029847	-	-	n/a	n/a	n/a	-	-	n/a	n/a
2310016C08Rik	ENSMUSG000000043421	-	-	-	-	-	-	-	-	-
2310066E14Rik	ENSMUSG000000038604	-	-	-	-	-	-	-	-	DEL
2410014A08Rik	ENSMUSG000000048578	-	-	-	-	-	Nanog	-	-	-
3110082I17Rik	ENSMUSG000000053553	-	-	-	-	-	-	-	-	DEL
3930402G23Rik	ENSMUSG000000038917	RETRO	-	n/a	n/a	n/a	-	-	n/a	n/a
4632428N05Rik	ENSMUSG000000020101	-	-	-	-	-	-	-	-	-
4831426I19Rik	ENSMUSG000000054150	RETRO	-	-	-	-	Nanog	-	-	-
4932417H02Rik	ENSMUSG000000025583	-	-	-	COSMIC	-	-	OCT4	-	-
4932422M17Rik	ENSMUSG000000062946	-	-	n/a	n/a	n/a	-	-	n/a	n/a
5730559C18Rik	ENSMUSG000000041605	-	-	-	-	-	-	-	AMP	-
6330548G22Rik	ENSMUSG000000029402	-	-	-	-	-	-	-	-	-
6430598A04Rik	ENSMUSG000000045348	-	-	-	-	-	-	-	-	-
A130050007Rik	ENSMUSG000000051480	-	-	n/a	n/a	n/a	-	-	n/a	n/a
A130092J06Rik	ENSMUSG000000050592	-	-	-	-	-	-	-	AMP	-
A2AN91_MOUSE	ENSMUSG000000038578	-	-	-	-	-	-	-	p53	AMP
A530013C23Rik	ENSMUSG000000006462	-	-	n/a	n/a	n/a	-	-	n/a	n/a
A630001O12Rik	ENSMUSG000000074025	-	-	n/a	n/a	n/a	-	-	n/a	n/a
A930002I21Rik	ENSMUSG000000050179	-	-	n/a	n/a	n/a	-	-	n/a	n/a
AA536749	ENSMUSG000000005417	-	-	-	-	-	-	-	-	DEL
Aars2	ENSMUSG000000023938	-	-	-	-	-	-	-	-	-
AB041803	ENSMUSG000000044471	RETRO	-	n/a	n/a	n/a	Nanog	-	n/a	n/a
Abcb9	ENSMUSG000000029408	-	-	-	-	-	-	-	p53	-
Abcg1	ENSMUSG000000024030	-	-	-	-	-	-	-	-	-
Acot11	ENSMUSG000000034853	-	-	-	-	-	-	-	-	-
Actr3	ENSMUSG000000026341	-	-	-	-	-	-	-	-	-
Adrbk1	ENSMUSG000000024858	-	-	-	COSMIC	-	-	-	-	-
Ahi1	ENSMUSG000000019986	RETRO	-	-	COSMIC	-	Nanog	-	-	AMP
Ahnak	ENSMUSG000000069833	-	-	-	-	-	-	-	-	-
AI848100	ENSMUSG000000040297	-	-	-	-	-	-	-	-	AMP
Ak1	ENSMUSG000000026817	-	-	-	-	-	-	-	-	AMP
Akap13	ENSMUSG000000066406	RETRO	-	n/a	n/a	n/a	-	-	n/a	n/a
Akna	ENSMUSG000000039158	-	-	-	-	-	-	-	-	AMP
Akt1	ENSMUSG000000001729	RETRO	-	-	-	-	-	-	-	-
Anp32e	ENSMUSG000000015749	-	-	-	-	-	-	-	-	AMP
Anxa2	ENSMUSG000000032231	-	-	-	-	-	-	-	-	DEL
App12	ENSMUSG000000020263	-	-	-	-	-	-	-	-	-
Aqp4	ENSMUSG000000024411	-	-	-	-	-	-	-	-	-
Aqp9	ENSMUSG000000032204	-	-	-	-	-	-	-	-	-
Arhgap26	ENSMUSG000000036452	-	-	Dom	-	-	-	OCT4	-	-
Arhgdib	ENSMUSG000000030220	-	-	-	-	-	-	-	-	-
Arhgef10l	ENSMUSG000000040964	-	-	-	-	-	-	OCT4	-	-
Arhgef3	ENSMUSG000000021895	-	-	-	-	-	Nanog	-	-	-
Arid1a	ENSMUSG000000007880	RETRO	-	-	COSMIC	-	-	-	-	-
Arid3a	ENSMUSG000000019564	-	-	-	-	-	-	-	-	DEL
Arpp21	ENSMUSG000000032503	-	-	-	-	-	-	-	-	-
Arrdc5	ENSMUSG000000073380	-	-	-	-	-	-	-	-	-
Art2b	ENSMUSG000000030651	-	-	n/a	n/a	n/a	-	-	n/a	n/a
Asb2	ENSMUSG000000021200	-	-	-	-	-	-	-	-	-
B230120H23Rik	ENSMUSG000000004085	-	-	-	COSMIC	-	-	-	-	-
B3gnt2	ENSMUSG000000051650	-	-	-	-	-	-	-	-	-
B3gnt1l	ENSMUSG000000046605	-	-	-	-	-	-	-	-	-
BC008155	ENSMUSG000000057411	-	-	-	-	-	-	-	-	-

BC027057	ENSMUSG00000049625	-	-	-	-	-	-	-	-	-	-	-
BC030863	ENSMUSG00000051586	-	-	-	-	-	-	-	-	-	AMP	-
Bcl11a	ENSMUSG00000000861	RETRO	-	Dom	COSMIC	Sjoblom	-	-	-	-	-	-
Bcl11b	ENSMUSG000000048251	-	-	Dom	COSMIC	-	-	-	-	-	-	-
Bcl211	ENSMUSG000000007659	RETRO	-	-	-	-	Nanog	-	-	-	-	DEL
Bcl9l	ENSMUSG000000063382	-	-	-	-	-	-	-	-	-	-	DEL
Bex6	ENSMUSG000000075269	-	-	-	COSMIC	-	-	-	-	-	-	-
Bid	ENSMUSG00000004446	RETRO	-	-	-	-	-	-	-	-	AMP	-
Brd2	ENSMUSG000000024335	RETRO	-	-	COSMIC	-	-	OCT4	-	-	-	-
Btg2	ENSMUSG000000020423	RETRO	-	-	-	-	-	-	-	-	AMP	-
C130026L21Rik	ENSMUSG000000052848	-	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	DEL
C330016O10Rik	ENSMUSG000000001053	RETRO	-	-	-	-	-	-	-	-	-	DEL
C330024D12Rik	ENSMUSG000000030553	-	-	-	-	-	-	-	-	-	-	-
Capsl	ENSMUSG000000039676	-	-	-	-	-	-	-	-	-	-	-
Cbfa2t3	ENSMUSG000000006362	RETRO	-	Dom	-	-	-	-	-	-	-	-
Cbl	ENSMUSG000000034342	-	-	Dom	-	-	-	-	-	-	-	-
Ccdc19	ENSMUSG000000026546	-	-	-	-	-	-	-	-	-	AMP	-
Ccnd1	ENSMUSG000000070348	RETRO	-	Dom	-	-	-	-	-	-	-	-
Ccnd2	ENSMUSG000000000184	RETRO	-	Dom	-	-	-	-	-	-	-	-
Ccnd3	ENSMUSG000000034165	RETRO	-	Dom	-	-	-	-	-	-	-	-
Ccr7	ENSMUSG000000037944	RETRO	-	-	-	-	-	-	-	-	-	-
Ccrk	ENSMUSG000000021483	RETRO	-	-	-	-	-	-	-	-	AMP	-
Cd2	ENSMUSG000000027863	-	-	-	-	-	-	-	-	-	-	-
Cd27	ENSMUSG000000030336	-	-	-	-	-	-	-	-	-	-	-
Cd3e	ENSMUSG000000032093	-	-	-	-	-	-	-	-	-	-	-
Cd47	ENSMUSG000000055447	-	-	-	-	-	-	-	-	-	-	-
Cd48	ENSMUSG000000015355	-	-	-	-	-	-	-	-	-	AMP	-
Cd53	ENSMUSG000000040747	-	-	-	-	-	-	-	-	-	-	-
Cd72	ENSMUSG000000028459	-	-	-	-	-	-	-	-	-	-	DEL
Cd97	ENSMUSG000000002885	-	-	-	-	-	-	OCT4	-	-	-	-
Cdk13	ENSMUSG000000020389	-	-	-	COSMIC	-	-	-	-	-	-	-
Cecr5	ENSMUSG000000058979	RETRO	-	-	-	-	Nanog	-	-	-	AMP	-
Chchd7	ENSMUSG000000042198	-	-	-	-	-	-	-	p53	-	-	-
Chd1	ENSMUSG000000023852	-	-	-	COSMIC	-	Nanog	OCT4	p53	-	-	-
Chd2	ENSMUSG000000025788	RETRO	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	-
Chd7	ENSMUSG000000041235	-	-	-	-	-	Nanog	-	-	-	-	-
Chst3	ENSMUSG000000057337	-	-	-	-	-	Nanog	OCT4	-	-	-	-
Cldn10a	ENSMUSG000000022132	-	-	-	-	-	-	-	-	-	-	-
Clec16a	ENSMUSG000000068663	-	-	-	-	-	-	-	-	-	-	-
Clec2d	ENSMUSG000000030157	-	-	-	-	-	-	-	-	-	-	-
Colq	ENSMUSG000000057606	-	-	-	-	-	-	-	-	-	-	-
Coro2a	ENSMUSG000000028337	RETRO	-	-	-	-	-	-	-	-	AMP	-
Csk	ENSMUSG000000032312	-	-	-	COSMIC	-	-	-	-	-	-	-
Cstad	ENSMUSG000000047363	RETRO	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	-
Cugbp2	ENSMUSG000000002107	-	-	-	-	-	-	OCT4	-	-	AMP	-
Cxcr4	ENSMUSG000000045382	-	-	-	COSMIC	-	-	-	-	-	-	-
Cyb5	ENSMUSG000000024646	-	-	-	-	-	Nanog	-	-	-	-	-
Cybas3	ENSMUSG000000034445	-	-	-	-	-	-	-	-	-	-	-
D12Erttd553e	ENSMUSG000000020589	RETRO	-	-	-	-	Nanog	-	-	-	AMP	-
D18Erttd653e	ENSMUSG000000024544	-	-	-	-	-	-	-	-	-	-	-
Dad1	ENSMUSG000000022174	-	-	-	-	-	-	-	-	-	-	-
Ddr1	ENSMUSG000000003534	RETRO	-	-	COSMIC	-	-	-	-	-	-	-
Dhx40	ENSMUSG000000018425	-	-	-	-	-	-	-	-	-	-	-
Dnahc8	ENSMUSG000000033826	-	-	-	COSMIC	-	Nanog	OCT4	-	-	-	-
Dock8	ENSMUSG000000052085	-	-	-	-	-	-	-	-	-	-	DEL
Dopey2	ENSMUSG000000022946	RETRO	-	-	-	-	Nanog	-	-	-	-	-
Dpp4	ENSMUSG000000035000	-	-	-	-	-	-	-	-	-	-	-
Dym	ENSMUSG000000035765	RETRO	-	-	-	-	-	-	-	-	-	-
E230001N04Rik	ENSMUSG000000066170	-	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	-
E2f2	ENSMUSG000000018983	RETRO	-	-	-	-	-	-	-	-	-	-
Edg1	ENSMUSG000000045092	-	-	-	-	-	Nanog	-	-	-	-	-
EG433384	ENSMUSG000000056699	-	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	-
Egfl7	ENSMUSG000000026921	-	-	-	-	-	-	-	-	-	AMP	-
Elf1	ENSMUSG000000036461	-	-	-	-	-	-	-	-	-	-	DEL
Emp3	ENSMUSG000000040212	-	-	-	-	-	-	-	-	-	-	-
Eng	ENSMUSG000000026814	-	-	-	-	-	-	-	-	-	AMP	-
Epha6	ENSMUSG000000055540	-	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	-
Erg	ENSMUSG000000040732	RETRO	SB	Dom	-	-	-	-	-	-	-	DEL
Ets1	ENSMUSG000000032035	RETRO	SB	-	COSMIC	-	-	-	-	-	-	-
Etv6	ENSMUSG000000030199	-	-	Dom	-	-	-	-	-	-	-	DEL
Evi1	ENSMUSG000000027684	RETRO	-	Dom	COSMIC	-	-	-	-	-	-	-
Evi2b	ENSMUSG000000070354	-	-	-	-	-	-	-	-	-	-	-
Evi5	ENSMUSG000000011831	-	-	-	-	-	-	-	-	-	-	-
Exoc2	ENSMUSG000000021357	-	-	-	COSMIC	-	-	-	-	-	AMP	-
Exoc6	ENSMUSG000000053799	-	-	-	-	-	-	-	-	-	-	-
Exosc5	ENSMUSG000000061286	-	-	-	-	-	-	-	-	-	-	-
Fchs2	ENSMUSG000000030691	-	-	-	-	-	-	-	-	-	-	-
Fgd2	ENSMUSG000000024013	-	-	-	COSMIC	-	Nanog	-	-	-	-	-
Fgfr2	ENSMUSG000000030849	-	-	Dom	COSMIC	-	-	-	-	-	-	-
Fgfr3	ENSMUSG000000054252	RETRO	-	Dom	COSMIC	-	-	-	-	-	-	-
Fgr	ENSMUSG000000028874	RETRO	-	-	COSMIC	-	Nanog	-	-	-	-	-
Fli1	ENSMUSG000000016087	RETRO	SB	Dom	COSMIC	-	-	-	-	-	-	-
Flt3	ENSMUSG000000042817	RETRO	-	Dom	COSMIC	-	-	-	-	-	-	-
Fmn1	ENSMUSG000000055805	-	-	-	-	-	Nanog	-	-	-	-	-
Foxp1	ENSMUSG000000030067	-	-	-	COSMIC	-	Nanog	-	-	-	-	-
Frat2	ENSMUSG000000047604	-	-	-	-	-	-	-	-	-	-	-
Frmd8	ENSMUSG000000024816	RETRO	-	-	COSMIC	-	-	-	-	-	-	-
Frmd8	ENSMUSG000000043488	RETRO	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	-
Fut8	ENSMUSG000000021065	-	-	-	-	-	-	-	-	-	-	-
Fyb	ENSMUSG000000022148	-	-	-	-	-	Nanog	OCT4	-	-	-	-
Gadd45b	ENSMUSG000000015312	-	-	-	-	-	-	-	-	-	-	-
Gadd45g	ENSMUSG000000021453	RETRO	-	-	-	-	-	OCT4	-	-	AMP	-
Gfi1	ENSMUSG000000029275	RETRO	-	-	-	-	-	-	-	-	-	-
Gfi1b	ENSMUSG000000026815	RETRO	-	-	-	-	-	-	-	-	AMP	-
Ggta1	ENSMUSG000000035778	RETRO	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a	-







ENSMUSG00000074565	-	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a
ENSMUSG00000076378	-	-	n/a	n/a	n/a	-	-	n/a	n/a	n/a

**Appendix C2. List showing other cancer-associated datasets in which the *Sleeping Beauty* CIS genes appear.**

See Appendix C1 for an explanation of each column.

Gene name	Ensembl ID	RTCGD (retro)	RTCGD (SB)	CGC	COSMIC	Sjoblom	Nanog BS	OCT4 BS	p53 BS	Mullighan Amps/ Dels
<i>Akt2</i>	ENSMUSG00000004056	-	-	Dom	-	-	-	-	-	-
<i>BC033915</i>	ENSMUSG00000034135	-	-	-	COSMIC	Sjoblom	-	-	-	-
<i>Erg</i>	ENSMUSG00000040732	RETRO	SB	Dom	-	-	-	-	-	-
<i>Fli1</i>	ENSMUSG00000016087	RETRO	SB	Dom	COSMIC	-	-	-	-	-
<i>Ikzf1</i>	ENSMUSG00000018654	RETRO	-	Dom	-	-	-	-	-	-
<i>Myb</i>	ENSMUSG00000019982	RETRO	-	-	-	-	-	-	-	AMP DEL
<i>Notch1</i>	ENSMUSG00000026923	RETRO	SB	Dom	COSMIC	-	-	-	p53 (up)	AMP DEL
<i>Ppp3ca</i>	ENSMUSG00000028161	-	-	-	COSMIC	-	-	-	-	-
<i>Pten</i>	ENSMUSG00000013663	-	-	Rec	COSMIC	-	-	-	-	DEL
	ENSMUSG00000075015	-	-	n/a	n/a	n/a	-	-	n/a	n/a

## Appendix D. Nearest and further genes from CISs with a *P*-value of <0.001 or <0.05 in lists supplied by the Netherlands Cancer Institute.

“CIS chr” and “CIS position” are the chromosome and base pair coordinates of the CIS, which correspond to the centre of the peak in insertion density identified by the kernel convolution-based method.

CIS P- value	CIS chr	CIS position	Nearest gene name	Nearest gene Ensembl ID	Further gene name	Further gene Ensembl ID
0.001	1	37217235		ENSMUSG00000061123	<i>Tmem131</i>	ENSMUSG00000026116
0.001	1	37780290	<i>Mgat4a</i>	ENSMUSG00000026110	<i>2010300C02Rik</i>	ENSMUSG00000026090
0.001	1	86239852	<i>1700019O17Rik</i>	ENSMUSG00000036574		ENSMUSG00000067125
0.001	1	86295450		ENSMUSG00000067125	<i>OTTMUSG0000007209</i>	ENSMUSG00000026238
0.001	1	90879243	<i>Lrrrip1</i>	ENSMUSG00000026305		ENSMUSG00000048068
0.001	1	91009545	<i>Ramp1</i>	ENSMUSG00000034353		ENSMUSG00000047217
0.001	1	125266838	<i>Actr3</i>	ENSMUSG00000026341	<i>Slc35f5</i>	ENSMUSG00000026342
0.001	1	128455260	<i>Cxcr4</i>	ENSMUSG00000045382		ENSMUSG00000064737
0.001	1	133917960	<i>Btg2</i>	ENSMUSG00000020423	<i>Fmod</i>	ENSMUSG00000041559
0.001	1	136100550	<i>Camsap111</i>	ENSMUSG00000041570	<i>GPR25_MOUSE</i>	ENSMUSG00000052759
0.001	1	137658090	<i>A130050O07Rik</i>	ENSMUSG00000051480		ENSMUSG00000065205
0.001	1	156936780	<i>1700057K13Rik</i>	ENSMUSG00000026592	<i>Angpt1</i>	ENSMUSG00000033544
0.001	1	163991159	<i>Sell</i>	ENSMUSG00000026581	<i>Selp</i>	ENSMUSG00000026580
0.001	1	165628770	<i>Creg1</i>	ENSMUSG00000040713	<i>Rcsd1</i>	ENSMUSG00000040723
0.001	1	171607260	<i>Cd48</i>	ENSMUSG00000015355	<i>Slamf7</i>	ENSMUSG00000038179
0.001	1	171851676	<i>Slamf6</i>	ENSMUSG00000015314	<i>Vangl2</i>	ENSMUSG00000026556
0.001	1	172443511	<i>Ccdc19</i>	ENSMUSG00000026546		ENSMUSG00000066683
0.001	1	180313439	<i>Itpkb</i>	ENSMUSG00000038855	<i>ENSMUSG00000056615</i>	ENSMUSG00000056615
0.001	1	180660300	<i>Mixl1</i>	ENSMUSG00000026497	<i>Acbd3</i>	ENSMUSG00000026499
0.001	1	180803760	<i>BC031781</i>	ENSMUSG00000038806		ENSMUSG00000066654
0.001	1	191254946	<i>Dtl</i>	ENSMUSG00000037474	<i>Ppp2r5a</i>	ENSMUSG00000026626
0.001	2	6626911	<i>Cugbp2</i>	ENSMUSG00000002107		ENSMUSG00000069177
0.001	2	11543491		ENSMUSG00000069172	<i>Rbm17</i>	ENSMUSG00000037197
0.001	2	26397160	<i>Notch1</i>	ENSMUSG00000026923	<i>Egfl7</i>	ENSMUSG00000026921
0.001	2	26493080	<i>Egfl7</i>	ENSMUSG00000026921	<i>Notch1</i>	ENSMUSG00000026923
0.001	2	28534226	<i>Gfi1b</i>	ENSMUSG00000026815	<i>Gtf3c5</i>	ENSMUSG00000026816
0.001	2	29999738	<i>Set</i>	ENSMUSG00000054766	<i>Pkn3</i>	ENSMUSG00000026785
0.001	2	30588260	<i>Cstad</i>	ENSMUSG00000047363	<i>1700001O22Rik</i>	ENSMUSG00000044320
0.001	2	30652628	<i>1700001O22Rik</i>	ENSMUSG00000044320	<i>Cstad</i>	ENSMUSG00000047363
0.001	2	31994682	<i>A130092J06Rik</i>	ENSMUSG00000050592	<i>Nup214</i>	ENSMUSG00000001855
0.001	2	32573666	<i>Eng</i>	ENSMUSG00000026814	<i>Ak1</i>	ENSMUSG00000026817
0.001	2	45044311	<i>OTTMUSG00000012358</i>	ENSMUSG00000052248		ENSMUSG00000057684
0.001	2	62252693	<i>Dpp4</i>	ENSMUSG00000035000	<i>Gcg</i>	ENSMUSG00000000394
0.001	2	65193998	<i>9330158F14Rik</i>	ENSMUSG00000061171		ENSMUSG00000060270
0.001	2	72102343		ENSMUSG00000068863	<i>B230120H23Rik</i>	ENSMUSG00000004085
0.001	2	90786925	<i>Sfpi1</i>	ENSMUSG00000002111	<i>Slc39a13</i>	ENSMUSG00000002105
0.001	2	103644128	<i>Lmo2</i>	ENSMUSG00000032698		ENSMUSG00000056848
0.001	2	116858239	<i>Rasgrp1</i>	ENSMUSG00000027347	<i>Thbs1</i>	ENSMUSG00000040152
0.001	2	116924160	<i>Rasgrp1</i>	ENSMUSG00000027347	<i>Thbs1</i>	ENSMUSG00000040152
0.001	2	126843788	<i>Dusp2</i>	ENSMUSG00000027368	<i>Stard7</i>	ENSMUSG00000027367
0.001	2	131535747	<i>Rassf2</i>	ENSMUSG00000027339	<i>Slc23a2</i>	ENSMUSG00000027340
0.001	2	132024599	<i>Prei4</i>	ENSMUSG00000027346		ENSMUSG00000068247
0.001	2	152242778	<i>Bcl2l1</i>	ENSMUSG00000007659	<i>Tpx2</i>	ENSMUSG00000027469
0.001	2	156342081	<i>Sla2</i>	ENSMUSG00000027636	<i>Ndrp3</i>	ENSMUSG00000027634
0.001	2	158180458	<i>2310007D09Rik</i>	ENSMUSG00000027654	<i>Ppp1r16b</i>	ENSMUSG00000037754
0.001	2	165342117		ENSMUSG00000051789	<i>Ncoa3</i>	ENSMUSG00000027678
0.001	2	165410755	<i>Ncoa3</i>	ENSMUSG00000027678		ENSMUSG00000051789
0.001	2	166824814	<i>Slc9a8</i>	ENSMUSG00000039463	<i>B4gal5</i>	ENSMUSG00000017929
0.001	2	167210199	<i>A530013C23Rik</i>	ENSMUSG0000006462	<i>Ptpn1</i>	ENSMUSG00000027540
0.001	2	167357666	<i>Ptpn1</i>	ENSMUSG00000027540	<i>A530013C23Rik</i>	ENSMUSG0000006462
0.001	2	169676198	<i>Zfp217</i>	ENSMUSG00000052056		ENSMUSG00000055544
0.001	2	180161851	<i>Slco4a1</i>	ENSMUSG00000038963	<i>mmu-mir-133a-2</i>	ENSMUSG00000065460
0.001	3	29414978	<i>Evi1</i>	ENSMUSG00000027684	<i>Mds1</i>	ENSMUSG00000051636
0.001	3	29514295	<i>Mds1</i>	ENSMUSG00000051636	<i>Evi1</i>	ENSMUSG00000027684
0.001	3	51372385		ENSMUSG00000069019	<i>Maml3</i>	ENSMUSG00000061143
0.001	3	87886915	<i>Mef2d</i>	ENSMUSG00000001419		ENSMUSG00000068928
0.001	3	88367220	<i>Arhgef2</i>	ENSMUSG00000028059	<i>Rxrp4</i>	ENSMUSG00000049741
0.001	3	89142895	<i>Zbtb7b</i>	ENSMUSG00000028042	<i>Flad1</i>	ENSMUSG00000042642
0.001	3	93865375	<i>Rorc</i>	ENSMUSG00000028150	<i>Lingo4</i>	ENSMUSG00000044505
0.001	3	95157949	<i>Adamts14</i>	ENSMUSG00000015850	<i>Mcl1</i>	ENSMUSG00000038612
0.001	3	95452585		ENSMUSG00000057781		ENSMUSG00000058910
0.001	3	100703412	<i>Cd2</i>	ENSMUSG00000027863		ENSMUSG00000050461
0.001	3	102156745	<i>Tspan2</i>	ENSMUSG00000027858	<i>Ngfb</i>	ENSMUSG00000027859
0.001	3	103210135	<i>Dclre1b</i>	ENSMUSG00000027845		ENSMUSG00000068800
0.001	3	106883096	<i>A930002I21Rik</i>	ENSMUSG00000050179	<i>AI504432</i>	ENSMUSG00000056145
0.001	3	114451945	<i>Edg1</i>	ENSMUSG00000045092	<i>Olfm3</i>	ENSMUSG00000027965
0.001	3	129871645		ENSMUSG00000058642		ENSMUSG00000049622
0.001	3	129907165		ENSMUSG00000058642		ENSMUSG00000049622
0.001	3	134486207	<i>Nfkb1</i>	ENSMUSG00000028163	<i>ENSMUSG00000045520</i>	ENSMUSG00000045520
0.001	4	3880430	<i>Chchd7</i>	ENSMUSG00000042198		ENSMUSG00000061390
0.001	4	11075624	<i>Trp53inp1</i>	ENSMUSG00000028211		ENSMUSG00000058164
0.001	4	43376874	<i>Cd72</i>	ENSMUSG00000028459		ENSMUSG00000066198
0.001	4	46494350		ENSMUSG00000066194	<i>Tbc1d2</i>	ENSMUSG00000039813
0.001	4	59383145	<i>Rod1</i>	ENSMUSG00000028382	<i>A2AN91_MOUSE</i>	ENSMUSG00000038578
0.001	4	62489630	<i>Whrn</i>	ENSMUSG00000039137		ENSMUSG00000039165
0.001	4	105793040	<i>Ssbp3</i>	ENSMUSG00000061887	<i>Acot11</i>	ENSMUSG00000034853
0.001	4	117418370	<i>Tie1</i>	ENSMUSG00000033191	<i>Mpl</i>	ENSMUSG00000063899
0.001	4	128586798		ENSMUSG00000066049	<i>BC030183</i>	ENSMUSG00000050493
0.001	4	128794580		ENSMUSG00000049089	<i>Ptp4a2</i>	ENSMUSG00000028788
0.001	4	131936973	<i>Fgr</i>	ENSMUSG00000028874	<i>Ahdcl</i>	ENSMUSG00000037692

0.001	4	132051188	ENSMUSG00000066041	ENSMUSG00000066041		ENSMUSG00000066040
0.001	4	132629392	<i>Pigv</i>	ENSMUSG00000043257	<i>Arid1a</i>	ENSMUSG0000007880
0.001	4	132779960		ENSMUSG00000064705	<i>Rps6ka1</i>	ENSMUSG0000003644
0.001	4	133074230	<i>Ubx5</i>	ENSMUSG00000012126	<i>Sh3bgrl3</i>	ENSMUSG00000028843
0.001	4	134785370	<i>Cnr2</i>	ENSMUSG00000062585	<i>Fuca1</i>	ENSMUSG00000028673
0.001	4	134910709	<i>Tceb3</i>	ENSMUSG00000028668	<i>Id3</i>	ENSMUSG0000007872
0.001	4	134971837	<i>Id3</i>	ENSMUSG00000007872	<i>Tceb3</i>	ENSMUSG00000028668
0.001	4	135058700	<i>E2f2</i>	ENSMUSG00000018983	<i>Ddefl1</i>	ENSMUSG00000036995
0.001	4	139825430	<i>Sdhd</i>	ENSMUSG00000009863		ENSMUSG00000064443
0.001	4	148194053	<i>D4Ertd429e</i>	ENSMUSG00000044700	<i>Pik3cd</i>	ENSMUSG00000039936
0.001	5	32173336	<i>Tacc3</i>	ENSMUSG00000037313	<i>Fgfr3</i>	ENSMUSG00000054252
0.001	5	63408106	<i>Klf3</i>	ENSMUSG00000029178	<i>Tbc1d1</i>	ENSMUSG00000029174
0.001	5	64659750	<i>Rhoh</i>	ENSMUSG00000029204		ENSMUSG00000067246
0.001	5	64720625	<i>Chrna9</i>	ENSMUSG00000029205	<i>Rhoh</i>	ENSMUSG00000029204
0.001	5	74573986		ENSMUSG00000067196	<i>Kdr</i>	ENSMUSG00000062960
0.001	5	74669557	<i>Kdr</i>	ENSMUSG00000062960		ENSMUSG00000067196
0.001	5	99594826		ENSMUSG00000067084	<i>Plac8</i>	ENSMUSG00000029322
0.001	5	104706836	<i>Lrrc8d</i>	ENSMUSG00000046079	<i>Lrrc8c</i>	ENSMUSG00000054720
0.001	5	106723992	<i>Rpap2</i>	ENSMUSG00000033773	<i>Gfi1</i>	ENSMUSG00000029275
0.001	5	106805480	<i>Evi5</i>	ENSMUSG00000011831	<i>Gfi1</i>	ENSMUSG00000029275
0.001	5	110555672	<i>C130026L21Rik</i>	ENSMUSG00000052848	<i>Pitpnb</i>	ENSMUSG00000050017
0.001	5	112943262	<i>Coro1c</i>	ENSMUSG00000004530	<i>Selplg</i>	ENSMUSG00000048163
0.001	5	114275290	<i>Cabp1</i>	ENSMUSG00000029544	<i>2410014A08Rik</i>	ENSMUSG00000048578
0.001	5	114642496	<i>Pxn</i>	ENSMUSG00000029528		ENSMUSG00000064401
0.001	5	116270566	<i>Taok3</i>	ENSMUSG00000061288	<i>Pebp1</i>	ENSMUSG00000032959
0.001	5	122293554	<i>4932422M17Rik</i>	ENSMUSG00000062946		ENSMUSG00000066795
0.001	5	122492536	<i>Bcl7a</i>	ENSMUSG00000029438	<i>Wdr66</i>	ENSMUSG00000029442
0.001	5	123399436		ENSMUSG00000029398	<i>Pitpnm2</i>	ENSMUSG00000029406
0.001	5	135184914	<i>Prkrip1</i>	ENSMUSG00000039737	<i>Orai2</i>	ENSMUSG00000039747
0.001	5	135637883	<i>Mylc2pl</i>	ENSMUSG00000005474	<i>4731417B20Rik</i>	ENSMUSG00000046548
0.001	5	136645576		ENSMUSG00000066690		ENSMUSG0000007324
0.001	5	137199166		ENSMUSG00000064676	<i>0910001L09Rik</i>	ENSMUSG00000050552
0.001	5	138379186	<i>Gpr146</i>	ENSMUSG00000044197	<i>C130050O18Rik</i>	ENSMUSG00000044092
0.001	5	138777046	<i>Mafk</i>	ENSMUSG00000018143	<i>Ints1</i>	ENSMUSG00000029547
0.001	5	139597070	<i>Lfng</i>	ENSMUSG00000029570	<i>Grifin</i>	ENSMUSG00000036586
0.001	5	146254722	<i>Flt3</i>	ENSMUSG00000042817		ENSMUSG00000057157
0.001	5	147866815		ENSMUSG00000066552	<i>Hmgb1</i>	ENSMUSG00000066551
0.001	5	148368619	<i>4930588N13Rik</i>	ENSMUSG00000029660	<i>6330406I15Rik</i>	ENSMUSG00000029659
0.001	6	29344053	<i>BC048651</i>	ENSMUSG00000039742	<i>2310016C08Rik</i>	ENSMUSG00000043421
0.001	6	31202455	<i>AB041803</i>	ENSMUSG00000044471		ENSMUSG00000052894
0.001	6	35041709	<i>2010107G12Rik</i>	ENSMUSG00000029847	<i>Cnot4</i>	ENSMUSG00000038784
0.001	6	48825985	<i>Gimap6</i>	ENSMUSG00000047867	<i>Gimap4</i>	ENSMUSG00000054435
0.001	6	52360435	<i>Hoxa7</i>	ENSMUSG00000038236	<i>Hoxa9</i>	ENSMUSG00000038227
0.001	6	52787635		ENSMUSG00000064792	<i>Tax1bp1</i>	ENSMUSG0000004535
0.001	6	53055274	<i>Jazf1</i>	ENSMUSG00000063568		ENSMUSG00000038157
0.001	6	99854785	<i>Eif4e3</i>	ENSMUSG00000030068		ENSMUSG00000024343
0.001	6	121003391	<i>Cecr5</i>	ENSMUSG00000058979		ENSMUSG00000040893
0.001	6	121362051	<i>BC030863</i>	ENSMUSG00000051586	<i>Bid</i>	ENSMUSG0000004446
0.001	6	125891365	<i>Cd27</i>	ENSMUSG00000030336		ENSMUSG00000064520
0.001	6	127827619	<i>Ccnd2</i>	ENSMUSG00000000184		ENSMUSG00000064191
0.001	6	127922935		ENSMUSG00000064191		ENSMUSG00000057412
0.001	6	128009665		ENSMUSG00000058306		ENSMUSG00000067666
0.001	6	129919277	<i>Cd69</i>	ENSMUSG00000030156	<i>Clec2d</i>	ENSMUSG00000030157
0.001	6	134950855		ENSMUSG00000020939	<i>Bcl2l14</i>	ENSMUSG00000030200
0.001	6	147434665	<i>4933424B01Rik</i>	ENSMUSG00000040250		ENSMUSG00000067323
0.001	7	19555460	<i>Kcnn4</i>	ENSMUSG00000054342	<i>1500002O20Rik</i>	ENSMUSG00000002210
0.001	7	24194070		ENSMUSG00000047345	<i>Sirt2</i>	ENSMUSG00000015149
0.001	7	33353130	<i>1600014C10Rik</i>	ENSMUSG00000054676		ENSMUSG00000051425
0.001	7	40923804		ENSMUSG00000039955	<i>Ldha</i>	ENSMUSG00000063229
0.001	7	62158275	<i>C330024D12Rik</i>	ENSMUSG00000030553	<i>EG384639</i>	ENSMUSG00000042668
0.001	7	67496820		ENSMUSG00000065729		ENSMUSG00000066411
0.001	7	69487127		ENSMUSG00000025750	<i>Akap13</i>	ENSMUSG00000066406
0.001	7	73844970	<i>Zfp710</i>	ENSMUSG00000048897	<i>2610034B18Rik</i>	ENSMUSG00000039043
0.001	7	73943257	<i>Sema4b</i>	ENSMUSG00000030539	<i>Idh2</i>	ENSMUSG00000030541
0.001	7	74000850	<i>Sema4b</i>	ENSMUSG00000030539	<i>Cib1</i>	ENSMUSG00000030538
0.001	7	74632350	<i>Zscan2</i>	ENSMUSG00000038797	<i>Iqgap1</i>	ENSMUSG00000030536
0.001	7	95190900	<i>Fchs2</i>	ENSMUSG00000030691	<i>P2ry2</i>	ENSMUSG00000032860
0.001	7	95447100	<i>Stard10</i>	ENSMUSG00000030688	<i>Cent2</i>	ENSMUSG00000032812
0.001	7	95667465		ENSMUSG00000066310	<i>mmu-mir-139</i>	ENSMUSG00000065446
0.001	7	108014978	<i>Copb1</i>	ENSMUSG00000030754	<i>Rras2</i>	ENSMUSG00000055723
0.001	7	108155370	<i>Psm1</i>	ENSMUSG00000030751	<i>Pde3b</i>	ENSMUSG00000030671
0.001	7	112137030	<i>4930583K01Rik</i>	ENSMUSG00000055159	<i>Syt17</i>	ENSMUSG00000058420
0.001	7	119538513	<i>Nsmce1</i>	ENSMUSG00000030750	<i>Il4ra</i>	ENSMUSG00000030748
0.001	7	119676960	<i>Gtf3c1</i>	ENSMUSG00000032777	<i>Il21r</i>	ENSMUSG00000030745
0.001	7	120402570	<i>Lat</i>	ENSMUSG00000030742		ENSMUSG00000066180
0.001	7	120757800	<i>Coro1a</i>	ENSMUSG00000030707	<i>Mapk3</i>	ENSMUSG00000063065
0.001	7	121141669	<i>A1467606</i>	ENSMUSG00000045165	<i>Qprt</i>	ENSMUSG00000030674
0.001	7	121233233	<i>Cd2bp2</i>	ENSMUSG00000042502	<i>Spn</i>	ENSMUSG00000051457
0.001	7	121331984		ENSMUSG00000061513	<i>Sephs2</i>	ENSMUSG00000049091
0.001	7	123850980	<i>Brwd2</i>	ENSMUSG00000042055		ENSMUSG00000065763
0.001	7	129963457	<i>Ptpre</i>	ENSMUSG00000041836	<i>Mki67</i>	ENSMUSG00000031004
0.001	7	134601900	<i>Olfir524</i>	ENSMUSG00000050366	<i>Cd163l1</i>	ENSMUSG00000025461
0.001	7	135393702	<i>Ifitm3</i>	ENSMUSG00000025492	<i>Ifitm1</i>	ENSMUSG00000025491
0.001	7	139355962		ENSMUSG00000031071	<i>Tpcn2</i>	ENSMUSG00000048677
0.001	7	139459278		ENSMUSG00000031071	<i>Tpcn2</i>	ENSMUSG00000048677
0.001	7	139520040	<i>Tpcn2</i>	ENSMUSG00000048677		ENSMUSG00000031071
0.001	8	10298663	<i>3930402G23Rik</i>	ENSMUSG00000038917	<i>Irs2</i>	ENSMUSG00000038894
0.001	8	83003110		ENSMUSG00000064787	<i>Cd97</i>	ENSMUSG00000002885
0.001	8	83464133	<i>mmu-mir-23a</i>	ENSMUSG00000065611	<i>mmu-mir-181c</i>	ENSMUSG00000065483
0.001	8	83925867	<i>Ier2</i>	ENSMUSG00000053560	<i>Cacna1a</i>	ENSMUSG00000034656
0.001	8	83990843	<i>Nfix</i>	ENSMUSG00000001911	<i>Dand5</i>	ENSMUSG00000053226
0.001	8	104916233	<i>2310066E14Rik</i>	ENSMUSG00000038604	<i>Ctcf</i>	ENSMUSG0000005698
0.001	8	110892610	<i>Ldhd</i>	ENSMUSG00000031958	<i>Znrf1</i>	ENSMUSG00000033545
0.001	8	116868923	<i>Plcg2</i>	ENSMUSG00000034330	<i>4632417N05Rik</i>	ENSMUSG00000034308
0.001	8	119895988	<i>1700016A09Rik</i>	ENSMUSG00000042840	<i>Gins2</i>	ENSMUSG00000031821

0.001	8	121849515	<i>Rnf166</i>	ENSMUSG00000014470	<i>2310061F22Rik</i>	ENSMUSG00000049482
0.001	8	122086021	<i>Cbfa2t3</i>	ENSMUSG00000006362	<i>BC021611</i>	ENSMUSG00000015016
0.001	8	122807753		ENSMUSG00000057475	<i>Def8</i>	ENSMUSG00000001482
0.001	8	126128303	<i>Tomm20</i>	ENSMUSG00000058779		ENSMUSG00000069852
0.001	9	7246771	<i>Mmp13</i>	ENSMUSG00000050578	<i>Dcun1d5</i>	ENSMUSG00000032002
0.001	9	32432540		ENSMUSG00000064492	<i>Ets1</i>	ENSMUSG00000032035
0.001	9	32533657	<i>Ets1</i>	ENSMUSG00000032035		ENSMUSG00000064492
0.001	9	44013881	<i>Thy1</i>	ENSMUSG00000032011		ENSMUSG00000059979
0.001	9	44227331	<i>Pdzd3</i>	ENSMUSG00000032105	<i>Cbl</i>	ENSMUSG00000034342
0.001	9	44494631	<i>Blr1</i>	ENSMUSG00000047880	<i>Bcl9l</i>	ENSMUSG00000063382
0.001	9	44979071	<i>Cd3d</i>	ENSMUSG00000032094	<i>Cd3e</i>	ENSMUSG00000032093
0.001	9	57755625	<i>Cyp1a1</i>	ENSMUSG00000032315	<i>Csk</i>	ENSMUSG00000032312
0.001	9	69594821	<i>Anxa2</i>	ENSMUSG00000032231	<i>Foxb1</i>	ENSMUSG00000059246
0.001	9	71304551	<i>Aqp9</i>	ENSMUSG00000032204	<i>Aldh1a2</i>	ENSMUSG00000013584
0.001	9	72524010	<i>Mns1</i>	ENSMUSG00000032221	<i>Zfp280d</i>	ENSMUSG00000038535
0.001	9	108045941	<i>Ube1l</i>	ENSMUSG00000032596	<i>6230427J02Rik</i>	ENSMUSG00000042106
0.001	9	109100985	<i>Trex1</i>	ENSMUSG00000049734	<i>Scotin</i>	ENSMUSG00000025647
0.001	9	110949851	<i>Als2cl</i>	ENSMUSG00000044037	<i>Tdgf1</i>	ENSMUSG00000032494
0.001	9	112261091	<i>mmu-mir-128b</i>	ENSMUSG00000065441	<i>Pdcd6ip</i>	ENSMUSG00000032504
0.001	9	114407511	<i>Glb1</i>	ENSMUSG00000045594	<i>Ccr4</i>	ENSMUSG00000047898
0.001	9	123784927	<i>Ccr9</i>	ENSMUSG00000029530	<i>Lztf1</i>	ENSMUSG00000025245
0.001	10	19508682	<i>Ifngr1</i>	ENSMUSG00000020009	<i>Olig3</i>	ENSMUSG00000045591
0.001	10	20924120	<i>Ahi1</i>	ENSMUSG00000019986	<i>Myb</i>	ENSMUSG00000019982
0.001	10	21009938	<i>Myb</i>	ENSMUSG00000019982	<i>Ahi1</i>	ENSMUSG00000019986
0.001	10	21125838	<i>Myb</i>	ENSMUSG00000019982		ENSMUSG00000059894
0.001	10	21171964		ENSMUSG00000059894	<i>Myb</i>	ENSMUSG00000019982
0.001	10	40527010	<i>Slc22a16</i>	ENSMUSG00000019834	<i>Cdc2l6</i>	ENSMUSG00000038481
0.001	10	60125292	<i>Chst3</i>	ENSMUSG00000057337	<i>Spock2</i>	ENSMUSG00000058297
0.001	10	62471532	<i>Srgn</i>	ENSMUSG00000020077	<i>2510003E04Rik</i>	ENSMUSG00000036955
0.001	10	80050543	<i>Arid3a</i>	ENSMUSG00000019564	<i>Wdr18</i>	ENSMUSG00000035754
0.001	10	80284284	<i>Cirbp</i>	ENSMUSG00000045193	<i>Midn</i>	ENSMUSG00000035621
0.001	10	80817672	<i>Mobkl2a</i>	ENSMUSG00000003348	<i>NP_082105.3</i>	ENSMUSG00000055862
0.001	10	81464292	<i>Tbxa2r</i>	ENSMUSG00000034881	<i>Gipc3</i>	ENSMUSG00000034872
0.001	10	81637110	<i>Gna15</i>	ENSMUSG00000034792	<i>Edg6</i>	ENSMUSG00000044199
0.001	10	93100182	<i>Pctk2</i>	ENSMUSG00000020015	<i>4930485B16Rik</i>	ENSMUSG00000020014
0.001	10	120266886	<i>4921513I03Rik</i>	ENSMUSG00000044544	<i>1700006J14Rik</i>	ENSMUSG00000034764
0.001	10	128040691	<i>Usp52</i>	ENSMUSG00000005682		ENSMUSG00000064948
0.001	11	5403337	<i>Xbp1</i>	ENSMUSG00000020484	<i>Znrf3</i>	ENSMUSG00000041961
0.001	11	11610839	<i>Ikzf1</i>	ENSMUSG00000018654	<i>Fign1</i>	ENSMUSG00000035455
0.001	11	18916027	<i>Meis1</i>	ENSMUSG00000020160		ENSMUSG00000069956
0.001	11	22705312		ENSMUSG00000062899	<i>B3gnt2</i>	ENSMUSG00000051650
0.001	11	48835439		ENSMUSG00000040335	<i>Olfir1396</i>	ENSMUSG00000047511
0.001	11	52072054	<i>Vdac1</i>	ENSMUSG00000020402	<i>Tcf7</i>	ENSMUSG00000000782
0.001	11	54874286		ENSMUSG00000044751	<i>Slc36a3</i>	ENSMUSG00000049491
0.001	11	58159185	<i>OTTMUSG00000005737</i>	ENSMUSG00000058287	<i>1810065E05Rik</i>	ENSMUSG00000013653
0.001	11	62272627	<i>Ubb</i>	ENSMUSG00000019505	<i>Prr6</i>	ENSMUSG00000018509
0.001	11	67925874	<i>Ntn1</i>	ENSMUSG00000020902	<i>Stx8</i>	ENSMUSG00000020903
0.001	11	68156194	<i>Pik3r5</i>	ENSMUSG00000020901	<i>Ntn1</i>	ENSMUSG00000020902
0.001	11	72682830	<i>Atp2a3</i>	ENSMUSG00000020788		ENSMUSG00000065298
0.001	11	74740528		ENSMUSG00000061832	<i>Smg6</i>	ENSMUSG00000038290
0.001	11	74900917	<i>Ovca2</i>	ENSMUSG00000038268	<i>mmu-mir-132</i>	ENSMUSG00000065537
0.001	11	75004843	<i>Rtn4rl1</i>	ENSMUSG00000045287	<i>Rpa1</i>	ENSMUSG00000000751
0.001	11	77243999	<i>1300007F04Rik</i>	ENSMUSG00000000686	<i>Taok1</i>	ENSMUSG00000017291
0.001	11	78730665	<i>Ksr1</i>	ENSMUSG00000018334	<i>Lgals9</i>	ENSMUSG00000001123
0.001	11	79250571		ENSMUSG00000046628	<i>Rab11fip4</i>	ENSMUSG00000017639
0.001	11	82817405		ENSMUSG00000035163	<i>Ap2b1</i>	ENSMUSG00000035152
0.001	11	86133847		ENSMUSG00000064526	<i>Med13</i>	ENSMUSG00000034297
0.001	11	86318401	<i>mmu-mir-21</i>	ENSMUSG00000065455		ENSMUSG00000069780
0.001	11	86624827	<i>Ypel2</i>	ENSMUSG00000018427	<i>Dhx40</i>	ENSMUSG00000018425
0.001	11	87475267	<i>mmu-mir-142</i>	ENSMUSG00000065420	<i>Supt4h1</i>	ENSMUSG00000020485
0.001	11	88896397	<i>A930013B10Rik</i>	ENSMUSG00000063109	<i>Nog</i>	ENSMUSG00000048616
0.001	11	98296507		ENSMUSG00000065891	<i>Med24</i>	ENSMUSG00000017210
0.001	11	98568907	<i>Thra</i>	ENSMUSG00000058756	<i>Nr1d1</i>	ENSMUSG00000020889
0.001	11	98766517		ENSMUSG00000064491	<i>Rara</i>	ENSMUSG00000037992
0.001	11	98977357	<i>Ccr7</i>	ENSMUSG00000037944	<i>Smarce1</i>	ENSMUSG00000037935
0.001	11	100225567	<i>1110036O03Rik</i>	ENSMUSG00000066931	<i>Jup</i>	ENSMUSG00000001552
0.001	11	100668367	<i>Stat5a</i>	ENSMUSG00000004043	<i>Stat5b</i>	ENSMUSG00000020919
0.001	11	100709155	<i>Stat3</i>	ENSMUSG00000004040	<i>Ptfr</i>	ENSMUSG00000004044
0.001	11	102995551	<i>Fmn1l</i>	ENSMUSG00000055805	<i>1700023F06Rik</i>	ENSMUSG00000020940
0.001	11	106494037	<i>Pecam1</i>	ENSMUSG00000020717	<i>Gm885</i>	ENSMUSG00000040528
0.001	11	114981951	<i>Slc9a3r1</i>	ENSMUSG00000020733	<i>Cd300lf</i>	ENSMUSG00000047798
0.001	11	115250587	<i>Kctd2</i>	ENSMUSG00000016940	<i>Arm7</i>	ENSMUSG00000057219
0.001	11	115723675	<i>2210020M01Rik</i>	ENSMUSG00000048442	<i>Recql5</i>	ENSMUSG00000020752
0.001	11	116181215		ENSMUSG00000052791		ENSMUSG00000020786
0.001	11	116238127	<i>Rnf157</i>	ENSMUSG00000052949	<i>1110014K08Rik</i>	ENSMUSG00000050628
0.001	11	116424757	<i>Rhbdf2</i>	ENSMUSG00000020806	<i>Cygb</i>	ENSMUSG00000020810
0.001	11	117148567	<i>Sept9</i>	ENSMUSG00000059248		ENSMUSG00000021618
0.001	11	117605527	<i>Tmc8</i>	ENSMUSG00000050106	<i>6030468B19Rik</i>	ENSMUSG00000025573
0.001	11	119663437	<i>Chmp6</i>	ENSMUSG00000025371		ENSMUSG00000056397
0.001	12	12295330	<i>Mycn</i>	ENSMUSG00000037169		ENSMUSG00000048957
0.001	12	52103161		ENSMUSG00000019260	<i>1110008L16Rik</i>	ENSMUSG00000021023
0.001	12	70425031	<i>Prkch</i>	ENSMUSG00000021108	<i>Tmem30b</i>	ENSMUSG00000034435
0.001	12	82414330	<i>Jundm2</i>	ENSMUSG00000034271	<i>Fos</i>	ENSMUSG00000021250
0.001	12	82502328	<i>Jundm2</i>	ENSMUSG00000034271	<i>Batf</i>	ENSMUSG00000034266
0.001	12	83703031		ENSMUSG00000061115		ENSMUSG00000059114
0.001	12	102594114		ENSMUSG00000057566		ENSMUSG00000064099
0.001	12	103397701	<i>Bcl11b</i>	ENSMUSG00000048251	<i>Setd3</i>	ENSMUSG00000056770
0.001	12	106174472	<i>Hsp90aa1</i>	ENSMUSG00000021270	<i>Wdr20a</i>	ENSMUSG00000037957
0.001	12	108155761	<i>EG382639</i>	ENSMUSG00000037638	<i>Akt1</i>	ENSMUSG00000001729
0.001	12	108336933	<i>Gpr132</i>	ENSMUSG00000021298	<i>Jag2</i>	ENSMUSG00000002799
0.001	13	18833698	<i>Stard3nl</i>	ENSMUSG00000003062		ENSMUSG00000003061
0.001	13	23035361	<i>Hist1h1d</i>	ENSMUSG00000052565	<i>Hist2h3c2</i>	ENSMUSG00000069273
0.001	13	28426378		ENSMUSG00000043626		ENSMUSG00000069256
0.001	13	30230008	<i>Irf4</i>	ENSMUSG00000021356	<i>Exoc2</i>	ENSMUSG00000021357
0.001	13	30308308	<i>Exoc2</i>	ENSMUSG00000021357		ENSMUSG00000069254

0.001	13	33651514	<i>Tubb2b</i>	ENSMUSG00000045136	<i>Tubb2a</i>	ENSMUSG00000058672
0.001	13	37400278	<i>Rreb1</i>	ENSMUSG00000039087		ENSMUSG00000052366
0.001	13	50295208	<i>Sema4d</i>	ENSMUSG00000021451	<i>Gadd45g</i>	ENSMUSG00000021453
0.001	13	50519968	<i>Gadd45g</i>	ENSMUSG00000021453	<i>Diras2</i>	ENSMUSG00000047842
0.001	13	50636638	<i>Gadd45g</i>	ENSMUSG00000021453	<i>Diras2</i>	ENSMUSG00000047842
0.001	13	54778354	<i>BC027057</i>	ENSMUSG00000049625	<i>H2afy</i>	ENSMUSG00000015937
0.001	13	61798581	<i>Ccrk</i>	ENSMUSG00000021483	<i>Ctsl</i>	ENSMUSG00000021477
0.001	13	98887438	<i>Cd180</i>	ENSMUSG00000021624		ENSMUSG00000069077
0.001	13	108815959	<i>Il6st</i>	ENSMUSG00000021756		ENSMUSG00000069060
0.001	14	23671933		ENSMUSG00000068669		ENSMUSG00000068670
0.001	14	23821465		ENSMUSG00000068668	<i>Zmiz1</i>	ENSMUSG00000078117
0.001	14	23892372	<i>Zmiz1</i>	ENSMUSG00000007817	<i>Ppif</i>	ENSMUSG00000021868
0.001	14	25493395	<i>D14Abb1e</i>	ENSMUSG00000040651	<i>Arhgef3</i>	ENSMUSG00000021895
0.001	14	39100453	<i>5730469M10Rik</i>	ENSMUSG00000021792	<i>Tspan14</i>	ENSMUSG00000037824
0.001	14	55259395	<i>Spata13</i>	ENSMUSG00000021990		ENSMUSG00000021992
0.001	14	64378994	<i>Egr3</i>	ENSMUSG00000033730		ENSMUSG00000068098
0.001	14	64727035	<i>Rcbtb2</i>	ENSMUSG00000022106	<i>Cysltr2</i>	ENSMUSG00000033470
0.001	14	69524875	<i>Lcp1</i>	ENSMUSG00000021998	<i>Cpb2</i>	ENSMUSG00000021999
0.001	14	73628125	<i>1190002H23Rik</i>	ENSMUSG00000022018		ENSMUSG00000045353
0.001	14	73878564		ENSMUSG000000067917	<i>Sugt1</i>	ENSMUSG00000022024
0.001	14	109596475	<i>mmu-mir-17</i>	ENSMUSG00000065508		ENSMUSG00000050988
0.001	14	113352627	<i>Cldn10a</i>	ENSMUSG00000022132	<i>Dzip1</i>	ENSMUSG00000042156
0.001	14	116528750	<i>Ebi2</i>	ENSMUSG00000051212	<i>Timm8a1</i>	ENSMUSG00000045455
0.001	14	116576305	<i>Timm8a1</i>	ENSMUSG00000045455	<i>Ebi2</i>	ENSMUSG00000051212
0.001	15	8345129		ENSMUSG00000068679	<i>Slc1a3</i>	ENSMUSG00000053600
0.001	15	9283820	<i>Capsl</i>	ENSMUSG00000039676	<i>Il7r</i>	ENSMUSG00000038882
0.001	15	61996917	<i>Myc</i>	ENSMUSG00000022346		ENSMUSG00000065812
0.001	15	62053677	<i>Myc</i>	ENSMUSG00000022346		ENSMUSG00000061375
0.001	15	62111705		ENSMUSG00000061375	<i>Myc</i>	ENSMUSG00000022346
0.001	15	62188686		ENSMUSG00000061375	<i>Myc</i>	ENSMUSG00000022346
0.001	15	62472724		ENSMUSG00000056590		ENSMUSG00000056864
0.001	15	62749453		ENSMUSG00000056864		ENSMUSG00000056590
0.001	15	63277845		ENSMUSG00000064826		ENSMUSG00000056864
0.001	15	63669185		ENSMUSG00000068466		ENSMUSG00000043083
0.001	15	73551396	<i>Dennd3</i>	ENSMUSG00000036661	<i>Slc45a4</i>	ENSMUSG00000036649
0.001	15	73763915		ENSMUSG00000064808		ENSMUSG00000058416
0.001	15	74957525		ENSMUSG00000034596	<i>Ly6e</i>	ENSMUSG00000022587
0.001	15	80620823	<i>Grap2</i>	ENSMUSG00000042351		ENSMUSG00000068166
0.001	15	82079568		ENSMUSG00000068119	<i>Xrcc6</i>	ENSMUSG00000022471
0.001	15	83649146	<i>Scube1</i>	ENSMUSG00000016763	<i>Ttll12</i>	ENSMUSG00000016757
0.001	15	103321602	<i>Copz1</i>	ENSMUSG00000060992	<i>mmu-mir-148b</i>	ENSMUSG00000065560
0.001	16	16743887	<i>Vpreb2</i>	ENSMUSG00000059280	<i>Slc25a1</i>	ENSMUSG00000035288
0.001	16	28771453	<i>Hes1</i>	ENSMUSG00000022528	<i>953002007Rik</i>	ENSMUSG00000056344
0.001	16	30992563	<i>Lrrc33</i>	ENSMUSG00000052384	<i>Fbxo45</i>	ENSMUSG00000035764
0.001	16	31329160	<i>Osta</i>	ENSMUSG00000035699		ENSMUSG00000068350
0.001	16	48643063		ENSMUSG00000060444	<i>Cd47</i>	ENSMUSG00000055447
0.001	16	54845060		ENSMUSG00000051061	<i>Rpl24</i>	ENSMUSG00000022601
0.001	16	90606834	<i>Ifnar1</i>	ENSMUSG00000022967	<i>Il10rb</i>	ENSMUSG00000022969
0.001	16	91914433	<i>Runx1</i>	ENSMUSG00000022952	<i>Setd4</i>	ENSMUSG00000022948
0.001	16	91968509	<i>Runx1</i>	ENSMUSG00000022952	<i>Setd4</i>	ENSMUSG00000022948
0.001	16	92019606	<i>Runx1</i>	ENSMUSG00000022952	<i>Setd4</i>	ENSMUSG00000022948
0.001	16	92092059	<i>Runx1</i>	ENSMUSG00000022952	<i>Setd4</i>	ENSMUSG00000022948
0.001	16	92318566	<i>Setd4</i>	ENSMUSG00000022948	<i>Runx1</i>	ENSMUSG00000022952
0.001	16	92987190	<i>Morc3</i>	ENSMUSG00000039456	<i>Dopey2</i>	ENSMUSG00000022946
0.001	16	94858873	<i>Erg</i>	ENSMUSG00000040732	<i>Ets2</i>	ENSMUSG00000022895
0.001	16	95302243	<i>Dscr2</i>	ENSMUSG00000022913	<i>Ets2</i>	ENSMUSG00000022895
0.001	17	13030875	<i>9030025P20Rik</i>	ENSMUSG00000036552	<i>Dll1</i>	ENSMUSG00000014773
0.001	17	25350593	<i>Hmga1</i>	ENSMUSG00000046711		ENSMUSG00000060209
0.001	17	26317381	<i>4930511I11Rik</i>	ENSMUSG00000024223	<i>Tmhs</i>	ENSMUSG00000062252
0.001	17	27208140	<i>Fgd2</i>	ENSMUSG00000024013	<i>Pim1</i>	ENSMUSG00000024014
0.001	17	27304540	<i>Pim1</i>	ENSMUSG00000024014	<i>Tbc1d22b</i>	ENSMUSG00000042203
0.001	17	31905906	<i>Psmb8</i>	ENSMUSG00000024338	<i>Tap2</i>	ENSMUSG00000024339
0.001	17	32908903	<i>Lta</i>	ENSMUSG00000024402	<i>Nfkbil1</i>	ENSMUSG00000042419
0.001	17	33029595		ENSMUSG00000064174		ENSMUSG00000057294
0.001	17	33737865		ENSMUSG00000057787	<i>H2-T24</i>	ENSMUSG00000053835
0.001	17	43003035	<i>Aars2</i>	ENSMUSG00000023938	<i>Spats1</i>	ENSMUSG00000023935
0.001	17	45047008	<i>Ccnd3</i>	ENSMUSG00000034165		ENSMUSG00000054271
0.001	17	45115665	<i>Bysl</i>	ENSMUSG00000023988		ENSMUSG00000054271
0.001	17	53932665	<i>Uhrf1</i>	ENSMUSG0000001228	<i>M6prbp1</i>	ENSMUSG00000024197
0.001	17	81795735	<i>Hao</i>	ENSMUSG00000000673	<i>Zfp36l2</i>	ENSMUSG00000045817
0.001	17	81983535	<i>Zfp36l2</i>	ENSMUSG00000045817	<i>Hao</i>	ENSMUSG00000000673
0.001	18	4338405	<i>Map3k8</i>	ENSMUSG00000024235	<i>Papd1</i>	ENSMUSG00000024234
0.001	18	5357605	<i>Zfp438</i>	ENSMUSG00000050945	<i>ENSMUSG00000063087</i>	ENSMUSG00000063087
0.001	18	15396409		ENSMUSG00000069445		ENSMUSG00000042886
0.001	18	35179674		ENSMUSG00000065904	<i>Ctnna1</i>	ENSMUSG00000037815
0.001	18	35975425	<i>Tmem173</i>	ENSMUSG00000024349		ENSMUSG00000060500
0.001	18	55208965	<i>Zfp608</i>	ENSMUSG00000052713		ENSMUSG00000064942
0.001	18	61099162	<i>Arsi</i>	ENSMUSG00000036412	<i>Tcof1</i>	ENSMUSG00000024613
0.001	18	62394033	<i>Adrb2</i>	ENSMUSG00000045730	<i>Sh3tc2</i>	ENSMUSG00000045629
0.001	18	68452825	<i>4933403F05Rik</i>	ENSMUSG00000038121	<i>D18Ert653e</i>	ENSMUSG00000024544
0.001	18	70795365	<i>Mbd2</i>	ENSMUSG00000024513		ENSMUSG00000058475
0.001	18	75510805	<i>Smad7</i>	ENSMUSG00000025880		ENSMUSG00000069347
0.001	18	85054024	<i>Cyb5</i>	ENSMUSG00000024646	<i>1700034H14Rik</i>	ENSMUSG00000024645
0.001	19	4087019	<i>Adrbk1</i>	ENSMUSG00000024858	<i>Fbxl11</i>	ENSMUSG00000054611
0.001	19	5598539	<i>Frm8</i>	ENSMUSG00000043488	<i>Scyl1</i>	ENSMUSG00000024941
0.001	19	6189172	<i>Rasgrp2</i>	ENSMUSG00000032946	<i>Nrxn2</i>	ENSMUSG00000033768
0.001	19	28738605	<i>C030046E11Rik</i>	ENSMUSG00000038658	<i>Pdcd1lg2</i>	ENSMUSG00000016498
0.001	19	36835733	<i>Hhex</i>	ENSMUSG00000024986	<i>Exoc6</i>	ENSMUSG00000053799
0.001	19	40571759	<i>Dntt</i>	ENSMUSG00000025014	<i>Blnk</i>	ENSMUSG00000061132
0.001	19	41384622	<i>Frat2</i>	ENSMUSG00000047604		ENSMUSG00000067199
0.001	20	6105829		ENSMUSG00000050227	<i>Pim2</i>	ENSMUSG00000031155
0.001	20	6193879	<i>Gata1</i>	ENSMUSG00000031162	<i>Hdac6</i>	ENSMUSG00000031161
0.001	20	42949129	<i>Elf4</i>	ENSMUSG00000031103	<i>Q8C3U4_MOUSE</i>	ENSMUSG00000053512
0.001	20	47271754	<i>mmu-mir-106a</i>	ENSMUSG00000065456		ENSMUSG00000046863
0.001	20	98219522	<i>Cnbp2</i>	ENSMUSG00000031330		ENSMUSG00000060041

0.001	20	135168160	<i>Irs4</i>	ENSMUSG00000054667		ENSMUSG00000061044
0.001	20	135305959		ENSMUSG00000061044	<i>Irs4</i>	ENSMUSG00000054667
0.05	1	51885139	<i>Obfc2a</i>	ENSMUSG00000026107	<i>Myo1b</i>	ENSMUSG00000018417
0.05	1	59019360	<i>ENSMUSG00000050533</i>	ENSMUSG00000026031	<i>Casp8</i>	ENSMUSG00000026029
0.05	1	59476356	<i>Als2</i>	ENSMUSG00000026024	<i>Als2cr7</i>	ENSMUSG00000026023
0.05	1	74696520	<i>mmu-mir-26b</i>	ENSMUSG00000065468	<i>Ctdsp1</i>	ENSMUSG00000026176
0.05	1	133102528	<i>Plekha6</i>	ENSMUSG00000041757	<i>Ppp1r15b</i>	ENSMUSG00000046062
0.05	1	138026353	<i>Atp6v1g3</i>	ENSMUSG00000026394	<i>Ptprc</i>	ENSMUSG00000026395
0.05	1	162567874	<i>Bat2d</i>	ENSMUSG00000040225	<i>Myoc</i>	ENSMUSG00000026697
0.05	1	181811700	<i>EG433384</i>	ENSMUSG00000056699	<i>Enah</i>	ENSMUSG00000022995
0.05	2	11128538	<i>Prkcq</i>	ENSMUSG00000026778		ENSMUSG00000062973
0.05	2	13999812	<i>Stam</i>	ENSMUSG00000026718	<i>Ptp1a</i>	ENSMUSG00000063275
0.05	2	18650614		ENSMUSG00000046809	<i>Dnajc1</i>	ENSMUSG00000026740
0.05	2	27054140	<i>C630035N08Rik</i>	ENSMUSG00000009216	<i>Dbh</i>	ENSMUSG00000000889
0.05	2	35430442		ENSMUSG00000068954	<i>Dab2ip</i>	ENSMUSG00000026883
0.05	2	44857908	<i>Zeb2</i>	ENSMUSG00000026872	<i>Gtdc1</i>	ENSMUSG00000036890
0.05	2	91340558	<i>F2</i>	ENSMUSG00000027249	<i>Arhgap1</i>	ENSMUSG00000027247
0.05	2	126434377		ENSMUSG00000009337	<i>Ap4e1</i>	ENSMUSG00000001998
0.05	2	163113278	<i>Pkig</i>	ENSMUSG00000035268	<i>0610039K10Rik</i>	ENSMUSG00000058812
0.05	2	163541060	<i>Stk4</i>	ENSMUSG00000018209	<i>Kcns1</i>	ENSMUSG00000040164
0.05	2	166100558		ENSMUSG00000065871	<i>BC067047</i>	ENSMUSG00000039621
0.05	2	166203470	<i>Trp53rk</i>	ENSMUSG00000042854		ENSMUSG00000065871
0.05	3	9883817		ENSMUSG00000069113		ENSMUSG00000065364
0.05	3	85851115		ENSMUSG00000065847	<i>Rps3a</i>	ENSMUSG00000028081
0.05	3	95419375	<i>Anp32e</i>	ENSMUSG00000015749		ENSMUSG00000057781
0.05	3	96046585	<i>Txnip</i>	ENSMUSG00000038393	<i>Polr3gl</i>	ENSMUSG00000028104
0.05	3	106583483	<i>Cd53</i>	ENSMUSG00000040747	<i>Olfir266</i>	ENSMUSG00000043529
0.05	3	151932715	<i>St6galnac5</i>	ENSMUSG00000039037	<i>St6galnac3</i>	ENSMUSG00000052544
0.05	4	8846480	<i>Chd7</i>	ENSMUSG00000041235		ENSMUSG00000064716
0.05	4	101529157	<i>Sgip1</i>	ENSMUSG00000028524	<i>Pde4b</i>	ENSMUSG00000028525
0.05	4	105875450	<i>Ssbp3</i>	ENSMUSG00000061887	<i>Mrpl37</i>	ENSMUSG00000028622
0.05	4	124151905	<i>Zc3h12a</i>	ENSMUSG00000042677	<i>Grik3</i>	ENSMUSG00000001985
0.05	4	128836280	<i>Ptp4a2</i>	ENSMUSG00000028788		ENSMUSG00000049089
0.05	4	129704690	<i>Laptm5</i>	ENSMUSG00000028581	<i>Sdc3</i>	ENSMUSG00000025743
0.05	4	131763693	<i>BC013712</i>	ENSMUSG00000037731	<i>Ppp1r8</i>	ENSMUSG00000028882
0.05	4	132590465		ENSMUSG00000059194	<i>Zdhhc18</i>	ENSMUSG00000037553
0.05	4	132717213		ENSMUSG00000064705	<i>Arid1a</i>	ENSMUSG00000007880
0.05	4	133877778	<i>D4Wsu53e</i>	ENSMUSG00000037266	<i>Tmem50a</i>	ENSMUSG00000028822
0.05	4	134087857	<i>Clic4</i>	ENSMUSG00000037242	<i>Syf2</i>	ENSMUSG00000028821
0.05	4	143924846		ENSMUSG00000066025		ENSMUSG00000066024
0.05	4	149406416	<i>Tnfrsf9</i>	ENSMUSG00000028965	<i>Park7</i>	ENSMUSG00000028964
0.05	4	150672620	<i>Acot7</i>	ENSMUSG00000028937	<i>Hes2</i>	ENSMUSG00000028940
0.05	4	153034815		ENSMUSG00000065993	<i>Actr2</i>	ENSMUSG00000051276
0.05	4	153728683		ENSMUSG00000058333	<i>Ski</i>	ENSMUSG00000029050
0.05	4	154563626	<i>mmu-mir-200b</i>	ENSMUSG00000065549	<i>9430015G10Rik</i>	ENSMUSG00000059939
0.05	5	63607486	<i>Klf3</i>	ENSMUSG00000029178	<i>Tlrl</i>	ENSMUSG00000044827
0.05	5	71995966	<i>Ociad1</i>	ENSMUSG00000029152		ENSMUSG00000051990
0.05	5	99658186	<i>Coq2</i>	ENSMUSG00000029319		ENSMUSG00000067084
0.05	5	107022286	<i>2900024C23Rik</i>	ENSMUSG00000029270		ENSMUSG00000051165
0.05	5	111352516	<i>Tpst2</i>	ENSMUSG00000029344	<i>Tfip11</i>	ENSMUSG00000029345
0.05	5	121289205	<i>Ppp1cc</i>	ENSMUSG00000004455	<i>Ccdc63</i>	ENSMUSG00000043036
0.05	5	121383706	<i>TECT1_MOUSE</i>	ENSMUSG00000038593	<i>Hvcn1</i>	ENSMUSG00000064267
0.05	5	123243706	<i>Ogfod2</i>	ENSMUSG00000023707	<i>Hip1r</i>	ENSMUSG00000000915
0.05	5	123653743	<i>6330548G22Rik</i>	ENSMUSG00000029402	<i>BC003324</i>	ENSMUSG00000029401
0.05	5	133950556	<i>Wbscr27</i>	ENSMUSG00000040557	<i>Cldn4</i>	ENSMUSG00000047501
0.05	5	136689166	<i>Tsc22d4</i>	ENSMUSG00000029723	<i>6430598A04Rik</i>	ENSMUSG00000045348
0.05	5	139207846	<i>Ftsj2</i>	ENSMUSG00000029557	<i>Mad11l</i>	ENSMUSG00000029554
0.05	5	141379487	<i>Foxk1</i>	ENSMUSG00000056493	<i>C330006K01Rik</i>	ENSMUSG00000039623
0.05	5	147914211	<i>Hmgb1</i>	ENSMUSG00000066551		ENSMUSG00000066552
0.05	6	31167314		ENSMUSG00000052894	<i>mmu-mir-29b-1</i>	ENSMUSG00000065604
0.05	6	31257583		ENSMUSG00000052507	<i>Mkn1</i>	ENSMUSG00000025609
0.05	6	72717805	<i>Vamp8</i>	ENSMUSG00000050732	<i>Ggcx</i>	ENSMUSG00000053460
0.05	6	91554600	<i>Hdac11</i>	ENSMUSG00000034245	<i>Nup210</i>	ENSMUSG00000030091
0.05	6	99735040		ENSMUSG00000024343	<i>Eif4e3</i>	ENSMUSG00000030068
0.05	6	121662055	<i>Usp18</i>	ENSMUSG00000030107	<i>Tuba8</i>	ENSMUSG00000030137
0.05	6	125559038	<i>Lag3</i>	ENSMUSG00000030124	<i>Cd4</i>	ENSMUSG00000023274
0.05	6	135683425	<i>Cdkn1b</i>	ENSMUSG00000030301		ENSMUSG00000043984
0.05	6	145942855	<i>Lrmp</i>	ENSMUSG00000030263	<i>Bcat1</i>	ENSMUSG00000030268
0.05	7	20823368	<i>Exosc5</i>	ENSMUSG00000061286	<i>Bckdha</i>	ENSMUSG00000060376
0.05	7	25834009	<i>Hcst</i>	ENSMUSG00000064109	<i>AY078069</i>	ENSMUSG00000036931
0.05	7	26241588	<i>Ffar2</i>	ENSMUSG00000051314	<i>Ffar3</i>	ENSMUSG00000019429
0.05	7	39652369	<i>Bcat2</i>	ENSMUSG00000030826		ENSMUSG00000062241
0.05	7	40007490	<i>Emp3</i>	ENSMUSG00000040212	<i>Ccdc114</i>	ENSMUSG00000040189
0.05	7	57779910	<i>Klf13</i>	ENSMUSG00000052040	<i>Trpm1</i>	ENSMUSG00000030523
0.05	7	72517740	<i>Mrpl46</i>	ENSMUSG00000030612	<i>ENSMUSG00000052629</i>	ENSMUSG00000052629
0.05	7	74247357	<i>Blm</i>	ENSMUSG00000030528		ENSMUSG00000030529
0.05	7	77513550		ENSMUSG00000066374		ENSMUSG00000053138
0.05	7	93910346	<i>Neu3</i>	ENSMUSG00000035239	<i>Spcs2</i>	ENSMUSG00000035227
0.05	7	121192906	<i>Spn</i>	ENSMUSG00000051457	<i>Cd2bp2</i>	ENSMUSG00000042502
0.05	7	123882300	<i>Brwd2</i>	ENSMUSG00000042055		ENSMUSG00000065763
0.05	7	136753950	<i>6330512M04Rik</i>	ENSMUSG00000045777		ENSMUSG00000066099
0.05	7	137972370	<i>Cars</i>	ENSMUSG00000010755	<i>Tnfrsf26</i>	ENSMUSG00000045362
0.05	8	21562896	<i>1700041G16Rik</i>	ENSMUSG00000054822	<i>Myt3</i>	ENSMUSG00000031540
0.05	8	23824673	<i>Tacc1</i>	ENSMUSG00000065954	<i>Plekha2</i>	ENSMUSG00000031557
0.05	8	32948963	<i>Tmem66</i>	ENSMUSG00000031532	<i>Leprotl1</i>	ENSMUSG00000031513
0.05	8	94258013	<i>Gpr56</i>	ENSMUSG00000031785	<i>Gpr114</i>	ENSMUSG00000061577
0.05	8	105403341	<i>Rbm35b</i>	ENSMUSG00000033824	<i>Nfatc3</i>	ENSMUSG00000031902
0.05	8	106461053	<i>Cyb5b</i>	ENSMUSG00000031924		ENSMUSG00000057657
0.05	8	114543956		ENSMUSG00000055043		ENSMUSG00000065090
0.05	8	119848093	<i>Gse1</i>	ENSMUSG00000031822	<i>1700120B06Rik</i>	ENSMUSG00000042269
0.05	8	120081812	<i>Irf8</i>	ENSMUSG00000041515	<i>Cox4i1</i>	ENSMUSG00000031818
0.05	8	120106043	<i>Irf8</i>	ENSMUSG00000041515	<i>Foxf1a</i>	ENSMUSG00000042812
0.05	8	125951548		ENSMUSG00000069852	<i>Irf2bp2</i>	ENSMUSG00000051495
0.05	9	20507368	<i>Fbxl12</i>	ENSMUSG00000066892	<i>5730577I03Rik</i>	ENSMUSG00000062470
0.05	9	21207041	<i>Slc44a2</i>	ENSMUSG00000057193	<i>Ap1m2</i>	ENSMUSG00000033099

0.05	9	44636891	<i>Treh</i>	ENSMUSG00000032098	<i>Ddx6</i>	ENSMUSG00000032097
0.05	9	45297401	<i>Tmprss13</i>	ENSMUSG00000037129	<i>I110ra</i>	ENSMUSG00000032089
0.05	9	64914275	<i>F730015K02Rik</i>	ENSMUSG00000053641		ENSMUSG00000066519
0.05	9	65666861	<i>Plekhhq1</i>	ENSMUSG00000050721		ENSMUSG00000041270
0.05	9	96852131	<i>Spsb4</i>	ENSMUSG00000046997	<i>Slc25a36</i>	ENSMUSG00000032449
0.05	10	28620462		ENSMUSG00000069691	<i>E430004N04Rik</i>	ENSMUSG00000049109
0.05	10	42998622	<i>Scml4</i>	ENSMUSG00000044770		ENSMUSG00000056871
0.05	10	43934922		ENSMUSG00000064118	<i>Qrs1</i>	ENSMUSG00000019863
0.05	10	60332832	<i>4632428N05Rik</i>	ENSMUSG00000020101	<i>Slc29a3</i>	ENSMUSG00000020100
0.05	10	79916922	<i>Palm</i>	ENSMUSG00000035863	<i>BC005764</i>	ENSMUSG00000035835
0.05	10	79975739	<i>Ptbp1</i>	ENSMUSG00000006498	<i>9130017N09Rik</i>	ENSMUSG00000035852
0.05	10	80531388	<i>Uqcr</i>	ENSMUSG00000020163	<i>Mbd3</i>	ENSMUSG00000035478
0.05	10	81060296	<i>Gadd45b</i>	ENSMUSG00000015312		ENSMUSG00000035103
0.05	10	89422752	<i>Nr1h4</i>	ENSMUSG00000047638		ENSMUSG00000019928
0.05	10	91154799	<i>Tmpo</i>	ENSMUSG00000019961		ENSMUSG00000019985
0.05	10	93279846	<i>Elk3</i>	ENSMUSG00000008398	<i>Lta4h</i>	ENSMUSG00000015889
0.05	10	117780612		ENSMUSG00000069509	<i>Rap1b</i>	ENSMUSG00000052681
0.05	10	118556982	<i>4932442E05Rik</i>	ENSMUSG00000050709	<i>Cand1</i>	ENSMUSG00000020114
0.05	10	128150682	<i>Rnf41</i>	ENSMUSG00000025373	<i>Smarcc2</i>	ENSMUSG00000025369
0.05	11	3200617	<i>OTTMUSG00000007639</i>	ENSMUSG00000053263	<i>Pik3ip1</i>	ENSMUSG00000034614
0.05	11	6424357		ENSMUSG00000064513		ENSMUSG00000065783
0.05	11	6450157	<i>Ccm2</i>	ENSMUSG00000000378	<i>Nacad</i>	ENSMUSG00000041073
0.05	11	18767407	<i>Meis1</i>	ENSMUSG00000020160		ENSMUSG00000069957
0.05	11	33905838	<i>Lcp2</i>	ENSMUSG00000002699	<i>Kcnmb1</i>	ENSMUSG00000020155
0.05	11	44369918	<i>Ebf1</i>	ENSMUSG00000057098	<i>Rnf145</i>	ENSMUSG00000019189
0.05	11	49001235	<i>Mgat1</i>	ENSMUSG00000020346	<i>Olfr1393</i>	ENSMUSG00000059864
0.05	11	51394259	<i>C330016O10Rik</i>	ENSMUSG00000001053	<i>Rmnd5b</i>	ENSMUSG00000001054
0.05	11	57827011	<i>Cnot8</i>	ENSMUSG00000020515	<i>Q3TQ57_MOUSE</i>	ENSMUSG00000069875
0.05	11	59355197	<i>Olfr225</i>	ENSMUSG00000044061	<i>AA536749</i>	ENSMUSG00000005417
0.05	11	59833387	<i>Rai1</i>	ENSMUSG00000062115	<i>4930412M03Rik</i>	ENSMUSG00000051008
0.05	11	67995067	<i>Ntn1</i>	ENSMUSG00000020902	<i>Pik3r5</i>	ENSMUSG00000020901
0.05	11	68747377	<i>1500010J02Rik</i>	ENSMUSG00000020898	<i>Aurkb</i>	ENSMUSG00000020897
0.05	11	69307020	<i>Trp53</i>	ENSMUSG00000059552	<i>Atp1b2</i>	ENSMUSG00000041329
0.05	11	72206047	<i>Spns3</i>	ENSMUSG00000020798	<i>Spns2</i>	ENSMUSG00000040447
0.05	11	75185176	<i>mmu-mir-22</i>	ENSMUSG00000065529	<i>Wdr81</i>	ENSMUSG00000045374
0.05	11	75372697	<i>Myo1c</i>	ENSMUSG00000017774	<i>Pps</i>	ENSMUSG00000006127
0.05	11	100549426	<i>NP_001074663.1</i>	ENSMUSG00000035355	<i>Rab5c</i>	ENSMUSG00000019173
0.05	11	106575247	<i>Gm885</i>	ENSMUSG00000040528	<i>Polg2</i>	ENSMUSG00000020718
0.05	11	107239162	<i>Psmd12</i>	ENSMUSG00000020720	<i>Pitpnc1</i>	ENSMUSG00000040430
0.05	11	115911097	<i>Wbp2</i>	ENSMUSG00000034341	<i>Trim47</i>	ENSMUSG00000020773
0.05	11	117776339	<i>Socs3</i>	ENSMUSG00000053113	<i>Tha1</i>	ENSMUSG00000017713
0.05	11	118287487	<i>D230014K01Rik</i>	ENSMUSG00000033857		ENSMUSG00000055046
0.05	11	119500262	<i>4932417H02Rik</i>	ENSMUSG00000025583		ENSMUSG00000056397
0.05	11	120450487	<i>Mafg</i>	ENSMUSG00000051510	<i>Pycr1</i>	ENSMUSG00000025140
0.05	11	121373610		ENSMUSG00000069562	<i>B3gnt1</i>	ENSMUSG00000046605
0.05	11	121505573	<i>Metrn1</i>	ENSMUSG00000039208	<i>B3gnt1</i>	ENSMUSG00000046605
0.05	12	48611011	<i>Heatr5a</i>	ENSMUSG00000035181	<i>EG544864</i>	ENSMUSG00000059605
0.05	12	66379019	<i>Gm71</i>	ENSMUSG00000049882	<i>Arf6</i>	ENSMUSG00000044147
0.05	12	73221091	<i>Zbtb1</i>	ENSMUSG00000033454	<i>Zbtb25</i>	ENSMUSG00000056459
0.05	12	74041861	<i>Fut8</i>	ENSMUSG00000021065	<i>Max</i>	ENSMUSG00000059436
0.05	12	81551551	<i>Npc2</i>	ENSMUSG00000021242	<i>Abcd4</i>	ENSMUSG00000021240
0.05	12	83765431	<i>6430527G18Rik</i>	ENSMUSG00000034168	<i>2310044G17Rik</i>	ENSMUSG00000034157
0.05	12	100447651		ENSMUSG00000064849	<i>4831426I19Rik</i>	ENSMUSG00000054150
0.05	12	106910208	<i>Tnfaip2</i>	ENSMUSG00000021281	<i>Gm266</i>	ENSMUSG00000010529
0.05	12	108902461		ENSMUSG00000061907	<i>4930523C11Rik</i>	ENSMUSG00000051804
0.05	12	110690701		ENSMUSG00000066297		ENSMUSG00000066299
0.05	13	12949185		ENSMUSG00000069331	<i>Lyst</i>	ENSMUSG00000019726
0.05	13	28237845		ENSMUSG00000062217		ENSMUSG00000069257
0.05	13	51121798	<i>Syk</i>	ENSMUSG00000021457	<i>Diras2</i>	ENSMUSG00000047842
0.05	13	60341458	<i>2010111I01Rik</i>	ENSMUSG00000021458		ENSMUSG00000064997
0.05	13	95179819		ENSMUSG00000069108		ENSMUSG00000060323
0.05	13	97865338	<i>Pik3r1</i>	ENSMUSG00000041417		ENSMUSG00000069079
0.05	14	14668912		ENSMUSG00000068752	<i>Oxsm</i>	ENSMUSG00000021786
0.05	14	25535035	<i>D14Abb1e</i>	ENSMUSG00000040651	<i>Arhgef3</i>	ENSMUSG00000021895
0.05	14	28775305		ENSMUSG00000042565	<i>Prkcd</i>	ENSMUSG00000021948
0.05	14	29548276	<i>Sh3bp5</i>	ENSMUSG00000021892	<i>Mettl6</i>	ENSMUSG00000021891
0.05	14	29691175	<i>Colq</i>	ENSMUSG00000057606	<i>Hacl1</i>	ENSMUSG00000021884
0.05	14	29803018	<i>Btd</i>	ENSMUSG00000021900	<i>Ankrd28</i>	ENSMUSG00000014496
0.05	14	67752804	<i>Itm2b</i>	ENSMUSG00000022108	<i>Med4</i>	ENSMUSG00000022109
0.05	15	36452585	<i>Ankrd46</i>	ENSMUSG00000048307		ENSMUSG00000068579
0.05	15	62364378		ENSMUSG00000056590		ENSMUSG00000056864
0.05	15	66834725		ENSMUSG00000068418	<i>Wispl</i>	ENSMUSG00000005124
0.05	15	78644705	<i>Pscd4</i>	ENSMUSG00000018008	<i>Rac2</i>	ENSMUSG00000033220
0.05	15	79263425	<i>Pick1</i>	ENSMUSG00000068206	<i>Sox10</i>	ENSMUSG00000033006
0.05	15	81568145		ENSMUSG00000068142	<i>Ep300</i>	ENSMUSG00000055024
0.05	15	84366995	<i>Parvg</i>	ENSMUSG00000022439	<i>Parvb</i>	ENSMUSG00000022438
0.05	15	97449954	<i>5830453K13Rik</i>	ENSMUSG00000044325	<i>BC038822</i>	ENSMUSG00000044250
0.05	15	97542935	<i>5830453K13Rik</i>	ENSMUSG00000044325	<i>Rpap3</i>	ENSMUSG00000022466
0.05	15	97916315	<i>Vdr</i>	ENSMUSG00000022479	<i>Hdac7a</i>	ENSMUSG00000022475
0.05	16	4228813	<i>Tcfap4</i>	ENSMUSG00000005718	<i>Glis2</i>	ENSMUSG00000014303
0.05	16	8415673		ENSMUSG00000065902	<i>Usp7</i>	ENSMUSG00000022710
0.05	16	29200453	<i>Atp13a3</i>	ENSMUSG00000022533	<i>Tmem44</i>	ENSMUSG00000022537
0.05	16	54969715	<i>Senp7</i>	ENSMUSG00000052917		ENSMUSG00000064994
0.05	16	75626803		ENSMUSG00000050299		ENSMUSG00000053608
0.05	16	93648349	<i>Ripply3</i>	ENSMUSG00000022941	<i>Hlcs</i>	ENSMUSG00000040820
0.05	16	93919303	<i>Dscr3</i>	ENSMUSG00000022898	<i>Dyrk1a</i>	ENSMUSG00000022897
0.05	17	13683105	<i>Chd1</i>	ENSMUSG00000023852	<i>Prdm9</i>	ENSMUSG00000051977
0.05	17	23599995	<i>Metrn</i>	ENSMUSG00000002274	<i>BC008155</i>	ENSMUSG00000057411
0.05	17	23795145	<i>Rab11fip3</i>	ENSMUSG00000037098	<i>Decr2</i>	ENSMUSG00000036775
0.05	17	28883660	<i>Abcg1</i>	ENSMUSG00000024030	<i>Tff3</i>	ENSMUSG00000024029
0.05	17	32751890		ENSMUSG00000065139	<i>Msh5</i>	ENSMUSG00000070355
0.05	17	33636415	<i>Ppp1r10</i>	ENSMUSG00000039220		ENSMUSG00000049832
0.05	17	42287145	<i>Supt3h</i>	ENSMUSG00000038954	<i>4930564C03Rik</i>	ENSMUSG00000048820
0.05	17	44277195	<i>2310039H08Rik</i>	ENSMUSG00000062619	<i>NP_035325.1</i>	ENSMUSG00000036858
0.05	17	45563715	<i>1700122O11Rik</i>	ENSMUSG00000042494	<i>1700067P10Rik</i>	ENSMUSG00000021545

0.05	17	49419135		ENSMUSG00000058380		ENSMUSG00000053770
0.05	17	51109845	<i>Pcaf</i>	ENSMUSG0000000708		ENSMUSG00000063839
0.05	17	63594898	<i>Twsg1</i>	ENSMUSG00000024098	<i>Ralbp1</i>	ENSMUSG00000024096
0.05	17	69257535	<i>Ndc80</i>	ENSMUSG00000024056	<i>Q8BP09_MOUSE</i>	ENSMUSG00000041913
0.05	18	39246982	<i>Arhgap26</i>	ENSMUSG00000036452	<i>Nr3c1</i>	ENSMUSG00000024431
0.05	18	50244433	<i>Tnfaip8</i>	ENSMUSG00000062210		ENSMUSG00000069381
0.05	18	60980215	<i>Rps14</i>	ENSMUSG00000024608	<i>Ndst1</i>	ENSMUSG00000054008
0.05	18	65140045	<i>Nedd4l</i>	ENSMUSG00000024589	<i>A330084C13Rik</i>	ENSMUSG00000055362
0.05	18	80828071	<i>Atp9b</i>	ENSMUSG00000024566	<i>Nfatc1</i>	ENSMUSG00000033016
0.05	19	3938519	<i>Coro1b</i>	ENSMUSG00000024835	<i>Rps6kb2</i>	ENSMUSG00000024830
0.05	19	4011389	<i>Clcf1</i>	ENSMUSG00000040663	<i>Pold4</i>	ENSMUSG00000024854
0.05	19	5629379	<i>Frmf8</i>	ENSMUSG00000043488	<i>Scyl1</i>	ENSMUSG00000024941
0.05	19	7953175	<i>Nxf1</i>	ENSMUSG00000010097	<i>Stx5a</i>	ENSMUSG00000010110
0.05	19	8242954	<i>Scgb1a1</i>	ENSMUSG00000024653		ENSMUSG00000059508
0.05	19	9780269	<i>Cybasc3</i>	ENSMUSG00000034445	<i>Dak</i>	ENSMUSG00000034371
0.05	19	24225959	<i>Dock8</i>	ENSMUSG00000052085		ENSMUSG00000064896
0.05	19	31586856	<i>2700046G09Rik</i>	ENSMUSG00000024893	<i>Sgms1</i>	ENSMUSG00000040451
0.05	19	32424629		ENSMUSG00000052009	<i>Pten</i>	ENSMUSG00000013663
0.05	19	35598899	<i>Pcgf5</i>	ENSMUSG00000024805	<i>Ankrd1</i>	ENSMUSG00000024803
0.05	19	43928459	<i>Scd1</i>	ENSMUSG00000037071	<i>Scd4</i>	ENSMUSG00000050195
0.05	19	45077552	<i>Poll</i>	ENSMUSG00000025218		ENSMUSG00000062336
0.05	19	46522796	<i>Ina</i>	ENSMUSG00000034336	<i>Q99JM3_MOUSE</i>	ENSMUSG00000025039
0.05	19	46999894	<i>Obfc1</i>	ENSMUSG00000042694	<i>Sh3pxd2a</i>	ENSMUSG00000053617
0.05	19	53470079	<i>Pdcd4</i>	ENSMUSG00000024975	<i>Rbm20</i>	ENSMUSG00000043639
0.05	20	11481710		ENSMUSG00000058791	<i>Ddx3x</i>	ENSMUSG00000000787
0.05	20	42661369	<i>1200013B08Rik</i>	ENSMUSG00000031101	<i>Xpnpep2</i>	ENSMUSG00000037005
0.05	20	128113669	<i>Gla</i>	ENSMUSG00000031266	<i>Btk</i>	ENSMUSG00000031264

## Appendix E. Human cancer cell lines used in the 10K and SNP 6.0 CGH analyses.

SNP6.0? indicates whether the cell line was used in the higher resolution SNP 6.0 CGH analysis. Abbreviations: auto\_ganglia = autonomic ganglia; CNS = central nervous system; haem\_and\_lymph = haematopoietic and lymphoid tissue. unknown(...) is used where the cell line was classified as unknown in the 10K analysis, but was later identified for the SNP 6.0 analysis.

Cell line	Tissue	SNP6.0?	Cell line	Tissue	SNP6.0?	Cell line	Tissue	SNP6.0?
SW13	adrenal_gland	Y	MOLT-4	haem_and_lymph	Y	SCLC-21H	lung	Y
GI-CA-N	auto_ganglia		MONO-			SHP-77	lung	Y
KP-N-YS	auto_ganglia	Y	MAC-6	haem_and_lymph	Y	SK-LU-1	lung	Y
NB-10	auto_ganglia	Y	Mo-T	haem_and_lymph	Y	SK-MES-1	lung	Y
NB-13	auto_ganglia	Y	MUTZ-1	haem_and_lymph	Y	SW1573	lung	Y
NB-14	auto_ganglia	Y	MV-4-11	haem_and_lymph	Y	SW900	lung	Y
NB-17	auto_ganglia	Y	NALM-1	haem_and_lymph	Y	VMRC-LCP	lung	Y
NB-5	auto_ganglia	Y	NALM-6	haem_and_lymph	Y	COLO-680N	oesophagus	Y
NB-6	auto_ganglia	Y	NC-37	haem_and_lymph	Y	EC-GI-10	oesophagus	Y
NB-7	auto_ganglia	Y	NKM-1	haem_and_lymph	Y	HCE-4	oesophagus	Y
ACN	auto_ganglia	Y	NOMO-1	haem_and_lymph	Y	KYSE-140	oesophagus	
BE2-C	auto_ganglia		OCI-AML2	haem_and_lymph	Y	KYSE-150	oesophagus	
			OPM-2	haem_and_lymph	Y			
			P12-					
CHP-126	auto_ganglia	Y	ICHIKAWA	haem_and_lymph	Y	KYSE-180	oesophagus	
CHP-212	auto_ganglia	Y	P30-OHK	haem_and_lymph	Y	KYSE-30	oesophagus	
GI-LI-N	auto_ganglia		P31-FUJ	haem_and_lymph	Y	KYSE-520	oesophagus	Y
GOTO-P3	auto_ganglia	Y	PF-382	haem_and_lymph		KYSE-70	oesophagus	
KP-N-RT-								
BM-1	auto_ganglia	Y	QIMR-WIL	haem_and_lymph	Y	OE19	oesophagus	Y
KP-N-S19s	auto_ganglia	Y	Raji	haem_and_lymph	Y	OE33	oesophagus	Y
			Ramos-					
LAN-5	auto_ganglia	Y	2G6-4C10	haem_and_lymph	Y	TE-1	oesophagus	Y
LAN-6	auto_ganglia	Y	REH	haem_and_lymph	Y	TE-10	oesophagus	Y
MC-IXC	auto_ganglia	Y	RL	haem_and_lymph	Y	TE-11	oesophagus	Y
MHH-NB-11	auto_ganglia	Y	RPMI-6666	haem_and_lymph	Y	TE-12	oesophagus	Y
NB16-								
RIKEN	auto_ganglia	Y	RPMI-8226	haem_and_lymph	Y	TE-15	oesophagus	Y
NH-12	auto_ganglia	Y	RPMI-8402	haem_and_lymph	Y	TE-5	oesophagus	Y
NH-6	auto_ganglia	Y	RPMI-8866	haem_and_lymph	Y	TE-6	oesophagus	Y
SCCH-26	auto_ganglia	Y	RS4-11	haem_and_lymph	Y	TE-8	oesophagus	Y
SIMA	auto_ganglia	Y	SCC-3	haem_and_lymph	Y	TE-9	oesophagus	Y
SK-N-AS	auto_ganglia	Y	SIG-M5	haem_and_lymph	Y	41MCISR	ovary	Y
SK-N-DZ	auto_ganglia	Y	SKM-1	haem_and_lymph	Y	Caov-3	ovary	Y
TGW	auto_ganglia	Y	SK-MM-2	haem_and_lymph	Y	EFO-21	ovary	Y
EGI-1	biliary_tract	Y	SKW	haem_and_lymph	Y	EFO-27	ovary	Y
ETK-1	biliary_tract	Y	SKW-3	haem_and_lymph	Y	IGROV-1	ovary	Y
HuCCT1	biliary_tract	Y	ST486	haem_and_lymph	Y	KGN	ovary	Y
HuH-28	biliary_tract	Y	SU-DHL-1	haem_and_lymph	Y	KURAMOCHI	ovary	Y
TGBC1TKB	biliary_tract	Y	SUP-B8	haem_and_lymph	Y	OAW28	ovary	Y
TGBC24TKB	biliary_tract	Y	SUP-T1	haem_and_lymph	Y	OAW-42	ovary	Y
CADO-ES1	bone	Y	TALL-1	haem_and_lymph	Y	OC-314	ovary	Y
CAL-72	bone	Y	THP-1	haem_and_lymph	Y	OVCAR3	ovary	Y
ES-1	bone	Y	TUR	haem_and_lymph	Y	OVCAR-4	ovary	Y
ES-4	bone	Y	U-266	haem_and_lymph	Y	OVCAR-5	ovary	Y
EW-1	bone	Y	U-698-M	haem_and_lymph	Y	PA-1	ovary	Y
EW-12	bone	Y	WSU-NHL	haem_and_lymph	Y	RMG-I	ovary	Y
EW-13	bone	Y	YT	haem_and_lymph	Y	RTSG	ovary	Y
EW-16	bone	Y	NB4	haem_and_lymph	Y	SK-OV-3	ovary	Y
EW-18	bone	Y	769-P	kidney	Y	TYK-nu	ovary	Y
EW-22	bone	Y	786-0	kidney	Y	AsPC-1	pancreas	Y
EW-24	bone	Y	A498	kidney	Y	BxPC-3	pancreas	Y
EW-3	bone	Y	ACHN	kidney	Y	Capan-1	pancreas	Y
EW-7	bone	Y	BB65-RCC	kidney	Y	Capan-2	pancreas	Y
H-EMC-SS	bone	Y	BFTC-909	kidney	Y	CFPAC-1	pancreas	Y
HOS	bone	Y	CAKI-1	kidney	Y	HPAF-II	pancreas	Y
HuO9	bone	Y	CAL-54	kidney	Y	HuP-T3	pancreas	Y
MG-63	bone	Y	HA7-RCC	kidney	Y	HuP-T4	pancreas	Y
			LB1047-					
NOS-1	bone	Y	RCC	kidney	Y	MIA-PaCa-2	pancreas	
			LB2241-					
NY	bone	Y	RCC	kidney	Y	MZ1-PC	pancreas	
Saos-2	bone	Y	LB996-RCC	kidney	Y	PANC-03-27	pancreas	Y
SJSA-1	bone	Y	OS-RC-2	kidney	Y	PANC-10-05	pancreas	Y
SK-PN-DW	bone	Y	RCC10RGB	kidney	Y	SW1990	pancreas	Y
U-2-OS	bone	Y	RXF393	kidney	Y	YAPC	pancreas	Y
BT-20	breast	Y	SK-NEP-1	kidney	Y	JAR	placenta	Y
BT-474	breast	Y	SN12C	kidney	Y	JEG-3	placenta	Y
BT-549	breast	Y	SW156	kidney	Y	IST-MES1	pleura	Y
CAL-120	breast	Y	TK10	kidney	Y	MPP-89	pleura	Y
CAL-148	breast	Y	U031	kidney	Y	MSTO-211H	pleura	Y
CAL-51	breast	Y	VMRC-RCZ	kidney	Y	NCI-H2452	pleura	Y
			VMRC-					
CAL-85-1	breast	Y	MELG	large_intestine	Y	NCI-H28	pleura	Y
CAMA-1	breast	Y	293	large_intestine	Y	BPH-1	prostate	Y
COLO-824	breast	Y	C2BBe1	large_intestine	Y	DU-145	prostate	Y
DU-4475	breast	Y	CA46	large_intestine	Y	A101D	skin	Y
EVSA-T	breast	Y	COLO-205	large_intestine	Y	A375	skin	Y
HCC1143	breast	Y	COLO-320	large_intestine	Y	A4-Fuk	skin	Y

HCC1187	breast	Y	COLO-678	large_intestine	Y	AKI	skin	
HCC1395	breast	Y	COLO-741	large_intestine	Y	BB132-MEL	skin	
HCC1419	breast		CW-2	large_intestine	Y	BSCC-93	skin	
HCC1569	breast	Y	GP5d	large_intestine	Y	C32	skin	Y
HCC1599	breast	Y	H4	large_intestine	Y	CAL-39	skin	Y
HCC1806	breast	Y	HCC2998	large_intestine	Y	CHL-1	skin	Y
HCC1937	breast	Y	HCT-116	large_intestine	Y	COLO-679	skin	Y
HCC1954	breast	Y	HT-115	large_intestine		COLO-792	skin	Y
HCC2157	breast	Y	HT-29	large_intestine	Y	COLO-800	skin	Y
HCC2218	breast	Y	HT55	large_intestine	Y	COLO-853	skin	
HCC38	breast	Y	LoVo	large_intestine	Y	CP50-MEL-B	skin	Y
HCC70	breast	Y	LS-123	large_intestine	Y	CP66-MEL	skin	Y
Hs-578-T	breast	Y	LS-174T	large_intestine	Y	G-361	skin	Y
MCF7	breast	Y	LS-411N	large_intestine	Y	GR-M	skin	
MDA-MB-134-VI	breast	Y	LS-513	large_intestine	Y	HMV-II	skin	Y
MDA-MB-157	breast	Y	NCI-H508	large_intestine	Y	IGR-1	skin	Y
MDA-MB-175-VII	breast	Y	NCI-H630	large_intestine	Y	IPC-298	skin	Y
MDA-MB-231	breast	Y	NCI-H716	large_intestine	Y	IST-MEL1	skin	Y
MDA-MB-361	breast	Y	NCI-H747	large_intestine	Y	LB2518-MEL	skin	Y
MDA-MB-415	breast	Y	RCM-1	large_intestine	Y	LB2531-MEL-Z	skin	
MDA-MB-453	breast	Y	RKO	large_intestine	Y	LB33-MEL-A	skin	
MDA-MB-468	breast		SK-CO-1	large_intestine	Y	LB373-MEL-D	skin	Y
MFM-223	breast		SNU-C1	large_intestine	Y	Malme-3M	skin	
MRK-nu-1	breast		SNU-C2B	large_intestine	Y	MEL-HO	skin	
NCI-ADR-RES	breast		SW1116	large_intestine	Y	MEL-JUSO	skin	
OCUB-M	breast	Y	SW1417	large_intestine	Y	MLMA	skin	Y
SK-BR-3	breast		SW403	large_intestine	Y	MMAC-SF	skin	Y
SW527	breast		SW48	large_intestine	Y	MZ2-mel	skin	
T47D	breast	Y	SW620	large_intestine	Y	RVH-421	skin	Y
UACC-812	breast	Y	SW837	large_intestine	Y	SK-MEL-2	skin	Y
UACC-893	breast	Y	SW948	large_intestine	Y	SK-MEL-24	skin	Y
8-MG-BA	CNS	Y	T84	large_intestine	Y	SK-MEL-28	skin	Y
A172	CNS	Y	C3A	liver	Y	SK-MEL-3	skin	Y
AM-38	CNS	Y	HLE	liver		SK-MEL-30	skin	Y
Becker	CNS	Y	HuH-6-clone5	liver		SR	skin	Y
CAS-1	CNS	Y	HuH-7	liver		T107	skin	
CCF-STTG1	CNS	Y	SK-HEP-1	liver	Y	UACC-257	skin	Y
D-247-MG	CNS	Y	SNU-387	liver	Y	UACC-62	skin	Y
D-283-MED	CNS	Y	SNU-398	liver		WM-115	skin	Y
D-542-MG	CNS	Y	SNU-423	liver		HUTU-80	small_intestine	Y
DBTRG-05MG	CNS	Y	SNU-449	liver	Y	A204	soft_tissue	Y
DK-MG	CNS	Y	SNU-475	liver	Y	A673	soft_tissue	Y
GAMG	CNS	Y	T24	liver		G-401	soft_tissue	Y
GB-1	CNS	Y	A549	lung	Y	G-402	soft_tissue	Y
GI-1	CNS	Y	ABC-1	lung	Y	GCT	soft_tissue	Y
GMS-10	CNS	Y	BEN	lung	Y	HT-1080	soft_tissue	Y
GOS-3	CNS		CAL-12T	lung	Y	MES-SA	soft_tissue	Y
KALS-1	CNS	Y	Calu-1	lung	Y	RH18	soft_tissue	Y
KNS-42	CNS	Y	Calu-3	lung	Y	RMS	soft_tissue	
KNS-81	CNS		Calu-6	lung	Y	S-117	soft_tissue	Y
KS-1	CNS	Y	ChaGo-K-1	lung		SJRH30	soft_tissue	Y
LN-405	CNS	Y	COLO-668	lung	Y	SK-LMS-1	soft_tissue	Y
MOG-G-CCM	CNS	Y	COR-L105	lung	Y	SK-UT-1	soft_tissue	Y
MOG-G-UVW	CNS	Y	COR-L23	lung		SW684	soft_tissue	Y
NMC-G1	CNS	Y	COR-L279	lung	Y	SW872	soft_tissue	Y
no-10	CNS	Y	COR-L47	lung		SW982	soft_tissue	Y
no-11	CNS	Y	COR-L88	lung	Y	T-174	soft_tissue	
ONS-76	CNS	Y	DMS-114	lung		TE-159-T	soft_tissue	
PFSK	CNS	Y	DMS-153	lung		TE-441-T	soft_tissue	Y
SF126	CNS	Y	DMS-273	lung		VA-ES-BJ	soft_tissue	Y
SF268	CNS	Y	DMS-53	lung	Y	23132-87	stomach	Y
SF539	CNS	Y	DMS-79	lung	Y	A3-KAW	stomach	Y
SK-MG-1	CNS	Y	DV-90	lung	Y	AGS	stomach	Y
SNB75	CNS	Y	EBC-1	lung		ECC10	stomach	Y
SW1783	CNS	Y	EKVX	lung	Y	ECC12	stomach	Y
T98G	CNS	Y	EPLC-272H	lung	Y	GCIY	stomach	Y
U-118-MG	CNS	Y	HOP-62	lung	Y	GT3TKB	stomach	Y
U251	CNS	Y	HOP-92	lung	Y	KATOIII	stomach	Y
U-87-MG	CNS	Y	IST-SL1	lung	Y	MKN1	stomach	Y
YH-13	CNS	Y	IST-SL2	lung	Y	MKN28	stomach	Y
YKG-1	CNS		KNS-62	lung	Y	MKN45	stomach	Y
BOKU	cervix	Y	LB647-			MKN7	stomach	Y
C-33-A	cervix	Y	SCLC	lung	Y	NCI-N87	stomach	Y
C-4-II	cervix	Y	LC-2-ad	lung		NCI-SNU-1	stomach	Y
Ca-Ski	cervix	Y	LCLC-103H	lung		NCI-SNU-16	stomach	Y
DoTc2-4510	cervix	Y	LK-2	lung	Y	NCI-SNU-5	stomach	Y
HT-3	cervix	Y	LU-134-A	lung	Y	NUGC-3	stomach	Y
ME-180	cervix	Y	LU-135	lung	Y	SCH	stomach	Y
OMC-1	cervix	Y	LU-139	lung	Y	TGBC11TKB	stomach	Y
SiHa	cervix	Y	LU-165	lung	Y	ITO-II	testis	Y
SKG-IIIa	cervix	Y	LU-65	lung	Y	NEC8	testis	Y
SW756	cervix	Y	LU-99A	lung		NTERA-S-cl-	testis	Y
			LUCLU-1	lung				

AN3-CA	endometrium	Y	LXF-289	lung		D1		
COLO-684	endometrium	Y	NCI-H1048	lung		8305C	thyroid	Y
EFE-184	endometrium	Y	NCI-H1062	lung		8505C	thyroid	
ESS-1	endometrium	Y	NCI-H1092	lung		BCPAP	thyroid	Y
HEC-1	endometrium	Y	NCI-H1173	lung		BHT-101	thyroid	Y
KLE	endometrium	Y	NCI-H1184	lung		CAL-62	thyroid	Y
MFE-280	endometrium		NCI-H128	lung		CGTH-W-1	thyroid	Y
MFE-296	endometrium		NCI-H1284	lung		FTC133	thyroid	
RL95-2	endometrium	Y	NCI-H1299	lung		K5	thyroid	Y
SNG-M	endometrium	Y	NCI-H1304	lung	Y	RO82-W-1	thyroid	Y
WERI-Rb-1	eye	Y	NCI-H1355	lung		TCO-1	thyroid	
Y79	eye		NCI-H1417	lung	Y	TT	thyroid	Y
380	haem_and_lymph		NCI-H146	lung	Y	22-RVI	unknown	
697	haem_and_lymph	Y	NCI-H1563	lung	Y	CAR-1	unknown	
ALL-PO	haem_and_lymph	Y	NCI-H157	lung	Y	COR-L24	unknown	
ARH-77	haem_and_lymph	Y	NCI-H1573	lung	Y	HTCC3	unknown	
ATN-1	haem_and_lymph	Y	NCI-H1581	lung	Y	IA5	unknown	
						LC-1-SQ-SF	unknown	
BALL-1	haem_and_lymph	Y	NCI-H1618	lung	Y	LCLC-		
BC-1	haem_and_lymph	Y	NCI-H1623	lung	Y	97TM1	unknown	
BC-3	haem_and_lymph		NCI-H1648	lung	Y	MFN-INO	unknown	
BE-13	haem_and_lymph	Y	NCI-H1650	lung	Y	NB-I-IFO	unknown	
BL-41	haem_and_lymph	Y	NCI-H1651	lung	Y	NCI-H417	unknown	
BL-70	haem_and_lymph	Y	NCI-H1666	lung	Y	SW1315	unknown	
BONNA-12	haem_and_lymph	Y	NCI-H1693	lung	Y	TCYIK	unknown	
						TE-206-T	unknown	Y
BV-173	haem_and_lymph		NCI-H1694	lung	Y	TuHR-14- TKB	unknown	
							unknown	
C8166	haem_and_lymph	Y	NCI-H1703	lung	Y	NB-12	(auto_ganglia)	Y
							unknown	
CESS	haem_and_lymph	Y	NCI-H1734	lung	Y	NB-SuS-SR	(auto_ganglia)	Y
							unknown	
CMK	haem_and_lymph	Y	NCI-H1755	lung	Y	SK-N-FI	(auto_ganglia)	Y
CML-T1	haem_and_lymph	Y	NCI-H1770	lung	Y	D-245-MG	unknown (CNS)	Y
CRO-AP5	haem_and_lymph	Y	NCI-H1792	lung	Y	D-263-MG	unknown (CNS)	Y
CTV-1	haem_and_lymph	Y	NCI-H1793	lung	Y	D-336-MG	unknown (CNS)	Y
Daudi	haem_and_lymph	Y	NCI-H1838	lung	Y	D-384-MED	unknown (CNS)	Y
DB	haem_and_lymph	Y	NCI-H187	lung	Y	D-392-MG	unknown (CNS)	Y
DEL	haem_and_lymph	Y	NCI-H1882	lung	Y	D-397-MG	unknown (CNS)	Y
DG-75	haem_and_lymph	Y	NCI-H1926	lung	Y	D-423-MG	unknown (CNS)	Y
DOHH-2	haem_and_lymph	Y	NCI-H1930	lung	Y	D-458-MED	unknown (CNS)	Y
EB-2	haem_and_lymph	Y	NCI-H1975	lung	Y	D-502-MG	unknown (CNS)	Y
EB-3	haem_and_lymph	Y	NCI-H2009	lung	Y	D-538-MG	unknown (CNS)	Y
EHEB	haem_and_lymph	Y	NCI-H2029	lung	Y	D-556-MED	unknown (CNS)	Y
EM-2	haem_and_lymph	Y	NCI-H2030	lung		D-566-MG	unknown (CNS)	Y
							unknown	
EoL-1-cell	haem_and_lymph	Y	NCI-H2052	lung	Y	ECC4	(gastro_tract)	Y
GA-10-								
Clone-20	haem_and_lymph	Y	NCI-H2073	lung		PLCPRF5	unknown (liver)	Y
GA-10-								
Clone-4	haem_and_lymph	Y	NCI-H2085	lung		SW626	unknown (ovary)	Y
							unknown	
GDM-1	haem_and_lymph	Y	NCI-H2107	lung	Y	PANC-08-13	(pancreas)	Y
GR-ST	haem_and_lymph	Y	NCI-H2141	lung		A2058	unknown (skin)	Y
H9	haem_and_lymph		NCI-H2170	lung		A388	unknown (skin)	Y
HC-1	haem_and_lymph	Y	NCI-H2195	lung		A431	unknown (skin)	Y
HDLM-2	haem_and_lymph	Y	NCI-H2227	lung	Y	GAK	unknown (skin)	Y
HD-MY-Z	haem_and_lymph	Y	NCI-H2228	lung	Y	RPMI-7951	unknown (skin)	Y
HEL-92-1-7	haem_and_lymph	Y	NCI-H226	lung	Y	SK-MEL-5	unknown (skin)	Y
HH	haem_and_lymph	Y	NCI-H2291	lung	Y	A253	upper_aero_tract	
HL-60	haem_and_lymph	Y	NCI-H23	lung	Y	BB30-HNC	upper_aero_tract	Y
HT	haem_and_lymph	Y	NCI-H2330	lung	Y	BB49-HNC	upper_aero_tract	Y
IM-9	haem_and_lymph	Y	NCI-H2342	lung		BHY	upper_aero_tract	Y
J45-01	haem_and_lymph		NCI-H2347	lung	Y	Ca9-22	upper_aero_tract	Y
JiyoyeP-								
2003	haem_and_lymph	Y	NCI-H250	lung	Y	CAL-27	upper_aero_tract	Y
JVM-2	haem_and_lymph	Y	NCI-H292	lung		CAL-33	upper_aero_tract	Y
JVM-3	haem_and_lymph	Y	NCI-H322M	lung	Y	Detroit562	upper_aero_tract	Y
K052	haem_and_lymph	Y	NCI-H345	lung	Y	DOK	upper_aero_tract	Y
K-562	haem_and_lymph	Y	NCI-H358	lung	Y	HCE-T	upper_aero_tract	Y
KARPAS-								
299	haem_and_lymph	Y	NCI-H378	lung		HN	upper_aero_tract	Y
KARPAS-								
422	haem_and_lymph	Y	NCI-H441	lung	Y	HO-1-N-1	upper_aero_tract	Y
KARPAS-45	haem_and_lymph	Y	NCI-H446	lung	Y	KOSC-2	upper_aero_tract	Y
KASUMI-1	haem_and_lymph	Y	NCI-H460	lung	Y	LB771-HNC	upper_aero_tract	Y
KE-37	haem_and_lymph	Y	NCI-H510A	lung	Y	RPMI-2650	upper_aero_tract	Y
KM-H2	haem_and_lymph	Y	NCI-H522	lung	Y	SAS	upper_aero_tract	Y
KMOE-2	haem_and_lymph	Y	NCI-H596	lung	Y	SCC-15	upper_aero_tract	Y
KMS-12-BM	haem_and_lymph	Y	NCI-H64	lung	Y	SCC-25	upper_aero_tract	Y
KU812	haem_and_lymph	Y	NCI-H650	lung	Y	SCC-9	upper_aero_tract	Y
KY821	haem_and_lymph	Y	NCI-H661	lung	Y	5637	urinary_tract	Y
L-363	haem_and_lymph	Y	NCI-H69	lung	Y	639-V	urinary_tract	Y
L-540	haem_and_lymph	Y	NCI-H719	lung	Y	647-V	urinary_tract	Y
LAMA-84	haem_and_lymph	Y	NCI-H720	lung	Y	BFTC-905	urinary_tract	Y
LC4-1	haem_and_lymph	Y	NCI-H727	lung	Y	DSH1	urinary_tract	Y
LOUCY	haem_and_lymph	Y	NCI-H748	lung		HT-1197	urinary_tract	Y
LP-1	haem_and_lymph	Y	NCI-H774	lung	Y	HT-1376	urinary_tract	Y
MC-1010	haem_and_lymph	Y	NCI-H810	lung	Y	KU-19-19	urinary_tract	
MEG-01	haem_and_lymph	Y	NCI-H82	lung	Y	RT-112	urinary_tract	Y
MHH-CALL-								
2	haem_and_lymph	Y	NCI-H835	lung	Y	RT4	urinary_tract	Y
MHH-CALL-								
4	haem_and_lymph		NCI-H889	lung	Y	SW1710	urinary_tract	

MJ	haem_and_lymph	Y	PC-14	lung		SW780	urinary_tract	Y
ML-2	haem_and_lymph	Y	PC-3	lung	Y	UM-UC-3	urinary_tract	Y
			RERF-LC-					
MN-60	haem_and_lymph	Y	FM	lung	Y	SW954	vulva	Y
MOLT-13	haem_and_lymph	Y	SBC-1	lung	Y	SW962	vulva	
MOLT-16	haem_and_lymph	Y	SBC-5	lung	Y			

## Publication

The following publication is reprinted from Cell 133(4): 727-41. Uren A.G., Kool, J., Matentzoglou, K., de Ridder, J., Mattison, J., van Uitert, M., Lagcher, W., Sie, D., Tanger, E., Cox, T., Reinders, M., Hubbard, T.J., Rogers, J., Jonkers, J., Wessels, L., Adams, D.J., van Lohuizen, M., and Berns, A. Large-scale mutagenesis in p19(ARF)- and p53-deficient mice identifies cancer genes and their collaborative networks. Copyright © 2008, with permission from Elsevier.