

Table 25. Gene order according to the hierarchical clustering of the top-200 genes of *IGH@/MYC* and the normal bone marrows and purified hematopoietic cells

Accession no.	Gene name	Gene symbol	Entrez gene	Reporter ID	Signature
AI364523	Full length insert cDNA clone ZD81C11	<i>0</i>	0	2018158	
AW025960	Mediator of RNA polymerase II transcription, subunit 12 homolog (yeast)	<i>MED12</i>	9968	2516484	
AA487215	Myosin, light polypeptide kinase	<i>MYLK</i>	4638	841308	
AA045664	Glycosyltransferase 28 domain containing 1	<i>GLT28D1</i>	55849	489213	
R10823	Breast carcinoma amplified sequence 3	<i>BCAS3</i>	54828	129020	
AA134808	Integrin beta 1 binding protein (melusin) 2	<i>ITGB1BP2</i>	26548	502462	
AA292074	Ubiquitin-conjugating enzyme E2L 6	<i>UBE2L6</i>	9246	725395	
AA216535	Sterol-C5-desaturase (ERG3 delta-5-desaturase homolog, fungal)-like	<i>SC5DL</i>	6309	649743	
AA399320	Lysosomal-associated protein transmembrane 4 alpha	<i>LAPTM4A</i>	9741	726684	
W90704	B lymphoma Mo-MLV insertion region (mouse)	<i>BMI1</i>	648	418004	
AA872348	Ras homolog gene family, member F (in filopodia)	<i>RHOF</i>	54509	1472664	
BX094795	Transcribed locus	<i>0</i>	0	795397	
AI246316	GTPase, IMAP family member 2	<i>GIMAP2</i>	26157	1967131	
AA417921	Multiple cluster hits:85201 & 194694	<i>CLECSF2 & MAP3K6</i>	9976 & 9064	767405	
R73647	Multiple cluster hits:343873 & 521419	<i>0 & FLJ32642</i>	0 & 137492	143115	
R40574	Multiple cluster hits:147218 & 202001	<i>0 & KIAA1012</i>	0 & 22878	28654	
AA059378	Guanylate cyclase activator 1A (retina)	<i>GUCA1A</i>	2978	381866	
AI014740	Der1-like domain family, member 2	<i>DERL2</i>	51009	1598739	
AI955688	HMT1 hnRNP methyltransferase-like 1 (<i>S. cerevisiae</i>)	<i>HRMT1L1</i>	3275	2509615	
AA988615	Major histocompatibility complex, class I, F	<i>HLA-F</i>	3134	1604703	
AA489785	Nuclear receptor coactivator 1	<i>NCOA1</i>	8648	839552	
AA453275	Integral membrane protein 2B	<i>ITM2B</i>	9445	795375	
AA411380	Ecotropic viral integration site 2A	<i>EVI2A</i>	2123	754582	
AA424369	KIAA1049 protein	<i>KIAA1049</i>	22980	767078	
AA633658	Amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)	<i>APP</i>	351	856575	
AI342950	Lamina-associated polypeptide 1B	<i>LAP1B</i>	26092	1910657	
AI688320	AP2 associated kinase 1	<i>AAK1</i>	22848	2326267	
R53479	Hypothetical protein MGC10485	<i>MGC10485</i>	112936	40155	
AA155694	Potassium voltage-gated channel, KQT like subfamily, member 1	<i>KCNQ1OT1</i>	10984	592241	
AA626721	Zinc finger, CSL domain containing 2	<i>ZCSSL2</i>	285381	745174	
AA486388	G1 to S phase transition 1	<i>GSPT1</i>	2935	842825	
AA149987	Protease, serine, 16 (thymus)	<i>PRSS16</i>	10279	566597	
T82365	EGF-like repeats and discoidin I-like domains 3	<i>EDIL3</i>	10085	80643	
T64262	Chemokine (C-C motif) ligand 13	<i>CCL13</i>	6357	80146	
AA428524	Homo sapiens, clone IMAGE:4337652, mRNA	<i>0</i>	0	773204	
R82300	Adenosylmethionine decarboxylase 1	<i>AMD1</i>	262	149013	
AW025698	Latent transforming growth factor beta binding protein 1	<i>LTBP1</i>	4052	2516260	CD71/GPA
AA400362	Transcription factor Dp-2 (E2F dimerization partner 2)	<i>TFDP2</i>	7029	742806	CD71/GPA
R16418	Fraser syndrome 1	<i>FRAS1</i>	80144	129320	CD71/GPA
W32608	Transportin 1	<i>TNPO1</i>	3842	321492	CD71/GPA
AA488324	BUB1 budding uninhibited by benzimidazoles 1 homolog beta (yeast)	<i>BUB1B</i>	701	842968	CD71/GPA
AI611326	Solute carrier family 25, member 13 (citrin)	<i>SLC25A13</i>	10165	2242727	
AA071368	Myelin protein zero-like 1	<i>MPZL1</i>	9019	530093	
AA456878	V-myb myeloblastosis viral oncogene homolog (avian)-like 2	<i>MYBL2</i>	4605	815526	CD34/Immature
AA129134	Solute carrier family 29 (nucleoside transporters), member 1	<i>SLC29A1</i>	2030	586650	CD34/Immature
AA404286	Peptidylprolyl isomerase F (cyclophilin F)	<i>PPIF</i>	10105	758343	CD34/Immature
R43734	Laminin, alpha 4	<i>LAMA4</i>	3910	32609	CD34/Immature

AW050510	Pyrroline-5-carboxylate reductase 1	<i>PYCRI</i>	5831	2557762	CD34/Immature
N47717	Fatty acid binding protein 5 (psoriasis-associated)	<i>FABP5</i>	2171	281039	CD34/Immature
AI651009	Mitogen-activated protein kinase 12	<i>MAPK12</i>	6300	2304048	CD34/Immature
H81935	Hypothetical protein FLJ32702	<i>FLJ32702</i>	123775	239937	Leukemic
W77808	Heterogeneous nuclear ribonucleoprotein A/B	<i>HNRPAB</i>	3182	345833	Leukemic
AW006596	Citrate synthase	<i>CS</i>	1431	2488760	Leukemic
BX108870	DKFZP564M082 protein	<i>DKFZP564M082</i>	25906	771317	Leukemic
AA988524	Death-associated protein 6	<i>DAXX</i>	1616	1602516	Leukemic
AA775271	Chromosome 20 open reading frame 20	<i>C20orf20</i>	55257	878607	Leukemic
AA433827	Est1p-like protein B	<i>EST1B</i>	23381	770709	Leukemic
AA292283	PHD finger protein 2	<i>PHF2</i>	5253	725841	Leukemic
H17627	Hypothetical protein FLJ20232	<i>FLJ20232</i>	54471	50693	Leukemic
AI969131	Enolase 2 (gamma, neuronal)	<i>ENO2</i>	2026	2545711	Leukemic
BX104631	GTP binding protein 4	<i>GTPBP4</i>	23560	230235	Leukemic
N56726	Multiple cluster hits:23754 & 399984	<i>0 & FLJ12519</i>	0 & 84128	258175	Leukemic
R27615	Protein kinase, DNA-activated, catalytic polypeptide	<i>PRKDC</i>	5591	133637	Leukemic
BX099342	Aspartoacylase (aminocyclase) 3	<i>ACY3</i>	91703	129128	CD34/Immature
AA039640	WEE1 homolog (S. pombe)	<i>WEE1</i>	7465	376316	Leukemic
BX089627	CDNA FLJ14942 fis, A-PLACE1011185	<i>CDNA FLJ14942</i>	0	811032	Leukemic
AA448187	KIAA1212	<i>KIAA1212</i>	55704	782806	Leukemic
AA459069	Multiple cluster hits:524506 & 549298	<i>SLC39A5 & FLJ34236</i>	283375 & 283373	810803	Leukemic
AA644129	Fanconi anemia, complementation group A	<i>FANCA</i>	2175	845419	Leukemic
AA620516	DEAH (Asp-Glu-Ala-His) box polypeptide 33	<i>DHX33</i>	56919	951298	Leukemic
AA418408	Multiple cluster hits:282387 & 525529	<i>POLR3G & KCNMB4</i>	10622 & 27345	767273	Leukemic
AI346246	RNA binding motif protein 9	<i>RBM9</i>	23543	1926364	Leukemic
H85704	Frizzled homolog 3 (Drosophila)	<i>FZD3</i>	7976	219961	Leukemic
AA447599	Cytoplasmic linker associated protein 2	<i>CLASP2</i>	23122	782700	Leukemic
AA975029	PAI-1 mRNA-binding protein	<i>PAI-RBP1</i>	26135	1560991	Leukemic
AA460171	Transcribed locus	<i>0</i>	0	795901	Leukemic
T70342	Transcribed locus, weakly similar to NP_055301.1 neuronal thread protein AD7c-NTP [Homo sapiens]	<i>0</i>	0	67066	Leukemic
W87541	Calcyclin binding protein	<i>CACYBP</i>	27101	416981	Leukemic
AA872402	Eukaryotic translation initiation factor 4B	<i>EIF4B</i>	1975	1472753	Leukemic
AI291437	Tetratricopeptide repeat domain 4	<i>TTC4</i>	7268	1894412	Leukemic
AA983905	WD repeat domain 4	<i>WDR4</i>	10785	1581541	Leukemic
AA931892	Exosome component 7	<i>EXOSC7</i>	23016	1570436	Leukemic
AA431199	Chromosome 10 open reading frame 70	<i>C10orf70</i>	55847	782164	Leukemic
BX099505	Heparan sulfate (glucosamine) 3-O-sulfotransferase 4	<i>HS3ST4</i>	9951	1417985	Leukemic
AA486524	Mitochondrial ribosomal protein S27	<i>MRPS27</i>	23107	843133	Leukemic
AA923514	Anaphase promoting complex subunit 1	<i>ANAPC1</i>	64682	1534603	Leukemic
AA678021	Small nuclear ribonucleoprotein polypeptide E	<i>SNRPE</i>	6635	431803	Leukemic
R40127	RAN binding protein 1	<i>RANBP1</i>	5902	30093	Leukemic
AA626076	Pantothenate kinase 1	<i>PANK1</i>	53354	1055460	Leukemic
BX090366	Transcribed locus, moderately similar to XP_357414.1 similar to Small nuclear ribonucleoprotein F (snRNP-F) (Sm protein F) (Sm-F) (SmF) [Mus musculus]	<i>Transcribed locus</i>	0	451664	Leukemic
T60508	Full length insert cDNA YH77E09	<i>cDNA YH77E09</i>	0	78064	Leukemic
AA598486	SUMO-1 activating enzyme subunit 1	<i>SAE1</i>	10055	898121	Leukemic
AA455111	Heterogeneous nuclear ribonucleoprotein C (C1/C2)	<i>HNRPC</i>	3183	809835	Leukemic
AI301329	Aldo-keto reductase family 1, member B10 (aldose reductase)	<i>AKR1B10</i>	57016	1899496	Leukemic
AA485132	Bromodomain adjacent to zinc finger domain, 1B	<i>BAZ1B</i>	9031	815683	Leukemic
AA598504	Ras-GTPase-activating protein SH3-domain-binding protein	<i>G3BP</i>	10146	898145	Leukemic
AA465459	DEAD (Asp-Glu-Ala-Asp) box polypeptide 21	<i>DDX21</i>	9188	814117	Leukemic

N90109	Multiple cluster hits:79110 & 118127	<i>NCL & ACTC</i>	4691 & 70	302933	Leukemic
AW007634	Histidyl-tRNA synthetase 2	<i>HARS2</i>	92675	2511570	Leukemic
N94588	CASP8 and FADD-like apoptosis regulator	<i>CFLAR</i>	8837	309776	CD34/Immature
W87741	V-myc myelocytomatosis viral oncogene homolog (avian)	<i>MYC</i>	4609	417226	CD34/Immature
W86133	V-myb myeloblastosis viral oncogene homolog (avian)	<i>MYB</i>	4602	416280	CD34/Immature
BX119416	Hypothetical protein MGC40397	<i>MGC40397</i>	121053	788507	CD34/Immature
AA668301	Ribosomal protein S16	<i>RPS16</i>	6217	853151	CD34/Immature
AA496376	Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 6	<i>SLC25A6</i>	293	755855	CD34/Immature
AA133534	Retinol dehydrogenase 13 (all-trans and 9-cis)	<i>RDH13</i>	112724	490714	CD34/Immature
AA700090	Mitochondrial ribosomal protein L50	<i>MRPL50</i>	54534	435415	CD34/Immature
T71834	Mitochondrial ribosomal protein L30	<i>MRPL30</i>	51263	85318	CD34/Immature
AA449654	Formin binding protein 1	<i>FNBP1</i>	23048	785907	CD34/Immature
R11047	Multiple cluster hits:344165 & 493309	<i>UBE2H & KIAA0020</i>	7328 & 9933	129227	CD34/Immature
R13596	Hypothetical gene LOC128439	<i>LOC128439</i>	128439	26736	CD34/Immature
H79778	Histone deacetylase 3	<i>HDAC3</i>	8841	239877	CD34/Immature
AA190583	Ubiquitin specific protease 13 (isopeptidase T 3)	<i>USP13</i>	8975	613126	CD34/Immature
AA496809	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1	<i>SMARCA1</i>	6594	897667	CD34/Immature
AA186790	Notchless gene homolog (Drosophila)	<i>FLJ10458</i>	54475	625399	CD34/Immature
H71218	Processing of precursor 7, ribonuclease P subunit (S. cerevisiae)	<i>POP7</i>	10248	214577	CD34/Immature
AA676471	Eukaryotic translation initiation factor 3, subunit 9 eta, 116kDa	<i>EIF3S9</i>	8662	882515	CD34/Immature
N28521	Eukaryotic translation initiation factor 5A	<i>EIF5A</i>	1984	263892	CD34/Immature
AA676316	Polymerase (RNA) I polypeptide A, 194kDa	<i>POLR1A</i>	25885	430436	CD34/Immature
BX117129	Ts translation elongation factor, mitochondrial	<i>TSEFM</i>	10102	324618	CD34/Immature
AA504814	Hypothetical protein HSPC111	<i>HSPC111</i>	51491	825695	CD34/Immature
W76508	DnaJ (Hsp40) homolog, subfamily C, member 11	<i>DNAJC11</i>	55735	345711	CD34/Immature
CR741476	Multiple cluster hits:335293 & 405987	<i>DKFZP564C186 & SAMD11</i>	26155 & 148398	773462	CD34/Immature
AI675611	Mitofusin 1	<i>MFN1</i>	55669	2314027	CD34/Immature
BX114583	FLJ44796 protein	<i>FLJ44796</i>	401209	194987	CD34/Immature
R92186	Misato	<i>FLJ10504</i>	55154	195817	CD34/Immature
AA447959	Multiple cluster hits:162397 & 516036	<i>FLJ10871 & TRIM54</i>	55756 & 57159	760282	CD34/Immature
AA433818	Nucleolin	<i>NCL</i>	4691	770704	CD34/Immature
AA448261	High-mobility group AT hook 1	<i>HMGA1</i>	3159	782811	CD34/Immature
AI334223	Transcribed locus	<i>0</i>	0	1932062	CD34/Immature
AI360334	Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	<i>CAD</i>	790	2019214	CD34/Immature
AA620477	Serine hydroxymethyltransferase 2 (mitochondrial)	<i>SHMT2</i>	6472	951117	CD34/Immature
AA291513	B cell CLL/lymphoma 7B	<i>BCL7B</i>	9275	724831	CD34/Immature
AA775831	Nuclear transport factor 2	<i>NUTF2</i>	10204	878506	CD34/Immature
AA205665	SET translocation (myeloid leukemia-associated)	<i>SET</i>	6418	646801	CD34/Immature
AA459148	Multiple cluster hits:91579 & 266331	<i>IMP4 & FREB</i>	92856 & 84824	814428	CD34/Immature
N45236	LOC441015	<i>KIAA0114</i>	57291	283173	CD34/Immature
AA489602	TNF receptor-associated protein 1	<i>TRAP1</i>	10131	897570	CD34/Immature
AA953249	Complement factor H	<i>CFH</i>	3075	1592021	CD34/Immature
AA486936	Tyrosyl-tRNA synthetase	<i>YARS</i>	8565	841070	CD34/Immature
AA932521	FK506 binding protein 4, 59kDa	<i>FKBP4</i>	2288	1570663	CD34/Immature
AA465723	Multiple cluster hits:17883 & 432562	<i>PPM1G & ITSN2</i>	5496 & 50618	814989	CD34/Immature
AA132083	Atherin	<i>LOC90378</i>	90378	504201	CD34/Immature
AA599175	Transcribed locus, strongly similar to XP_525693.1 similar to DNA-binding protein B [Pan troglodytes]	<i>0</i>	0	949932	CD34/Immature
AA099169	Phosphofructokinase, muscle	<i>PFKM</i>	5213	489626	CD34/Immature
N31952	Methylcrotonoyl-Coenzyme A carboxylase 2 (beta)	<i>MCCC2</i>	64087	259374	CD34/Immature

AA043133	Solute carrier family 16 (monocarboxylic acid transporters), member 1	<i>SLC16A1</i>	6566	486175	CD34/Immature
AA427807	Deleted in lymphocytic leukemia, 1	<i>DLEU1</i>	10301	773383	CD34/Immature
BX114173	Eukaryotic translation elongation factor 1 epsilon 1	<i>EEF1E1</i>	9521	306921	CD34/Immature
H71092	Calmodulin binding transcription activator 1	<i>CAMTA1</i>	23261	211800	CD34/Immature
AA779727	A disintegrin and metalloproteinase domain 19 (meltrin beta)	<i>ADAM19</i>	8728	1034494	
W86504	Pellino homolog 1 (Drosophila)	<i>PELL1</i>	57162	416676	
R07827	IBR domain containing 2	<i>IBRDC2</i>	255488	126934	
R72689	Myosin, heavy polypeptide 11, smooth muscle	<i>MYH11</i>	4629	156324	
AA857101	Homeo box B7	<i>HOXB7</i>	3217	1434905	
W96189	Src homology 3 domain-containing guanine nucleotide exchange factor	<i>SGEF</i>	26084	361659	
AI982528	Immunoglobulin superfamily, member 4	<i>IGSF4</i>	23705	2508140	
AA490501	UV radiation resistance associated gene	<i>UVRAG</i>	7405	823901	CD19
AA935689	KIAA0746 protein	<i>KIAA0746</i>	23231	1556991	CD19
AA283106	Prepronociceptin	<i>PNOC</i>	5368	713263	CD19
W02963	Fc receptor homolog expressed in B cells	<i>FREB</i>	84824	291871	CD19
BX118507	Oxysterol binding protein-like 10	<i>OSBPL10</i>	114884	151597	CD19
AA258944	V-rel reticuloendotheliosis viral oncogene homolog B, nuclear factor of kappa light polypeptide gene enhancer in B cells 3 (avian)	<i>RELB</i>	5971	687054	CD19
R38669	Rho-related BTB domain containing 2	<i>RHOBTB2</i>	23221	23333	CD19
N92712	Chromosome 11 open reading frame 24	<i>C11orf24</i>	53838	306446	CD19
AA418994	Integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor)	<i>ITGA3</i>	3675	755402	
H99203	Ubiquitin specific protease 7 (herpes virus-associated)	<i>USP7</i>	7874	261829	
AA465338	KIAA0922 protein	<i>KIAA0922</i>	23240	814062	
AA148641	Meis1, myeloid ecotropic viral integration site 1 homolog 2 (mouse)	<i>MEIS2</i>	4212	503083	
AI040379	Glycosylphosphatidylinositol specific phospholipase D1	<i>GPLD1</i>	2822	1656488	
AA909354	Synovial sarcoma, X breakpoint 2 interacting protein	<i>SSX2IP</i>	117178	1505784	
AA905925	PRKC, apoptosis, WT1, regulator	<i>PAWR</i>	5074	1505405	
AI732405	Hypothetical protein MGC24039	<i>MGC24039</i>	160518	511218	
AA169121	Metastasis associated 1 family, member 3	<i>MTA3</i>	57504	594556	
N80376	Hypothetical protein FLJ23451	<i>FLJ23451</i>	79823	292531	
AA486607	Nedd4 binding protein 3	<i>N4BP3</i>	23138	841176	Leukemic
W47100	Ubiquitin-conjugating enzyme E2G 1 (UBC7 homolog, C. elegans)	<i>UBE2G1</i>	7326	324653	Leukemic
AA699926	Syntrophin, alpha 1 (dystrophin-associated protein A1, 59kDa, acidic component)	<i>SNTA1</i>	6640	435330	Leukemic
AA704945	Chromosome 13 open reading frame 21	<i>C13orf21</i>	387923	461403	Leukemic
AA278473	Calcium binding protein 39-like	<i>CAB39L</i>	81617	703943	Leukemic
AA810225	G protein-coupled receptor 30	<i>GPR30</i>	2852	1367900	Leukemic
AI243521	PR domain containing 15	<i>PRDM15</i>	63977	1853490	Leukemic
T96924	Chromosome 8 open reading frame 13	<i>C8orf13</i>	83648	121136	Leukemic
W32303	RAB6A, member RAS oncogene family	<i>RAB6A</i>	5870	321470	Leukemic
H09757	Leucine zipper, putative tumor suppressor 1	<i>LZTS1</i>	11178	46561	Leukemic
AA029597	Bone morphogenetic protein 7 (osteogenic protein 1)	<i>BMP7</i>	655	366887	Leukemic
N66104	Kinesin family member 5C	<i>KIF5C</i>	3800	278430	Lymphoid/mature
T66833	PTPRF interacting protein, binding protein 2 (liprin beta 2)	<i>PPFIBP2</i>	8495	66336	Lymphoid/mature
BX090803	Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 23	<i>SLC25A23</i>	79085	2074766	Lymphoid/mature
BX107638	Homo sapiens, clone IMAGE:5259272, mRNA	<i>0</i>	0	824995	Lymphoid/mature
AA598652	Sialyltransferase 1 (beta-galactoside alpha-2,6-sialyltransferase)	<i>SIAT1</i>	6480	897906	Lymphoid/mature
AA431848	SON DNA binding protein	<i>SON</i>	6651	773618	Lymphoid/mature
AA677794	BTB and CNC homology 1, basic leucine zipper transcription factor 2	<i>BACH2</i>	60468	431734	Lymphoid/mature
AA894927	Asparagine synthetase	<i>ASNS</i>	440	1493527	Lymphoid/mature
AI968431	Hypothetical protein FLJ13910	<i>FLJ13910</i>	64795	2514601	Lymphoid/mature
H78244	Transmembrane 4 superfamily member 4	<i>TM4SF4</i>	7104	234559	Lymphoid/mature

BX117756	SET domain, bifurcated 1	<i>SETDB1</i>	9869	25755	Lymphoid/mature
W02632	PI-3-kinase-related kinase SMG-1	<i>SMG1</i>	23049	296166	
AA994297	Zinc finger and BTB domain containing 2	<i>ZBTB2</i>	57621	1631238	
T80931	NFS1 nitrogen fixation 1 (<i>S. cerevisiae</i>)	<i>NFS1</i>	9054	109307	
