

Table 21. The differentially expressed genes in *MLL* vs. B lineage ALL

Accession no.	Gene name	Gene symbol	Entrez gene	Reporter ID	Score*	P	Sign [†]
BX112951	Meis1, myeloid ecotropic viral integration site 1 homolog (mouse)	<i>MEIS1</i>	4211	307506	13.01914	0.0002	+
AA953229	Homeo box A10	<i>HOXA10</i>	3206	1592006	7.32839	0.0002	+
AA479883	Hypothetical protein FLJ21127	<i>FLJ21127</i>	79600	772880	4.298862	0.0002	+
N67262	Zinc finger protein 135 (clone pHZ-17)	<i>ZNF135</i>	7694	286378	4.223683	0.0002	-
AA047441	Protein phosphatase 1H (PP2C domain containing)	<i>PPM1H</i>	57460	488431	4.195039	0.0002	+
BX115990	Chromosome 9 open reading frame 52	<i>C9orf52</i>	158219	2110547	4.098576	0.0002	+
BX105581	Lymphocyte antigen 86	<i>LY86</i>	9450	2333826	3.400301	0.0002	+
AI984983	Phospholipase A2, group IVA (cytosolic, calcium-dependent)	<i>PLA2G4A</i>	5321	2494805	3.295743	0.0002	+
AI021905	Adducin 1 (alpha)	<i>ADD1</i>	118	1654651	3.293293	0.0002	+
R22219	Phosphate cytidyltransferase 2, ethanolamine	<i>PCYT2</i>	5833	130884	3.291428	0.0004	+
AA975680	SVAP1 protein	<i>IMAGE3451454</i>	116841	1588973	3.287576	0.0004	+
AA194765	Forkhead box O1A (rhabdomyosarcoma)	<i>FOXO1A</i>	2308	628955	3.284992	0.0002	-
R06246	Multiple cluster hits:30258 & 486548	<i>0 & MAP7</i>	0 & 9053	126218	3.252799	0.0002	+
AA147540	Serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 9	<i>SERPINB9</i>	5272	505385	3.214267	0.0002	-
AA486067	Transducin (beta)-like 1X-linked	<i>TBLIX</i>	6907	840766	3.205819	0.0002	-
AA453898	Sialyltransferase 4C (beta-galactoside alpha-2,3-sialyltransferase)	<i>SIAT4C</i>	6484	813751	3.137125	0.0002	+
AA128156	RunT related transcription factor 2	<i>RUNX2</i>	860	501989	3.097915	0.0006	+
AI927284	Lectin, galactoside-binding, soluble, 1 (galectin 1)	<i>LGALS1</i>	3956	2461050	3.039644	0.0002	+
AA453774	Regulator of G-protein signalling 16	<i>RGS16</i>	6004	813707	2.999767	0.0002	+
AA431426	Ribosomal protein L23a pseudogene 7	<i>RPL23AP7</i>	118433	782434	2.975902	0.0002	+
W45031	Mitochondria-associated protein involved in granulocyte-macrophage colony-stimulating factor signal transduction	<i>Magmas</i>	51025	322923	2.9567	0.0008	+
R12636	Hypothetical gene LOC401431	<i>LOC401431</i>	401431	26149	2.89011	0.0002	-
AA928660	Protease, serine, 12 (neurotrypsin, motopsin)	<i>PRSS12</i>	8492	1553054	2.838338	0.0004	+
AA449654	Formin binding protein 1	<i>FNBP1</i>	23048	785907	2.821136	0.0002	+
AI278206	RAB1A, member RAS oncogene family	<i>RAB1A</i>	5861	1878917	2.814022	0.0002	-
AA683557	Ral guanine nucleotide dissociation stimulator-like 1	<i>RGL1</i>	23179	505864	2.80546	0.0004	-
AA953973	Spastic paraplegia 20, spartin (Troyer syndrome)	<i>SPG20</i>	23111	1573305	2.796572	0.001	+
N98832	Spleen focus forming virus (SFFV) proviral integration oncogene sp1	<i>SPI1</i>	6688	278808	2.786428	0.0002	-
AA633658	Amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)	<i>APP</i>	351	856575	2.769163	0.0002	-
N71061	Chromosome 10 open reading frame 58	<i>C10orf58</i>	84293	294591	2.736423	0.0002	-
W52082	Mitochondrial ribosomal protein L33	<i>MRPL33</i>	9553	325520	2.698654	0.0002	+
AA459614	Tyrosylprotein sulfotransferase 2	<i>TPST2</i>	8459	810937	2.686035	0.0002	-
R77251	Microtubule-associated protein 7	<i>MAP7</i>	9053	144834	2.676695	0.0002	+
BX095299	Fragile histidine triad gene	<i>FHIT</i>	2272	125273	2.662129	0.0002	-
AA857015	Ephrin-A1	<i>EFNA1</i>	1942	1474684	2.646903	0.0002	-
AA782337	Ankyrin 2, neuronal	<i>ANK2</i>	287	857603	2.628807	0.0002	+
AA482594	Kelch-like 5 (Drosophila)	<i>KLHL5</i>	51088	746080	2.587484	0.0004	-
AA400292	Disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila)	<i>DAB2</i>	1601	742685	2.58302	0.0002	-
AA669136	Transcription factor 4	<i>TCF4</i>	6925	854581	2.575075	0.0002	-
N36927	CDNA FLJ33419 fis, clone BRACE2019877	<i>0</i>	0	273536	2.527296	0.0004	+
N46717	Syntaxin binding protein 6 (amisyn)	<i>STXBP6</i>	29091	277042	2.516744	0.0002	+
AA428394	HtrA serine peptidase 3	<i>HTRA3</i>	94031	773558	2.509196	0.0008	+
AA043163	ELK3, ETS-domain protein (SRF accessory protein 2)	<i>ELK3</i>	2004	486102	2.494976	0.0008	-
AW087156	Nuclear phosphoprotein similar to <i>S. cerevisiae</i> PWP1	<i>PWP1</i>	11137	2578263	2.470165	0.0002	+
AA158540	TBC1 domain family, member 14	<i>TBC1D14</i>	57533	592458	2.457798	0.001	+
T60664	AHNAK nucleoprotein (desmoyokin)	<i>AHNAK</i>	195	79216	2.422263	0.0006	+
AI268273	Mitogen-activated protein kinase kinase kinase 5	<i>MAP3K5</i>	4217	1880757	2.421493	0.0008	+

N30348	Fms-related tyrosine kinase 1 (vascular endothelial growth factor)/vascular permeability factor receptor	<i>FLT1</i>	2321	258101	2.397606	0.0006	-
A1440513	Villin 2 (ezrin)	<i>VIL2</i>	7430	2072783	2.352864	0.0008	+
W58161	Pinin, desmosome associated protein	<i>PNN</i>	5411	341051	2.349005	0.0002	-
AA634300	IGF-II mRNA-binding protein 2	<i>IMP-2</i>	10644	743774	2.346936	0.0002	+
N67762	Chromosome 9 open reading frame 21	<i>C9orf21</i>	195827	291403	2.345112	0.0002	+
AA630100	Hypothetical protein MGC17299	<i>MGC17299</i>	128218	854691	2.323185	0.0002	-
AA864840	Retinoic acid induced 14	<i>RAI14</i>	26064	1460073	2.309665	0.0008	-
R76277	Calmodulin 1 (phosphorylase kinase, delta)	<i>CALM1</i>	801	144801	2.295832	0.0008	-
AA668595	Tumor protein p53 inducible protein 3	<i>TP53I3</i>	9540	859359	2.290491	0.0002	+
BX098767	Seryl-tRNA synthetase 2	<i>SARS2</i>	54938	809467	2.281401	0.001	+
AA425588	Integrin, alpha E (antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide)	<i>ITGAE</i>	3682	773332	2.26545	0.0002	+
BX099263	Prominin 1	<i>PROM1</i>	8842	27544	2.246197	0.0004	+
H46554	Transcription factor 8 (represses interleukin 2 expression)	<i>TCF8</i>	6935	178463	2.24379	0.0002	-
N23340	Hypothetical protein LOC152485	<i>LOC152485</i>	152485	267186	2.230099	0.0004	-
R01824	Myofibrillogenesis regulator 1	<i>MR-1</i>	25953	124447	2.227693	0.0002	+
AA486275	Serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 1	<i>SERPINB1</i>	1992	842836	2.226654	0.0008	+
AA187045	Sialyltransferase 10 (alpha-2,3-sialyltransferase VI)	<i>SIAT10</i>	10402	624372	2.226331	0.0006	-
T58146	HLA complex P5	<i>HCP5</i>	10866	79254	2.225294	0.0004	-
N32639	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 8	<i>SLC7A8</i>	23428	267666	2.220183	0.0004	+
T47228	X 009 protein	<i>MDS009</i>	56986	75919	2.217918	0.001	+
BX112066	Hypothetical protein FLJ38984	<i>FLJ38984</i>	127703	770380	2.213171	0.0002	+
AA630534	Kruppel-like factor 11	<i>KLF11</i>	8462	854789	2.193718	0.0006	-
N57610	HECT domain and ankyrin repeat containing, E3 ubiquitin protein ligase 1	<i>HACE1</i>	57531	283430	2.180532	0.0002	-
AA134531	Hypothetical protein BC018415	<i>LOC130617</i>	130617	502558	2.171082	0.0002	+
AA886199	Chromosome 1 open reading frame 34	<i>C1orf34</i>	22996	1492468	2.157518	0.0008	+
AA293453	Sideroflexin 3	<i>SFXN3</i>	81855	726236	2.156278	0.001	+
W02342	Ceroid-lipofuscinosis, neuronal 5	<i>CLN5</i>	1203	292071	2.144411	0.001	+
AW057757	Palladin	<i>KIAA0992</i>	23022	2542582	2.113065	0.0004	+
AA228130	PC4 and SFRS1 interacting protein 1	<i>PSIP1</i>	11168	667598	2.112296	0.001	-
N31532	Potassium channel tetramerisation domain containing 15	<i>KCTD15</i>	79047	266019	2.092832	0.0004	+
AA999901	Guanine nucleotide binding protein (G protein), gamma 11	<i>GNG11</i>	2791	1636447	2.086228	0.001	-
AA412217	Anaphase promoting complex subunit 1	<i>ANAPC1</i>	64682	731433	2.085086	0.0002	+
AA464028	Hypothetical protein FLJ14525	<i>FLJ14525</i>	84886	810603	2.081352	0.0002	-
N94362	Solute carrier family 35, member E3	<i>SLC35E3</i>	55508	309486	2.060098	0.0006	-
AA629596	Nipsnap homolog 3A (C. elegans)	<i>NIPSNAP3A</i>	25934	884765	2.033848	0.0002	+
AA479995	Discs, large homolog 5 (Drosophila)	<i>DLG5</i>	9231	753969	2.000836	0.0006	-
AA464688	OCIA domain containing 2	<i>OCIAD2</i>	132299	810218	1.977171	0.0008	-
AA460890	Nedd4 family interacting protein 1	<i>NDFIP1</i>	80762	796739	1.93092	0.0008	-
A1374985	Growth arrest specific 2	<i>GAS2</i>	2620	2047854	1.862829	0.0008	-
N63635	Pim-1 oncogene	<i>PIM1</i>	5292	292726	1.850285	0.0002	-
AA626846	Hypothetical LOC389025	<i>0</i>	389025	745190	1.849095	0.0002	-
A1986457	Serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1	<i>SERPINF1</i>	5176	2562939	1.844415	0.0002	-
AA457731	SNARE protein Ykt6	<i>YKT6</i>	10652	810762	1.734551	0.0004	-
N21237	SAM and SH3 domain containing 1	<i>SASH1</i>	23328	264938	1.727895	0.0008	-
R83161	GRB2-associated binding protein 1	<i>GAB1</i>	2549	194399	1.719901	0.001	-

*Value from discriminatory analysis, with a high value indicating a high correlation with the classes.

†The plus (+) sign indicates relative up-regulation in *MLL*-positive ALLs, the minus (-) sign indicates up-regulation in B lineage.