

**Table 16. The top-100 differentially expressed genes in *IGH@/MYC* vs. B lineage ALL**

| Accession no. | Gene name  | Gene symbol     | Entrez gene | Reporter ID | Score*   | P      | Sign† |
|---------------|--|-----------------|-------------|-------------|----------|--------|-------|
| AA029597      | Bone morphogenetic protein 7 (osteogenic protein 1)                  | <i>BMP7</i>     | 655         | 366887      | 8.155594 | 0.0002 | +     |
| W96189        | Src homology 3 domain-containing guanine nucleotide exchange factor  | <i>SGEF</i>     | 26084       | 361659      | 8.141738 | 0.0002 | +     |
| BX112646      | Solute carrier family 22 (organic cation transporter), member 16     | <i>SLC22A16</i> | 85413       | 451511      | 7.337463 | 0.0002 | -     |
| AI768675      | Transcribed locus  | <i>0</i>        | 0           | 2381724     | 6.055717 | 0.0002 | -     |
| AI669313      | LAG1 longevity assurance homolog 6 ( <i>S. cerevisiae</i> )          | <i>LASS6</i>    | 253782      | 2312454     | 6.02544  | 0.0002 | -     |
| R16418        | Fraser syndrome 1  | <i>FRAS1</i>    | 80144       | 129320      | 5.965528 | 0.0002 | +     |
| BX115313      | V-ets erythroblastosis virus E26 oncogene like (avian)               | <i>ERG</i>      | 2078        | 123755      | 5.686709 | 0.0002 | -     |
| AA418994      | Integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) | <i>ITGA3</i>    | 3675        | 755402      | 5.620077 | 0.0002 | +     |
| N40075        | Spondyloepiphyseal dysplasia, late, pseudogene                       | <i>SEDLP</i>    | 10597       | 269788      | 5.306615 | 0.0002 | -     |
| AA909354      | Synovial sarcoma, X breakpoint 2 interacting protein                 | <i>SSX2IP</i>   | 117178      | 1505784     | 5.125268 | 0.0002 | +     |
| AI732405      | Hypothetical protein MGC24039  | <i>MGC24039</i> | 160518      | 511218      | 5.081947 | 0.0002 | +     |
| AI651009      | Mitogen-activated protein kinase 12                                  | <i>MAPK12</i>   | 6300        | 2304048     | 4.765435 | 0.0002 | +     |
| AA427807      | Deleted in lymphocytic leukemia, 1                                   | <i>DLEU1</i>    | 10301       | 773383      | 4.702511 | 0.0002 | +     |
| BX096490      | KIAA0913   | <i>KIAA0913</i> | 23053       | 771260      | 4.683925 | 0.0002 | -     |
| AA460171      | Transcribed locus  | <i>0</i>        | 0           | 795901      | 4.659499 | 0.0002 | +     |
| AI016027      | Unc-84 homolog B ( <i>C. elegans</i> )                               | <i>UNC84B</i>   | 25777       | 1636166     | 4.641706 | 0.0002 | -     |
| AA865573      | GRB2-associated binding protein 2                                    | <i>GAB2</i>     | 9846        | 1470151     | 4.564465 | 0.0002 | -     |
| H09757        | Leucine zipper, putative tumor suppressor 1                          | <i>LZTS1</i>    | 11178       | 46561       | 4.549632 | 0.0002 | +     |
| AA704945      | Chromosome 13 open reading frame 21                                  | <i>C13orf21</i> | 387923      | 461403      | 4.508463 | 0.0002 | +     |
| R17551        | Carbohydrate (chondroitin 4) sulfotransferase 11                     | <i>CHST11</i>   | 50515       | 32195       | 4.358373 | 0.0002 | -     |
| T64956        | Poly (ADP-ribose) polymerase family, member 14                       | <i>PARP14</i>   | 54625       | 66815       | 4.335518 | 0.0002 | -     |
| R98532        | Factor for adipocyte differentiation 158                             | <i>FAD158</i>   | 84230       | 201168      | 4.294626 | 0.0002 | -     |
| R94661        | Major histocompatibility complex, class I, E                         | <i>HLA-E</i>    | 3133        | 198453      | 4.290553 | 0.0002 | -     |
| AA931892      | Exosome component 7  | <i>EXOSC7</i>   | 23016       | 1570436     | 4.283446 | 0.0002 | +     |
| AA278473      | Calcium binding protein 39-like                                      | <i>CAB39L</i>   | 81617       | 703943      | 4.164403 | 0.0002 | +     |
| BX089627      | CDNA FLJ14942 fis, A-PLACE1011185                                    | <i>0</i>        | 0           | 811032      | 4.154423 | 0.0004 | +     |
| AA171463      | Sorting nexin 2  | <i>SNX2</i>     | 6643        | 610113      | 4.150821 | 0.0002 | -     |
| BX093830      | CDNA FLJ37485 fis, clone BRAWH2014379                                | <i>0</i>        | 0           | 786612      | 4.099756 | 0.0002 | -     |
| W76395        | Melanoma associated gene   | <i>D2S448</i>   | 7837        | 345601      | 4.09391  | 0.0002 | -     |
| AA863424      | Dipeptidase 1 (renal)  | <i>DPEP1</i>    | 1800        | 1456900     | 4.021588 | 0.0008 | -     |
| AI732773      | Hypothetical protein FLJ35429  | <i>FLJ35429</i> | 285830      | 810064      | 3.961453 | 0.0002 | -     |
| N50375        | Activated RNA polymerase II transcription cofactor 4                 | <i>PC4</i>      | 10923       | 280465      | 3.951944 | 0.0002 | -     |
| BX089501      | CD58 antigen, (lymphocyte function-associated antigen 3)             | <i>CD58</i>     | 965         | 490368      | 3.927639 | 0.0002 | -     |
| AI982528      | Immunoglobulin superfamily, member 4                                 | <i>IGSF4</i>    | 23705       | 2508140     | 3.920726 | 0.0002 | +     |
| W47106        | Putative small membrane protein NID67                                | <i>NID67</i>    | 85027       | 324674      | 3.898979 | 0.0002 | -     |
| AA953249      | Complement factor H  | <i>CFH</i>      | 3075        | 1592021     | 3.884445 | 0.0002 | +     |
| AI954306      | Guanylate cyclase 1, soluble, alpha 3                                | <i>GUCY1A3</i>  | 2982        | 2551468     | 3.883517 | 0.0002 | -     |
| AI399875      | G protein-coupled receptor kinase interactor 2                       | <i>GIT2</i>     | 9815        | 2113499     | 3.883208 | 0.0002 | -     |
| AA485214      | Nucleobindin 2   | <i>NUCB2</i>    | 4925        | 815794      | 3.863853 | 0.0002 | -     |
| H85704        | Frizzled homolog 3 ( <i>Drosophila</i> )                             | <i>FZD3</i>     | 7976        | 219961      | 3.862561 | 0.0002 | +     |
| H44953        | Caspase 4, apoptosis-related cysteine protease                       | <i>CASP4</i>    | 837         | 183194      | 3.844143 | 0.0002 | -     |
| AA205665      | SET translocation (myeloid leukemia-associated)                      | <i>SET</i>      | 6418        | 646801      | 3.755667 | 0.0002 | +     |
| BX115741      | Guanine nucleotide binding protein (G protein), gamma 10             | <i>GNG10</i>    | 2790        | 795738      | 3.747655 | 0.0002 | -     |
| AA975029      | PAI-1 mRNA-binding protein   | <i>PAI-RBP1</i> | 26135       | 1560991     | 3.74411  | 0.0002 | +     |
| AA676316      | Polymerase (RNA) I polypeptide A, 194kDa                             | <i>POLR1A</i>   | 25885       | 430436      | 3.732588 | 0.0004 | +     |
| W00574        | KIAA1447 protein   | <i>KIAA1447</i> | 57597       | 297908      | 3.717813 | 0.0002 | -     |

|          |   |                              |                |         |          |          |        |   |
|----------|---|------------------------------|----------------|---------|----------|----------|--------|---|
| AW050573 | Transient receptor potential cation channel, subfamily M, member 2                                | <i>TRPM2</i>                 | 7226           | 2558044 | 3.694532 | 0.0002   | -      |   |
| CR745555 | Multiple cluster hits:405692 & 506829   | <i>CGI-116 &amp; LASS6</i>   | 51019 & 253782 | 416049  | 3.678317 | 0.0002   | -      |   |
| T96924   | Chromosome 8 open reading frame 13  | <i>C8orf13</i>               |                | 83648   | 121136   | 3.667049 | 0.0002 | + |
| AA905925 | PRKC, apoptosis, WT1, regulator   | <i>PAWR</i>                  |                | 5074    | 1505405  | 3.659643 | 0.0002 | + |
| BX118507 | Oxysterol binding protein-like 10   | <i>OSBPL10</i>               |                | 114884  | 151597   | 3.619967 | 0.0002 | + |
| AA454770 | Rab interacting lysosomal protein   | <i>RILP</i>                  |                | 83547   | 809739   | 3.525456 | 0.0002 | - |
| N45236   | LOC441015   | <i>KIAA0114</i>              |                | 57291   | 283173   | 3.524954 | 0.0002 | + |
| AA991196 | Leukocyte-associated Ig-like receptor 1   | <i>LAIR1</i>                 |                | 3903    | 1606315  | 3.496931 | 0.0002 | - |
| AA447959 | Multiple cluster hits:162397 & 516036   | <i>FLJ10871 &amp; TRIM54</i> | 55756 & 57159  | 760282  | 3.495772 | 0.0004   | +      |   |
| AA620477 | Serine hydroxymethyltransferase 2 (mitochondrial)   | <i>SHMT2</i>                 |                | 6472    | 951117   | 3.471254 | 0.0002 | + |
| AA465723 | Multiple cluster hits:17883 & 432562  | <i>PPM1G &amp; ITSN2</i>     | 5496 & 50618   | 814989  | 3.45037  | 0.0002   | +      |   |
| AA456298 | Histone 2, H2be   | <i>HIST2H2BE</i>             |                | 8349    | 813149   | 3.4234   | 0.0002 | - |
| H63455   | UDP-glucuronate decarboxylase 1   | <i>UXS1</i>                  |                | 80146   | 208993   | 3.404694 | 0.0002 | - |
| AA486607 | Nedd4 binding protein 3   | <i>N4BP3</i>                 |                | 23138   | 841176   | 3.402487 | 0.0002 | + |
| AA707332 | LIM domain binding 2  | <i>LDB2</i>                  |                | 9079    | 451503   | 3.372424 | 0.0002 | - |
| BX098850 | Chromosome 20 open reading frame 100  | <i>C20orf100</i>             |                | 84969   | 41332    | 3.351953 | 0.0002 | - |
| AA983905 | WD repeat domain 4  | <i>WDR4</i>                  |                | 10785   | 1581541  | 3.350752 | 0.0004 | + |
| AA872402 | Eukaryotic translation initiation factor 4B   | <i>EIF4B</i>                 |                | 1975    | 1472753  | 3.341969 | 0.0002 | + |
| AA496809 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1 | <i>SMARCA1</i>               |                | 6594    | 897667   | 3.3166   | 0.0004 | + |
| R51593   | Transcribed locus, strongly similar to XP_496062.1 similar to golgin-67 isoform c [Homo sapiens]  | <i>0</i>                     | 0              | 38925   | 3.31213  | 0.0004   | -      |   |
| AA136882 | Activin A receptor, type I  | <i>ACVRI</i>                 |                | 90      | 491066   | 3.30145  | 0.0004 | - |
| W49714   | Multiple cluster hits:501345 & 549168   | <i>CTBP2 &amp; ZRANB1</i>    | 1488 & 54764   | 325102  | 3.296197 | 0.0002   | -      |   |
| AA677025 | Similar to annexin II receptor  | <i>0</i>                     | 389289         | 454564  | 3.295784 | 0.0002   | -      |   |
| N47444   | Upregulated in colorectal cancer gene 1   | <i>UCC1</i>                  |                | 54749   | 280699   | 3.275602 | 0.0004 | - |
| AA446864 | Hypothetical protein FLJ20152   | <i>FLJ20152</i>              |                | 54463   | 784212   | 3.265409 | 0.0002 | - |
| R70617   | Optineurin  | <i>OPTN</i>                  |                | 10133   | 142259   | 3.259823 | 0.0002 | - |
| AI886127 | Nuclear domain 10 protein   | <i>NDP52</i>                 |                | 10241   | 2445606  | 3.259624 | 0.0002 | - |
| AA043133 | Solute carrier family 16 (monocarboxylic acid transporters), member 1                             | <i>SLC16A1</i>               |                | 6566    | 486175   | 3.251215 | 0.0002 | + |
| R23318   | Suppressor of cytokine signaling 2  | <i>SOCS2</i>                 |                | 8835    | 131073   | 3.24737  | 0.0002 | - |
| T49854   | HCV F-transactivated protein 1  | <i>LOC401152</i>             |                | 401152  | 68667    | 3.232627 | 0.0002 | - |
| AA193671 | Centaurin, delta 1  | <i>CENTD1</i>                |                | 116984  | 666110   | 3.222522 | 0.0004 | - |
| AA169121 | Metastasis associated 1 family, member 3  | <i>MTA3</i>                  |                | 57504   | 594556   | 3.222092 | 0.0002 | + |
| AA447599 | Cytoplasmic linker associated protein 2   | <i>CLASP2</i>                |                | 23122   | 782700   | 3.22051  | 0.0002 | + |
| R32739   | Similar to cDNA sequence BC035954   | <i>0</i>                     | 163301         | 135238  | 3.215246 | 0.0004   | -      |   |
| N50750   | Solute carrier family 27 (fatty acid transporter), member 3                                       | <i>SLC27A3</i>               |                | 11000   | 280784   | 3.211301 | 0.0004 | - |
| AW025698 | Latent transforming growth factor beta binding protein 1  | <i>LTBP1</i>                 |                | 4052    | 2516260  | 3.198488 | 0.0002 | + |
| BX090803 | Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 23                    | <i>SLC25A23</i>              |                | 79085   | 2074766  | 3.194655 | 0.0002 | + |
| T55639   | Iron-sulfur cluster assembly enzyme   | <i>ISCU</i>                  |                | 23479   | 73531    | 3.189305 | 0.0002 | - |
| AA465459 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 21   | <i>DDX21</i>                 |                | 9188    | 814117   | 3.18348  | 0.0002 | + |
| AA705221 | Hypothetical protein FLJ10587   | <i>FLJ10587</i>              |                | 55181   | 461440   | 3.18072  | 0.0002 | - |
| AA598652 | Sialyltransferase 1 (beta-galactoside alpha-2,6-sialyltransferase)                                | <i>SIAT1</i>                 |                | 6480    | 897906   | 3.180708 | 0.0002 | + |
| AA810225 | G protein-coupled receptor 30   | <i>GPR30</i>                 |                | 2852    | 1367900  | 3.18052  | 0.0006 | + |
| AA699926 | Syntrophin, alpha 1 (dystrophin-associated protein A1, 59kDa, acidic component)                   | <i>SNTA1</i>                 |                | 6640    | 435330   | 3.168472 | 0.0004 | + |
| N92712   | Chromosome 11 open reading frame 24   | <i>C11orf24</i>              |                | 53838   | 306446   | 3.164785 | 0.0002 | + |
| N79823   | Lipocalin 2 (oncogene 24p3)   | <i>LCN2</i>                  |                | 3934    | 302127   | 3.162697 | 0.0002 | - |
| AA877255 | Interferon regulatory factor 7  | <i>IRF7</i>                  |                | 3665    | 1159963  | 3.157033 | 0.0002 | - |
| R22340   | Chr2 synaptotagmin  | <i>CHR2SYT</i>               |                | 57488   | 130916   | 3.13947  | 0.0002 | - |
| AA459148 | Multiple cluster hits:91579 & 266331  | <i>IMP4 &amp; FREB</i>       | 92856 & 84824  | 814428  | 3.125093 | 0.0002   | +      |   |
| AA932521 | FK506 binding protein 4, 59kDa  | <i>FKBP4</i>                 |                | 2288    | 1570663  | 3.122608 | 0.0002 | + |

|          |   |                             |             |        |          |        |   |
|----------|---|-----------------------------|-------------|--------|----------|--------|---|
| BX117129 | Ts translation elongation factor, mitochondrial   | <i>TSFM</i>                 | 10102       | 324618 | 3.106564 | 0.0004 | + |
| W03611   | Acetyl-Coenzyme A synthetase 2 (AMP forming)-like | <i>ACAS2L</i>               | 84532       | 291426 | 3.098545 | 0.0002 | - |
| R11047   | Multiple cluster hits:344165 & 493309             | <i>UBE2H &amp; KIAA0020</i> | 7328 & 9933 | 129227 | 3.097845 | 0.0002 | + |
| AA700222 | Vinexin beta (SH3-containing adaptor molecule-1)  | <i>SCAM-1</i>               | 10174       | 453183 | 3.093639 | 0.0002 | - |
| BX110270 | Chromosome 13 open reading frame 12               | <i>C13orf12</i>             | 51371       | 23121  | 3.080331 | 0.0002 | - |

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

†The plus (+) sign indicates relative up-regulation in *IGH@/MYC*-positive ALLs, the minus (-) sign indicates up-regulation in the remaining ALLs.