Appendix

Table SI. Gene expression at least 4-fold higher in adult T-cell leukemia–lymphoma specimens than in Jurkat cells.

Arrayed feature	Expression relative to Jurkat cell line*
330370 || HBB || hemoglobin, beta || Hs.155376	7.67
116933 || LYZ || lysozyme (renal amyloidosis) || Hs.234734	6.99
120321 || MGC17330 || hypothetical protein MGC17330 || Hs.26670	6.54
311493 || CD28 || CD28 antigen (Tp44) || Hs.1987	6.41
114151 || HLA-DRB5 || major histocompatibility complex, class II, DR beta 5 || Hs.352392	6.09
119990 || S100A11 || S100 calcium binding protein A11 (calgizzarin) || Hs.417004	5.97
101316 || HLA-DRB3 || major histocompatibility complex, class II, DR beta 3 || Hs.308026	5.80
111765 || IGKC || **immunoglobulin kappa constant || Hs.406565	5.75
99469 || S100A8 || S100 calcium binding protein A8 (calgranulin A) || Hs.416073	5.70
331082 || LGALS1 || lectin, galactoside-binding, soluble, 1 (galectin 1) || Hs.382367	5.64
108180 || ISG20 || interferon stimulated gene 20 kDa || Hs.183487	5.58
107910 || HLA-DRB1 || major histocompatibility complex, class II, DR beta 1 || Hs.375570	5.05
308487 || ID2 || inhibitor of DNA binding 2, dominant negative helix-loop-helix protein || Hs.180919	4.94
108639 || CTLA4 || cytotoxic T-lymphocyte-associated protein 4 || Hs.247824	4.89
102363 || TYROBP || TYRO protein tyrosine kinase binding protein || Hs.9963	4.83
112406 || HBA2 || **hemoglobin, alpha 2 || Hs.347939	4.82
161366 || SERPINB1 || serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 1 || Hs.183583	4.74
106670 || HLA-DQB1 || major histocompatibility complex, class II, DQ beta 1 || Hs.73931	4.71
99062 || OAS2 || 2′- 5′-oligoadenylate synthetase 2, 69/71 kDa || Hs.432659	4.63
119872 || P2RY5 || purinergic receptor P2Y, G-protein coupled, 5 || Hs.189999	4.62
110632 || || *Homo sapiens*, Similar to nuclear localization signals binding protein 1, clone MGC:21810 IMAGE:4183576, mRNA, complete cds || Hs.244624	4.58
107000 || CSPG2 || chondroitin sulfate proteoglycan 2 (versican) || Hs.81800	4.54
100967 || KCNN4 || potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4 || Hs.10082	4.46
314421 || HLA-C || major histocompatibility complex, class I, C || Hs.277477	4.42
102967 || CSPG2 || chondroitin sulfate proteoglycan 2 (versican) || Hs.81800	4.37
102734 || MGC27165 || hypothetical protein MGC27165 || Hs.366	4.37
108645 || COPEB || core promoter element binding protein || Hs.285313	4.34
110694 || MGC27165 || hypothetical protein MGC27165 || Hs.366	4.32
318245 || ID2 || inhibitor of DNA binding 2, dominant negative helix-loop-helix protein || Hs.180919	4.29
161545 || EDG1 || endothelial differentiation, sphingolipid G-protein-coupled receptor, 1 || Hs.154210	4.28
318902 || ChGn || chondroitin beta1,4N-acetylgalactosaminyltransferase || Hs.11260	4.26
108901 || IGKC || immunoglobulin kappa constant || Hs.406565	4.24
222669 || JAK3 || Janus kinase 3 (a protein tyrosine kinase, leukocyte) || Hs.99877	4.23
102486 || C14orf47 || chromosome 14 open reading frame 47 || Hs.57787	4.23
226481 || TOSO || regulator of Fas-induced apoptosis || Hs.58831	4.21
161106 || MGC27165 || hypothetical protein MGC27165 || Hs.366	4.16
115147 || SOCS3 || suppressor of cytokine signaling 3 || Hs.345728	4.15
115200 || LYN || v-yes-1 Yamaguchi sarcoma viral related oncogene homolog || Hs.80887	4.04
110533 || RAB31 || RAB31, member RAS oncogene family || Hs.223025	4.01
113390 || || **Homo sapiens cDNA FLJ37940 fis, clone CTONG2007779. || Hs.95872	4.00
116761 || RARRES3 || retinoic acid receptor responder (tazarotene induced) 3 || Hs.17466	3.98
161053 || TNFRSF7 || tumor necrosis factor receptor superfamily, member 7 || Hs.355307	3.97
115297 || FCER1G || Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide || Hs.433300	3.96
108175 || ARHGEF5 || Rho guanine nucleotide exchange factor (GEF) 5 || Hs.334	3.96
223997 || APOL3 || apolipoprotein L, 3 || Hs.241535	3.95
331305 || IGHM || immunoglobulin heavy constant mu || Hs.153261	3.93
100816 || BTG1 || B-cell translocation gene 1, anti-proliferative || Hs.77054	3.85
307195 || LTB || lymphotoxin beta (TNF superfamily, member 3) || Hs.890	3.82
309992 || || ||	3.80
239268 || RUNX3 || runt-related transcription factor 3 || Hs.170019	3.79
317969 || || ESTs || Hs.296276	3.79
220964 || GNG11 || guanine nucleotide binding protein (G protein), gamma 11 || Hs.83381	3.71
99380 || CRIP1 || cysteine-rich protein 1 (intestinal) || Hs.423190	3.71

(*continued*)

Table SI. (*Continued*).

Arrayed feature	Expression relative to Jurkat cell line*
113479 || TNFSF7 || tumor necrosis factor (ligand) superfamily, member 7 || Hs.99899	3.66
309190 || SAT || spermidine/spermine N1-acetyltransferase || Hs.28491	3.65
101875 || || ESTs, Weakly similar to S21348 probable pol polyprotein-related protein 4 - rat [*R. norvegicus*] || Hs.432827	3.64
307507 || MALT1 || mucosa associated lymphoid tissue lymphoma translocation gene 1 || Hs.180566	3.64
114205 || || *Homo sapiens*, clone IMAGE:3881549, mRNA || Hs.346735	3.62
312080 || LLT1 || lectin-like NK cell receptor || Hs.136748	3.60
224392 || DAF || decay accelerating factor for complement (CD55, Cromer blood group system) || Hs.1369	3.57
102912 || || ESTs || Hs.97872	3.54
118393 || IL10RA || interleukin 10 receptor, alpha || Hs.327	3.54
104323 || SLC2A14, || **solute carrier family 2 (facilitated glucose transporter), member 14 || Hs.401274	3.50
103931 || || ESTs || Hs.15200	3.50
110556 || MYO1E || myosin IE || Hs.82251	3.48
114548 || BASP1 || brain abundant, membrane attached signal protein 1 || Hs.79516	3.45
226185 || || Homo sapiens, clone IMAGE:4766144, mRNA || Hs.72080	3.41
316875 || || ESTs || Hs.444602	3.41
112735 || JUN || v-jun sarcoma virus 17 oncogene homolog (avian) || Hs.78465	3.40
110605 || B2M || beta-2-microglobulin || Hs.48516	3.39
104520 || IGJ || immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptides || Hs.76325	3.35
330976 || || Homo sapiens, clone IMAGE:5533204, mRNA || Hs.235936	3.35
107005 || HLA-DQB1 || major histocompatibility complex, class II, DQ beta 1 || Hs.73931	3.35
110541 || || ||	3.34
117954 || GNLY || granulysin || Hs.105806	3.34
307925 || || ESTs, Weakly similar to PRO0478 protein [*Homo sapiens*] [*H. sapiens*] || Hs.175437	3.32
330383 || KLRC2 || killer cell lectin-like receptor subfamily C, member 2 || Hs.177605	3.32
184461 || ANK1 || ankyrin 1, erythrocytic || Hs.183805	3.30
191208 || || ||	3.29
309960 || KIAA0053 || KIAA0053 gene product || Hs.1528	3.29
221560 || UNC84B || unc-84 homolog A (*C. elegans*) || Hs.406612	3.26
106809 || || *Homo sapiens* cDNA: FLJ21930 fis, clone HEP04301, highly similar to HSU90916 Human clone 23815 mRNA sequence. || Hs.82845	3.24
331223 || CST7 || cystatin F (leukocystatin) || Hs.143212	3.24
107517 || CYLD || cylindromatosis (turban tumor syndrome) || Hs.18827	3.24
101256 || PSCDBP || pleckstrin homology, Sec7 and coiled/coil domains, binding protein || Hs.270	3.24
100368 || GBP1 || guanylate binding protein 1, interferon-inducible, 67 kDa || Hs.62661	3.24
106240 || TRIM22 || tripartite motif-containing 22 || Hs.318501	3.23
110188 || || ESTs, Highly similar to Y379_HUMAN Hypothetical protein KIAA0379 [*H. sapiens*] || Hs.40173	3.22
312563 || || *Homo sapiens*, Similar to olfactory receptor, family 2, subfamily A, member 4, clone IMAGE:4424116, mRNA || Hs.133517	3.21
309527 || CDA || cytidine deaminase || Hs.72924	3.21
226697 || || *Homo sapiens* mRNA; cDNA DKFZp586A0618 (from clone DKFZp586A0618) || Hs.349755	3.19
317666 || DDX17 || DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 17, 72kDa || Hs.349121	3.16
98611 || ZNF187 || zinc finger protein 187 || Hs.237786	3.15
115150 || SAT || spermidine/spermine N1-acetyltransferase || Hs.28491	3.14
223574 || IGSF4 || immunoglobulin superfamily, member 4 || Hs.70337	3.12
112895 || OAS2 || 2′- 5′-oligoadenylate synthetase 2, 69/71 kDa || Hs.432659	3.11
99827 || GJB1 || gap junction protein, beta 1, 32kDa (connexin 32, Charcot-Marie-Tooth neuropathy, X-linked) || Hs.333303	3.08
119885 || IGKC || **immunoglobulin kappa constant || Hs.406565	3.08
102629 || MIR || myosin regulatory light chain interacting protein || Hs.20072	3.07
319569 || ADAM19 || a disintegrin and metalloproteinase domain 19 (meltrin beta) || Hs.278679	3.07
178262 || JUNB || jun B proto-oncogene || Hs.400124	3.06
100666 || C1S || complement component 1, s subcomponent || Hs.434029	3.06
307412 || PTPRM || protein tyrosine phosphatase, receptor type, M || Hs.154151	3.05

(*continued*)

Table SI. (*Continued*).

Arrayed feature	Expression relative to Jurkat cell line*
112014 || IL2RB || interleukin 2 receptor, beta || Hs.75596	3.04
105812 || IRF7 || interferon regulatory factor 7 || Hs.166120	3.04
330877 || OAS2 || 2′- 5′-oligoadenylate synthetase 2, 69/71kDa || Hs.432659	3.01
113615 || ZNF24 || zinc finger protein 24 (KOX 17) || Hs.183593	3.00
316377 || GBP4 || guanylate binding protein 4 || Hs.240849	2.97
312148 || OAS3 || 2′- 5′-oligoadenylate synthetase 3, 100 kDa || Hs.56009	2.96
104934 || SERPINB1 || serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 1 || Hs.183583	2.93
310861 || || ESTs || Hs.169054	2.92
104093 || LSP1 || lymphocyte-specific protein 1 || Hs.56729	2.90
178264 || IFITM3 || interferon induced transmembrane protein 3 (1-8U) || Hs.433414	2.89
330485 || PSTPIP1 || proline-serine-threonine phosphatase interacting protein 1 || Hs.129758	2.87
224226 || LOC91663 || hypothetical protein BC013995 || Hs.380906	2.85
115703 || IRF7 || interferon regulatory factor 7 || Hs.166120	2.85
119893 || SP100 || nuclear antigen Sp100 || Hs.77617	2.72
223329 || || ESTs || Hs.431083	2.70
111414 || || ESTs || Hs.119563	2.68
315157 || || ESTs, Moderately similar to hypothetical protein MGC4027 [*Homo sapiens*] [*H. sapiens*] || Hs.126232	2.67
101364 || FGFR1 || fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) || Hs.748	2.63
112250 || TOB1 || transducer of ERBB2, 1 || Hs.178137	2.46
112885 || || ||	2.36

*Values shown are based on log-2 scale.

Table SII. Gene expression at least 4-fold lower in adult T-cell leukemia–lymphoma specimens than in Jurkat cells.

Arrayed feature	Expression relative to Jurkat cell line*
330504 || TRGV9 || T cell receptor gamma variable 9 || Hs.112259	−4.68
107272 || || *Homo sapiens*, clone IMAGE:4690669, mRNA || Hs.49265	−4.69
111956 || NUCB2 || nucleobindin 2 || Hs.3164	−4.72
105129 || TMEPAI || transmembrane, prostate androgen induced RNA || Hs.83883	−4.79
109425 || TRGV9 || T cell receptor gamma variable 9 || Hs.112259	−4.84
309831 || D2S448 || Melanoma associated gene || Hs.118893	−5.24
105870 || ALDH1A2 || aldehyde dehydrogenase 1 family, member A2 || Hs.95197	−5.83
308729 || TTK || TTK protein kinase || Hs.169840	−3.40
319981 || LOC93081 || hypothetical protein BC015148 || Hs.13413	−3.45
331359 || ESPL1 || extra spindle poles like 1 (*S. cerevisiae*) || Hs.153479	−3.50
100448 || || ***Homo sapiens*, clone IMAGE:4655360, mRNA || Hs.325015	−3.50
330906 || KIF4A || kinesin family member 4A || Hs.279766	−3.52
117645 || NGFRAP1 || nerve growth factor receptor (TNFRSF16) associated protein 1 || Hs.381039	−3.53
331160 || KIAA0992 || palladin || Hs.194431	−3.53
308076 || SLIT1 || slit homolog 1 (*Drosophila*) || Hs.133466	−3.58
119100 || CCNA2 || cyclin A2 || Hs.85137	−3.70
248886 || || ||	−3.75
309620 || CD1B || CD1B antigen, b polypeptide || Hs.1310	−4.00
311271 || GSTP1 || glutathione S-transferase pi || Hs.226795	−4.00
220192 || JAM3 || junctional adhesion molecule 3 || Hs.334703	−4.31
226414 || ASRGL1 || asparaginase like 1 || Hs.7331	−4.37
98358 || NKX3-1 || NK3 transcription factor related, locus 1 (*Drosophila*) || Hs.55999	−4.59
114866 || FLJ20186 || hypothetical protein FLJ20186 || Hs.62771	−3.21
331303 || CDT1 || DNA replication factor || Hs.122908	−3.22
309851 || ASRGL1 || asparaginase like 1 || Hs.7331	−3.26

(*continued*)

Table SII. (*Continued*).

Arrayed feature	Expression relative to Jurkat cell line*
104748 || PELI2 || pellino homolog 2 (*Drosophila*) || Hs.44038	−3.29
117274 || NRLN1 || likely ortholog of mouse neuralin 1 || Hs.82223	−3.32
226061 || PCOLCE2 || procollagen C-endopeptidase enhancer 2 || Hs.8944	−3.34
226975 || LOC81023 || hypothetical protein AF301222 || Hs.335951	−3.36
223918 || FLJ25157 || hypothetical protein FLJ25157 || Hs.108323	−3.36
116625 || || ||	−3.17
101527 || || *Homo sapiens* clone IMAGE:120162 mRNA sequence || Hs.406351	−3.17
107468 || STEAP || six transmembrane epithelial antigen of the prostate || Hs.61635	−2.96
311092 || MGC4248 || hypothetical protein MGC4248 || Hs.334437	−3.01
106982 || RAMP || RA-regulated nuclear matrix-associated protein || Hs.126774	−3.02
103951 || || ESTs || Hs.421701	−3.03
313420 || BRI3BP || BRI3 binding protein || Hs.131886	−3.08
317206 || RAGD || Rag D protein || Hs.238679	−2.90
223114 || RFC3 || replication factor C (activator 1) 3, 38kDa || Hs.115474	−2.87
184450 || SCD || stearoyl-CoA desaturase (delta-9-desaturase) || Hs.119597	−2.82
111873 || DLG7 || discs, large homolog 7 (*Drosophila*) || Hs.77695	−2.68
109247 || TRGV9 || **T cell receptor gamma variable 9 || Hs.112259	−2.68
223334 || CCNB2 || cyclin B2 || Hs.194698	−2.70
114167 || KIF9 || kinesin family member 9 || Hs.105187	−2.73
100912 || || Human full-length cDNA 5-PRIME end of clone CS0DK007YB08 of HeLa cells of Homo sapiens (human) || Hs.406349	−2.76
113026 || || ESTs || Hs.404723	−2.77
117992 || KCNH2 || potassium voltage-gated channel, subfamily H (eag-related), member 2 || Hs.188021	−2.61
225987 || SLC7A11 || solute carrier family 7, (cationic amino acid transporter, y+ system) member 11 || Hs.6682	−2.40
185871 || LOC148418 || hypothetical protein LOC148418 || Hs.105069	−2.38
104835 || MYO1B || myosin IB || Hs.121576	−2.35

*Values shown are based on log-2 scale.