Table 24. Gene order according to the hierarchical clustering of the top-200 genes of *TCF3/PBX1* and the normal bone marrows and purified hematoietic cells

Accession	Gene name	Gene symbol	Entrez gene	Reporter ID	Signature
AA428001	Activated Cdc42-associated kinase 1	*ACK1*	10188	773478	
AA485865	Interleukin 7 receptor	*IL7R*	3575	840460	
BX096523	Uronyl-2-sulfotransferase	*UST*	10090	505335	
AA703219	Dedicator of cytokinesis 10	*DOCK10*	55619	435992	
AI369885	Ubiquitin-conjugating enzyme E2, J2 (UBC6 homolog, yeast)	*UBE2J2*	118424	2017705	
AW009108	Interferon stimulated gene 20kDa	*ISG20*	3669	2503967	
R93279	Multiple cluster hits:415117 & 549825	*SIAT9 & 0*	8869 & 0	275798	
AA429248	HGFL gene	*MGC17330*	113791	769796	
AA434587	Multiple cluster hits:476365 & 502004	*SCP2 & RRAS2*	6342 & 22800	773674	
BX105103	Leucine rich repeat containing 28	*LRRC28*	123355	198694	
AA165567	Mitogen-activated protein kinase kinase kinase 1	*MAP3K1*	4214	593306	
AA009593	Membrane protein, palmitoylated 7 (MAGUK p55 subfamily member 7)	*MPP7*	143098	365517	
BX103840	Snf2-related CBP activator protein	*SRCAP*	10847	429446	
AA282272	Acyl-Coenzyme A dehydrogenase family, member 8	*ACAD8*	27034	712950	
AI651167	Similar to tripartite motif-containing 16; estrogen-responsive B box protein	*0*	147166	2298710	
R19233	Pleckstrin homology domain containing, family A member 2	*PLEKHA7*	144100	33028	
AA152294	Presenilin 2 (Alzheimer disease 4)	*PSEN2*	5664	491232	
AA489331	Adenosine deaminase, RNA-specific, B1 (RED1 homolog rat)	*ADARB1*	104	842939	
AA458653	Tribbles homolog 2 (Drosophila)	*TRIB2*	28951	813426	
AA460810	RUN and TBC1 domain containing 3	*RUTBC3*	27352	796083	Leukemic
BX105523	HECT, C2 and WW domain containing E3 ubiquitin protein ligase 1	*NEDL1*	23072	180885	Leukemic
N35393	IQ motif containing E	*IQCE*	23288	272100	Leukemic
AA706935	Exostoses (multiple)-like 3	*EXTL3*	2137	451871	Leukemic
AI979331	Core-binding factor, beta subunit	*CBFB*	865	2515917	Leukemic
BX099314	Chemokine-like factor super family 7	*CKLFSF7*	112616	810002	Leukemic
R88680	Hypothetical protein MGC10485	*MGC10485*	112936	166530	Leukemic
N50428	Hypothetical protein FLJ30046	*FLJ30046*	122060	280640	Leukemic
AA293700	FLJ44216 protein	*FLJ44216*	375484	725618	Leukemic
H17927	Thioredoxin-like 2	*TXNL2*	10539	50743	Leukemic
AA478659	Nidogen 2 (osteonidogen)	*NID2*	22795	754093	Leukemic
AA946776	Fibroblast growth factor 9 (glia-activating factor)	*FGF9*	2254	1589786	Leukemic
AI698719	Myeloid/lymphoid or mixed-lineage leukemia 2	*MLL2*	8085	2302544	Leukemic
AA394127	Nuclear factor of activated T cells, cytoplasmic, calcineurin-dependent 4	*NFATC4*	4776	725649	Leukemic
AA418036	GLI-Kruppel family member GLI3 (Greig cephalopolysyndactyly syndrome)	*GLI3*	2737	767495	Leukemic
H22559	Formin homology 2 domain containing 3	*FHOD3*	80206	51807	Leukemic
AA425618	Immunoglobulin superfamily, member 3	*IGSF3*	3321	773335	Leukemic
BX116075	BUB3 budding uninhibited by benzimidazoles 3 homolog (yeast)	*BUB3*	9184	191904	Leukemic
AA485439	CGI-146 protein	*PNAS-4*	51029	811058	Leukemic
AA718910	MAD1 mitotic arrest deficienT like 1 (yeast)	*MAD1L1*	8379	1292432	Leukemic
R16503	Multiple cluster hits:106510 & 144669	*LOC116236 & 0*	116236 & 0	128668	Leukemic
H08423	SET and MYND domain containing 2	*SMYD2*	56950	45623	Leukemic
AA418095	Multiple cluster hits:508021 & 516808	*RCBTB1 & PDE6D*	55213 & 5147	767422	Leukemic
AI360738	KIAA1036	*KIAA1036*	22846	2011138	Leukemic
AA044579	Kynurenine 3-monooxygenase (kynurenine 3-hydroxylase)	*KMO*	8564	486710	Leukemic
AA150060	Multiple cluster hits:409081 & 534399	*KMO & OPN3*	8564 & 23596	504461	Leukemic
AA664237	Synaptopodin	*SYNPO*	11346	855610	Leukemic
AA424629	Latent transforming growth factor beta binding protein 2	*LTBP2*	4053	767202	Leukemic

AA465338	KIAA0922 protein	*KIAA0922*	23240	814062	
BX107484	Hypothetical protein LOC284749	*LOC284749*	284749	294381	CD19
W02963	Fc receptor homolog expressed in B cells	*FREB*	84824	291871	CD19
AA464602	Sterile alpha motif domain containing 4	*SAMD4*	23034	812969	CD19
BX111769	Calcium/calmodulin-dependent protein kinase (CaM kinase) II delta	*CAMK2D*	817	713271	CD19
AA406353	Programmed cell death 6	*PDCD6*	10016	753193	CD19
AA825491	Interferon regulatory factor 4	*IRF4*	3662	1358229	CD19
N52267	Adaptor-related protein complex 2, beta 1 subunit	*AP2B1*	163	245853	CD71/GPA
T68430	Hypothetical protein FLJ10853	*FLJ10853*	55246	83342	CD71/GPA
R26176	Signal transducer and activator of transcription 5B	*STAT5B*	6777	132857	CD71/GPA
AA918646	KIAA0830 protein	*KIAA0830*	23052	1534700	CD71/GPA
AA460115	Ornithine decarboxylase 1	*ODC1*	4953	796646	CD71/GPA
AI015679	Phosphoserine aminotransferase 1	*PSAT1*	29968	1636108	Leukemic
T64216	Nucleoredoxin	*NXN*	64359	80226	Leukemic
AA866113	Amyloid beta (A4) precursor protein-binding, family B, member 2 (Fe65-like)	*APBB2*	323	1470333	Leukemic
AA699926	Syntrophin, alpha 1 (dystrophin-associated protein A1, 59kDa, acidic component)	*SNTA1*	6640	435330	Leukemic
AA857195	Tumor suppressing subtransferable candidate 1	*TSSC1*	7260	1435003	Leukemic
AI364374	Serine threonine kinase 39 (STE20/SPS1 homolog, yeast)	*STK39*	27347	2018084	Leukemic
AA663910	Golgi autoantigen, golgin subfamily a, 3	*GOLGA3*	2802	855684	Leukemic
AA887320	SH3 multiple domains 1	*SH3MD1*	9644	1500815	Leukemic
AA496984	Angiomotin	*AMOT*	154796	823647	Leukemic
N42729	Chromosome 14 open reading frame 37	*C14orf37*	145407	270921	Leukemic
AA401304	Pre-B cell leukemia transcription factor 1	*PBX1*	5087	741880	CD71/GPA
AA430546	KIAA0056 protein	*KIAA0056*	23310	770066	Leukemic
AA701242	Cordon-bleu homolog (mouse)	*COBL*	23242	434863	Leukemic
BX118816	Plexin B1	*PLXNB1*	5364	755952	Leukemic
BX106842	Androgen receptor (dihydrotestosterone receptor; testicular feminization; spinal and bulbar muscular atrophy; Kennedy disease)	*AR*	367	2250839	Leukemic
AI343711	Aldehyde oxidase 1	*AOX1*	316	1917741	Leukemic
AA452824	Sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D	*SEMA6D*	80031	788558	Leukemic
AA025434	Family with sequence similarity 3, member D	*FAM3D*	131177	365707	Leukemic
AA436591	C-mer proto-oncogene tyrosine kinase	*MERTK*	10461	753069	Leukemic
AA629903	Hypothetical protein LOC143458	*LOC143458*	143458	884662	Leukemic
AA464605	Ankyrin repeat domain 15	*ANKRD15*	23189	812975	Leukemic
AA701545	Ribonuclease, RNase A family, k6	*RNASE6*	6039	435858	
AA150254	Placenta-specific 8	*PLAC8*	51316	491644	
AA133536	Hypothetical protein LOC147111	*LOC147111*	147111	490718	
AA431967	LATS, large tumor suppressor, homolog 2 (Drosophila)	*LATS2*	26524	782193	
AA426306	Guanine nucleotide binding protein (G protein), q polypeptide	*GNAQ*	2776	769022	
AA457182	KIAA1068 protein	*KIAA1068*	23386	838367	
AI681896	Glucuronidase, beta	*GUSB*	2990	2273001	
BX101090	Bone morphogenetic protein 2	*BMP2*	650	359610	
R23083	Moesin	*MSN*	4478	131362	
N53376	Phosphoinositide-3-kinase, regulatory subunit 5, p101	*PIK3R5*	23533	284004	
AA425513	Solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1	*SLC9A3R1*	9368	773286	
CR744995	Cytochrome B 245, beta polypeptide (chronic granulomatous disease)	*CYBB*	1536	1942669	
AA598631	Spermidine/spermine N1-acetyltransferase	*SAT*	6303	897864	
AA454591	Multiple cluster hits:33333 & 388613	*0 & NEO1*	388134 & 4756	811562	
AA504303	Multiple cluster hits:435933 & 495960	*PHF10 & ATP6AP2*	55274 & 10159	825076	
W04283	Multiple cluster hits:132340 & 389724	*C6orf85 & IFI44L*	63027 & 10964	295939	
AA504431	Phosphatidylinositol 3,4,5-trisphosphate-dependent RAC exchanger 1	*PREX1*	57580	825270	

AA059378	Guanylate cyclase activator 1A (retina)	*GUCA1A*	2978	381866
H85272	Rab9 effector p40	*RAB9P40*	10244	249606
AA664004	Tripeptidyl peptidase I	*CLN2*	1200	855385
AA488885	Zinc finger protein 106 homolog (mouse)	*SH3BP3*	64397	824875
T59658	Anthrax toxin receptor 2	*ANTXR2*	118429	76169
AA159688	Ecotropic viral integration site 2B	*EVI2B*	2124	593183
BX110601	Aldo-keto reductase family 1, member C2 (dihydrodiol dehydrogenase 2; bile acid binding protein; 3-alpha hydroxysteroid dehydrogenase, type III)	*AKR1C1*	1645	212620
CR736732	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2	*PFKFB2*	5208	325526
T53169	KIAA2002 protein	*KIAA2002*	79834	68534
AI948737	V-ral simian leukemia viral oncogene homolog B (ras related; GTP binding protein)	*RALB*	5899	2472305
AA411323	Interleukin 13 receptor, alpha 1	*IL13RA1*	3597	755037
W52272	GLI pathogenesis-related 1 (glioma)	*GLIPR1*	11010	325365
H97597	HIV-1 rev binding protein 2	*HRB2*	11103	260696
BX098567	Platelet/endothelial cell adhesion molecule (CD31 antigen)	*PECAM1*	5175	130541
AA446021	RNA binding motif protein 17	*RBM17*	84991	781026
AA463323	Chromosome 6 open reading frame 111	*C6orf111*	25957	796921
AA286902	Serine/threonine kinase 17a (apoptosis-inducing)	*STK17A*	9263	701450
AA479102	Protein kinase C, beta 1	*PRKCB1*	5579	753923
AI628353	KIAA0882 protein	*KIAA0882*	23158	2284924
AI361583	Potassium voltage-gated channel, subfamily F, member 1	*KCNF1*	3754	2015269
H09463	Jumonji domain containing 1C	*JMJD1C*	221037	46286
T96006	Multiple cluster hits:159799 & 370781	*THRAP2 & KIAA0251*	23389 & 23042	120897
AI184710	Toll-like receptor 6	*TLR6*	10333	1734216
R78328	CDC2-related protein kinase 7	*CRK7*	51755	145743
R23318	Suppressor of cytokine signaling 2	*SOCS2*	8835	131073
AA866153	Protein inhibitor of activated STAT, 1	*PIAS1*	8554	1469434
AA453028	Paired immunoglobin-like type 2 receptor beta	*PILRB*	29990	788355
W24806	Myosin IB	*MYO1B*	4430	308231
T77810	RYK receptor-like tyrosine kinase	*RYK*	6259	108815
BX098872	Hypothetical protein LOC339290	*LOC339290*	339290	767347
AA056375	Hypothetical protein from clone 643	*LOC57228*	57228	509458
AA480983	Formin binding protein 1	*FNBP1*	23048	814620
AA465494	Acyl-CoA synthetase long-chain family member 5	*ACSL5*	51703	814053
W55967	MAP3K12 binding inhibitory protein 1	*MBIP*	51562	340555
AA460074	Protein kinase, cAMP-dependent, catalytic, beta	*PRKACB*	5567	796442
AA447661	Sestrin 1	*SESN1*	27244	813584
N25140	Multiple cluster hits:506383 & 521240	*0 & LCHN*	0 & 57189	261492
AA035450	Inositol 1,4,5-triphosphate receptor, type 1	*ITPR1*	3708	471725
N58609	Chemokine orphan receptor 1	*CMKOR1*	57007	246786
AA001874	Solute carrier family 9 (sodium/hydrogen exchanger), isoform 9	*SLC9A9*	285195	428163
AA417921	Multiple cluster hits:85201 & 194694	*CLECSF2 & MAP3K6*	9976 & 9064	767405
H11808	C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 2 (activation-induced)	*CLECSF2*	9976	47481
AA626777	Muscle RAS oncogene homolog	*MRAS*	22808	877772
AA621342	DKFZP564B167 protein	*DKFZP564B167*	25874	1048810
AI000103	Glutamate-ammonia ligase (glutamine synthase)	*GLUL*	2752	1609836
AA131701	Sperm autoantigenic protein 17	*SPA17*	53340	503866
H68845	Peroxiredoxin 2	*PRDX2*	7001	212165
W24873	Fucosidase, alpha-L- 1, tissue	*FUCA1*	2517	308437
AA426027	Sorting nexin 3	*SNX3*	8724	757225
T60160	GABA(A) receptor-associated protein like 1	*GABARAPL1*	23710	81409

AI337373	PHD finger protein 19	*PHF19*	26147	2062453	
T97800	Hypothetical protein LOC284940	*SHANK3*	85358	121540	
AA156032	SH3-domain binding protein 4	*SH3BP4*	23677	590145	
AA704613	Similar to lymphocyte antigen 6 complex, locus G5B; G5b protein; open reading frame 31	*LOC112476*	112476	450777	
AI369785	Neural proliferation, differentiation and control, 1	*NPDC1*	56654	2017597	
AA442959	6-pyruvoyl-tetrahydropterin synthase/dimerization cofactor of hepatocyte nuclear factor 1 alpha (TCF1)	*PCBD*	5092	809421	
AA491213	Splicing factor, arginine/serine-rich 9	*SFRS9*	8683	824041	
R64190	Arginyl aminopeptidase (aminopeptidase B)	*RNPEP*	6051	139573	
AA292435	SLIT ROBO Rho GTPase activating protein 2	*SRGAP2*	23380	714493	
AI985408	Solute carrier family 27 (fatty acid transporter), member 2	*SLC27A2*	11001	2496336	
AA428394	HtrA serine peptidase 3	*HTRA3*	94031	773558	
AA046939	Multiple cluster hits:351680 & 516515	*0 & 0*	0 & 0	376866	
AI344518	H2A histone family, member V	*H2AFV*	94239	1917941	
AA708152	Transmembrane emp24 protein transport domain containing 6	*MGC23911*	146456	460798	
R26405	CDNA FLJ14942 fis, A-PLACE1011185	*0*	0	132250	
AI611956	Immunoglobulin lambda-like polypeptide 1	*IGLL1*	3543	2245295	
AA664101	Aldehyde dehydrogenase 1 family, member A1	*ALDH1A1*	216	855624	
BX089984	TEA domain family member 4	*TEAD4*	7004	346696	
AA452140	Hypothetical protein MGC45428	*MGC45428*	166614	787860	
T97547	Heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A)	*HNRPU*	3192	121621	
AA430410	Hypothetical protein LOC162073	*LOC162073*	162073	769947	
AI018794	KIAA1545 protein	*KIAA1545*	57666	1639072	
AI652019	MAD2 mitotic arrest deficienT like 2 (yeast)	*MAD2L2*	10459	2306860	CD34/CD19
AI808234	Zinc finger protein 177	*ZNF177*	7730	2363207	CD34/CD19
N95435	Putative G protein coupled receptor	*GPR*	11245	309929	CD34/CD19
BX103225	Multiple cluster hits:149156 & 547053	*GLDC & 0*	2731 & 0	248261	CD34/CD19
AI015349	Calcium regulated heat stable protein 1, 24kDa	*CARHSP1*	23589	1637328	CD34/CD19
BX118964	Regulating synaptic membrane exocytosis 3	*RIMS3*	9783	175846	CD34/CD19
BX090424	Coronin, actin binding protein, 2B	*CORO2B*	10391	303199	CD34/CD19
CR743281	CHK1 checkpoint homolog (S. pombe)	*CHEK1*	1111	246524	CD34/Immature
R78607	CDK2-associated protein 1	*CDK2AP1*	8099	144932	CD34/Immature
AI017283	Angiomotin like 1	*AMOTL1*	154810	1638584	CD34/Immature
AI653017	Cyclin-dependent kinase 2	*CDK2*	1017	2308346	CD34/Immature
T65786	Splicing factor, arginine/serine-rich 1 (splicing factor 2, alternate splicing factor)	*SFRS1*	6426	80399	CD34/Immature
N26486	Hypothetical protein FLJ12760	*FLJ12760*	339175	266218	CD34/Immature
AA190583	Ubiquitin specific protease 13 (isopeptidase T 3)	*USP13*	8975	613126	CD34/Immature
T63981	Ring finger protein (C3HC4 type) 159	*RNF159*	84333	79763	CD34/Immature
T72234	Alanine-glyoxylate aminotransferase 2	*AGXT2*	64902	85836	CD34/Immature
T71965	ATP synthase mitochondrial F1 complex assembly factor 1	*ATPAF1*	64756	85384	CD34/Immature
AA455565	Transmembrane protein 9	*TMEM9*	252839	813488	CD34/Immature
N21334	Abl interactor 2	*ABI2*	10152	265102	CD34/Immature
AA701963	Aldo-keto reductase family 1, member B1 (aldose reductase)	*AKR1B1*	231	435948	CD34/Immature
AA699677	Hexokinase 1	*HK1*	3098	446888	CD34/Immature
H09923	Poly (ADP-ribose) polymerase family, member 1	*PARP1*	142	46248	CD34/Immature
R88930	Multiple cluster hits:459927 & 504790	*PTMA & 0*	5757 & 0	195419	CD34/Immature
AA456008	ALL1-fused gene from chromosome 1q	*AF1Q*	10962	812105	CD34/Immature
H16256	Hypothetical protein FLJ20397	*FLJ20397*	54919	47647	CD34/Immature
AA885609	Microtubule-associated protein 1A	*MAP1A*	4130	1499940	CD34/Immature
AA449133	CTP synthase	*CTPS*	1503	785389	CD34/Immature
N31952	Methylcrotonoyl-Coenzyme A carboxylase 2 (beta)	*MCCC2*	64087	259374	CD34/Immature

H47080	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit c (subunit 9) isoform 3	*ATP5G3*	518	193106	CD34/Immature
AI359066	Small nuclear ribonucleoprotein polypeptide E	*SNRPE*	6635	2013064	CD34/Immature
R18985	Cleavage and polyadenylation specific factor 6, 68kDa	*CPSF6*	11052	33690	CD34/Immature