

Table 4. Probe sets whose expression is increased in T cell- and monocyte-enriched populations versus total leukocytes

100 probe sets whose apparent expression most increased in T cells relative to Buffy coat

Fold change in T cells	Probe set	Gene description	Defined gene lists
6.81	209795_at	CD69 antigen (p60, early T cell activation antigen)	cell_cycle, cell_signaling, immunology
5.59	206363_at	v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian)	tsonc
4.80	212538_at	dedicator of cytokinesis 9	
4.72	210948_s_at	lymphoid enhancer-binding factor 1	development
4.71	220418_at	ubiquitin associated and SH3 domain containing, A	
4.58	218911_at	glioma-amplified sequence-41	
4.56	206545_at	CD28 antigen (Tp44)	
4.43	204777_s_at	mal, T cell differentiation protein	immunology, misc
4.25	219528_s_at	B-cell CLL/lymphoma 11B (zinc finger protein)	
4.22	221974_at	mRNA; cDNA DKFZp686M12165 (from clone DKFZp686M12165)	
4.21	211005_at	linker for activation of T cells	
4.20	206150_at	tumor necrosis factor receptor superfamily, member 7	immunology
4.19	205006_s_at	N-myristoyltransferase 2	
4.18	209602_s_at	GATA binding protein 3	gene_regulation, immunology, misc, transcription
4.11	204019_s_at	SH3 domain containing, Ysc84-like 1 (S. cerevisiae)	
4.07	204890_s_at	lymphocyte-specific protein tyrosine kinase	immunology, signal_transduction, tsonc
4.07	205005_s_at	N-myristoyltransferase 2	
4.05	202431_s_at	v-myc myelocytomatosis viral oncogene homolog (avian)	gene_regulation, immunology, transcription, tsonc
4.03	203413_at	NEL-like 2 (chicken)	
3.97	210607_at	fms-related tyrosine kinase 3 ligand	cell_cycle, cell_signaling, immunology, signal_transduction
3.91	204773_at	interleukin 11 receptor, alpha	immunology
3.87	213460_x_at	Williams Beuren syndrome chromosome region 20C	
3.83	219346_at	leucine rich repeat and fibronectin type III domain containing 3	
3.81	206804_at	CD3G antigen, gamma polypeptide (TiT3 complex)	immunology
3.81	203717_at	dipeptidylpeptidase 4 (CD26, adenosine deaminase complexing protein 2)	angiogenesis, immunology, metastasis
3.81	216945_x_at	PAS domain containing serine/threonine kinase	
3.80	39248_at	aquaporin 3	
3.80	203386_at	TBC1 domain family, member 4	
3.77	210425_x_at	golgin-67	
3.74	211596_s_at	leucine-rich repeats and immunoglobulin-like domains 1	
3.73	64432_at	apoptosis-related protein PNAS-1	
3.70	213539_at	CD3D antigen, delta polypeptide (TiT3 complex)	
3.70	213670_x_at	Williams Beuren syndrome chromosome region 20C	

Fold change in T cells	Probe set	Gene description	Defined gene lists
3.70	217147_s_at	T cell receptor interacting molecule	
3.68	210972_x_at	cDNA clone MGC:71411 IMAGE:4853814, complete cds	
3.67	211727_s_at	COX11 homolog, cytochrome c oxidase assembly protein (yeast)	misc
3.64	221648_s_at	CGI-146 protein	
3.62	219029_at	Hypothetical protein FLJ21657	
3.61	201848_s_at	BCL2/adenovirus E1B 19kDa interacting protein 3	apoptosis
3.60	39729_at	peroxiredoxin 2	
3.60	222266_at	Chromosome 19 open reading frame 2	
3.59	201656_at	integrin, alpha 6	cell_signaling, immunology, metastasis
3.59	206492_at	fragile histidine triad gene	tsonc
3.58	209671_x_at	T cell receptor alpha locus	
3.57	208798_x_at	golgin-67	
3.56	206666_at	granzyme K (serine protease, granzyme 3; tryptase II)	misc
3.55	214093_s_at	nexilin (F actin binding protein)	
3.52	214723_x_at	KIAA1641 protein	
3.52	202969_at	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2	signal_transduction
3.50	220132_s_at	lectin-like NK cell receptor	
3.50	209267_s_at	solute carrier family 39 (zinc transporter), member 8	
3.49	207651_at	platelet activating receptor homolog	
3.47	206761_at	CD96 antigen	
3.42	209348_s_at	v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian)	tsonc
3.41	218532_s_at	hypothetical protein FLJ20152	
3.40	219315_s_at	hypothetical protein FLJ20898	
3.39	200965_s_at	actin binding LIM protein 1	
3.37	205407_at	reversion-inducing-cysteine-rich protein with kazal motifs	
3.37	217340_at	ribosomal protein L21	
3.36	213457_at	malignant fibrous histiocytoma amplified sequence 1	
3.36	217838_s_at	Enah/Vasp-like	
3.34	205831_at	CD2 antigen (p50), sheep red blood cell receptor	angiogenesis, immunology, metastasis
3.32	203608_at	aldehyde dehydrogenase 5 family, member A1 (succinate-semialdehyde dehydrogenase)	
3.31	213093_at	protein kinase C, alpha	angiogenesis, cell_cycle, cell_signaling, signal_transduction
3.30	213958_at	CD6 antigen	immunology
3.28	211902_x_at		
3.28	219109_at	PF20	
3.28	213166_x_at	hypothetical protein FLJ14346	
3.27	203685_at	B-cell CLL/lymphoma 2	apoptosis, immunology, tsonc
3.25	205047_s_at	asparagine synthetase	immunology
3.24	214130_s_at	phosphodiesterase 4D interacting protein (myomegalin)	
3.24	218723_s_at	response gene to complement 32	
3.22	212846_at	KIAA0179	
3.22	204142_at	rTS beta protein	

Fold change in T cells	Probe set	Gene description	Defined gene lists
3.21	211796_s_at	T cell receptor beta chain BV20S1 BJ1-5 BC1 mRNA, complete cds	
3.21	205510_s_at	hypothetical protein FLJ10038	
3.20	212400_at	hypothetical protein MGC50853	
3.20	202971_s_at	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2	signal_transduction
3.20	217394_at	Human TCRAV8.1a mRNA for T cell receptor alpha-chain V region, partial cds.	
3.17	213598_at	putative dimethyladenosine transferase	
3.17	212614_at	AT rich interactive domain 5B (MRF1-like)	
3.16	203828_s_at	natural killer cell transcript 4	
3.16	202165_at	protein phosphatase 1, regulatory (inhibitor) subunit 2	
3.16	219864_s_at	Down syndrome critical region gene 1-like 2 /// Down syndrome critical region gene 1-like 2	
3.15	209657_s_at	heat shock transcription factor 2	
3.15	214705_at	InaD-like protein	
3.15	217950_at	nitric oxide synthase interacting protein	
3.14	204891_s_at	lymphocyte-specific protein tyrosine kinase /// lymphocyte-specific protein tyrosine kinase	immunology, signal_transduction, tsonc
3.14	205087_at	RWD domain containing 3	
3.14	211675_s_at	I-mfa domain-containing protein	
3.12	202073_at	Optineurin	
3.12	219117_s_at	FK506 binding protein 11, 19 kDa	
3.12	205288_at	CDC14 cell division cycle 14 homolog A (S. cerevisiae)	
3.12	202746_at	integral membrane protein 2A	
3.11	205254_x_at	transcription factor 7 (T cell specific, HMG-box)	gene_regulation, immunology, transcription
3.10	201853_s_at	cell division cycle 25B	
3.08	209604_s_at	GATA binding protein 3	gene_regulation, immunology, misc, transcription
3.07	217326_x_at		
3.07	202478_at	tribbles homolog 2 (Drosophila)	
3.06	211478_s_at	dipeptidylpeptidase 4 (CD26, adenosine deaminase complexing protein 2)	angiogenesis, immunology, metastasis

100 Probe Sets Whose Apparent Expression Most Increased in Monocytes Relative to Buffy Coat

Fold change in monocytes	Probe set	Gene description	Defined gene lists
8.31	203821_at	diphtheria toxin receptor (heparin-binding epidermal growth factor-like growth factor)	immunology
5.86	210895_s_at	CD86 antigen (CD28 antigen ligand 2, B7-2 antigen)	immunology
5.85	202393_s_at	TGFB inducible early growth response	angiogenesis, cell_cycle, cell_signaling,

Fold change in monocytes	Probe set	Gene description	Defined gene lists
			immunology, misc
5.83	201110_s_at	thrombospondin 1	angiogenesis, cell_signaling, immunology, metastasis
5.83	221841_s_at	Kruppel-like factor 4 (gut)	
5.57	202284_s_at	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	immunology, tsonc
5.47	203645_s_at	CD163 antigen	
5.40	208450_at	lectin, galactoside-binding, soluble, 2 (galectin 2)	
5.23	217388_s_at	kynureninase (L-kynurenine hydrolase)	
5.20	212681_at	erythrocyte membrane protein band 4.1-like 3	
5.16	212224_at	aldehyde dehydrogenase 1 family, member A1	
5.16	219093_at	hypothetical protein FLJ20701	
5.06	215646_s_at	chondroitin sulfate proteoglycan 2 (versican)	immunology
5.03	215049_x_at	CD163 antigen	
4.89	208923_at	cytoplasmic FMR1 interacting protein 1	
4.73	213397_x_at	ribonuclease, RNase A family, 4	
4.68	220146_at	toll-like receptor 7	
4.67	217897_at	FXYD domain containing ion transport regulator 6	
4.50	211571_s_at	chondroitin sulfate proteoglycan 2 (versican)	immunology
4.49	206743_s_at	asialoglycoprotein receptor 1	
4.48	204112_s_at	histamine N-methyltransferase	
4.48	211776_s_at	erythrocyte membrane protein band 4.1-like 3	
4.39	202436_s_at	cytochrome P450, family 1, subfamily B, polypeptide 1	immunology, pharmacology
4.39	220162_s_at	caspase recruitment domain family, member 9	
4.38	201506_at	transforming growth factor, beta-induced, 68kDa	cell_cycle, cell_signaling, immunology
4.38	212956_at	KIAA0882 protein	
4.38	206710_s_at	erythrocyte membrane protein band 4.1-like 3	
4.34	49306_at	Ras association (RalGDS/AF-6) domain family 4	
4.28	206157_at	pentaxin-related gene, rapidly induced by IL-1 beta	cell_cycle, cell_signaling, immunology
4.28	202435_s_at	cytochrome P450, family 1, subfamily B, polypeptide 1	immunology, pharmacology
4.20	217513_at	hypothetical protein LOC284021	
4.19	218559_s_at	v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian)	
4.18	209684_at	Ras and Rab interactor 2	
4.16	208146_s_at	carboxypeptidase, vitellogenic-like	
4.15	203485_at	reticulon 1	angiogenesis, metastasis
4.14	203922_s_at	cytochrome b-245, beta polypeptide (chronic granulomatous disease)	immunology
4.14	201105_at	lectin, galactoside-binding, soluble, 1 (galectin 1)	immunology, misc
4.13	202437_s_at	cytochrome P450, family 1, subfamily B, polypeptide 1	immunology, pharmacology
4.10	208890_s_at	plexin B2	
4.09	205859_at	lymphocyte antigen 86	
4.04	200602_at	amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)	immunology
4.01	203932_at	major histocompatibility complex, class II, DM beta	immunology
4.00	202007_at	nidogen (enactin)	
3.99	212460_at	chromosome 14 open reading frame 147	

Fold change in monocytes	Probe set	Gene description	Defined gene lists
3.99	201417_at	SRY (sex determining region Y)-box 4	gene_regulation, immunology, transcription
3.99	205076_s_at	cisplatin resistance associated	
3.99	219666_at	membrane-spanning 4-domains, subfamily A, member 6A	
3.98	221802_s_at	KIAA1598	
3.96	213537_at	major histocompatibility complex, class II, DP alpha 1	immunology
3.94	200736_s_at	glutathione peroxidase 1	immunology, pharmacology
3.92	205789_at	CD1D antigen, d polypeptide	angiogenesis, metastasis
3.85	206488_s_at	CD36 antigen (collagen type I receptor, thrombospondin receptor)	immunology
3.84	204466_s_at	synuclein, alpha (non A4 component of amyloid precursor)	
3.82	204115_at	guanine nucleotide binding protein (G protein), gamma 11	
3.78	208949_s_at	lectin, galactoside-binding, soluble, 3 (galectin 3)	immunology
3.75	201560_at	chloride intracellular channel 4	
3.73	205992_s_at	interleukin 15	immunology
3.69	203305_at	coagulation factor XIII, A1 polypeptide	immunology
3.68	203923_s_at	cytochrome b-245, beta polypeptide (chronic granulomatous disease)	immunology
3.66	217853_at	tensin-like SH2 domain containing 1	
3.66	208894_at	major histocompatibility complex, class II, DR alpha	immunology
3.64	214953_s_at	amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)	immunology
3.63	211732_x_at	histamine N-methyltransferase	
3.63	209499_x_at	tumor necrosis factor (ligand) superfamily, member 13	
3.63	203300_x_at	adaptor-related protein complex 1, sigma 2 subunit	
3.62	202295_s_at	cathepsin H	
3.61	204081_at	neurogranin (protein kinase C substrate, RC3)	
3.61	220091_at	solute carrier family 2 (facilitated glucose transporter), member 6	
3.60	210220_at	frizzled homolog 2 (Drosophila)	development
3.59	213624_at	Sphingomyelin phosphodiesterase, acid-like 3A	
3.58	210222_s_at	reticulon 1	angiogenesis, metastasis
3.56	201743_at	CD14 antigen	angiogenesis, immunology, metastasis, misc
3.54	201847_at	lipase A, lysosomal acid, cholesterol esterase (Wolman disease)	
3.54	201416_at	SRY (sex determining region Y)-box 4	gene_regulation, immunology, transcription
3.53	202944_at	N-acetylgalactosaminidase, alpha-	immunology
3.53	202381_at	a disintegrin and metalloproteinase domain 9 (meltrin gamma)	
3.51	206978_at	chemokine (C-C motif) receptor 2	immunology
3.51	219806_s_at	FN5 protein	
3.49	210314_x_at	tumor necrosis factor (ligand) superfamily, member 13	
3.48	201425_at	aldehyde dehydrogenase 2 family (mitochondrial)	immunology, pharmacology
3.47	201590_x_at	annexin A2	
3.46	200762_at	dihydropyrimidinase-like 2	
3.46	200838_at	cathepsin B	immunology, misc
3.44	208818_s_at	catechol-O-methyltransferase	behavior, immunology

Fold change in monocytes	Probe set	Gene description	Defined gene lists
3.40	205730_s_at	actin binding LIM protein family, member 3	
3.39	221042_s_at	calmin (calponin-like, transmembrane)	
3.38	212235_at	plexin D1	
3.37	205686_s_at	CD86 antigen (CD28 antigen ligand 2, B7-2 antigen)	immunology
3.36	213379_at	hypothetical protein CL640	
3.35	210982_s_at	major histocompatibility complex, class II, DR alpha	immunology
3.35	202201_at	biliverdin reductase B (flavin reductase (NADPH))	
3.33	200839_s_at	cathepsin B	immunology, misc
3.32	205685_at	CD86 antigen (CD28 antigen ligand 2, B7-2 antigen)	immunology
3.31	208816_x_at	annexin A2 pseudogene 1	
3.30	214146_s_at	pro-platelet basic protein (chemokine (C-X-C motif) ligand 7)	immunology
3.30	211369_at	calcium binding protein P22	
3.30	209696_at	fructose-1,6-bisphosphatase 1	immunology
3.30	206120_at	CD33 antigen (gp67)	angiogenesis, metastasis
3.29	204526_s_at	TBC1 domain family, member 8 (with GRAM domain)	
3.27	220016_at	hypothetical protein MGC5395	