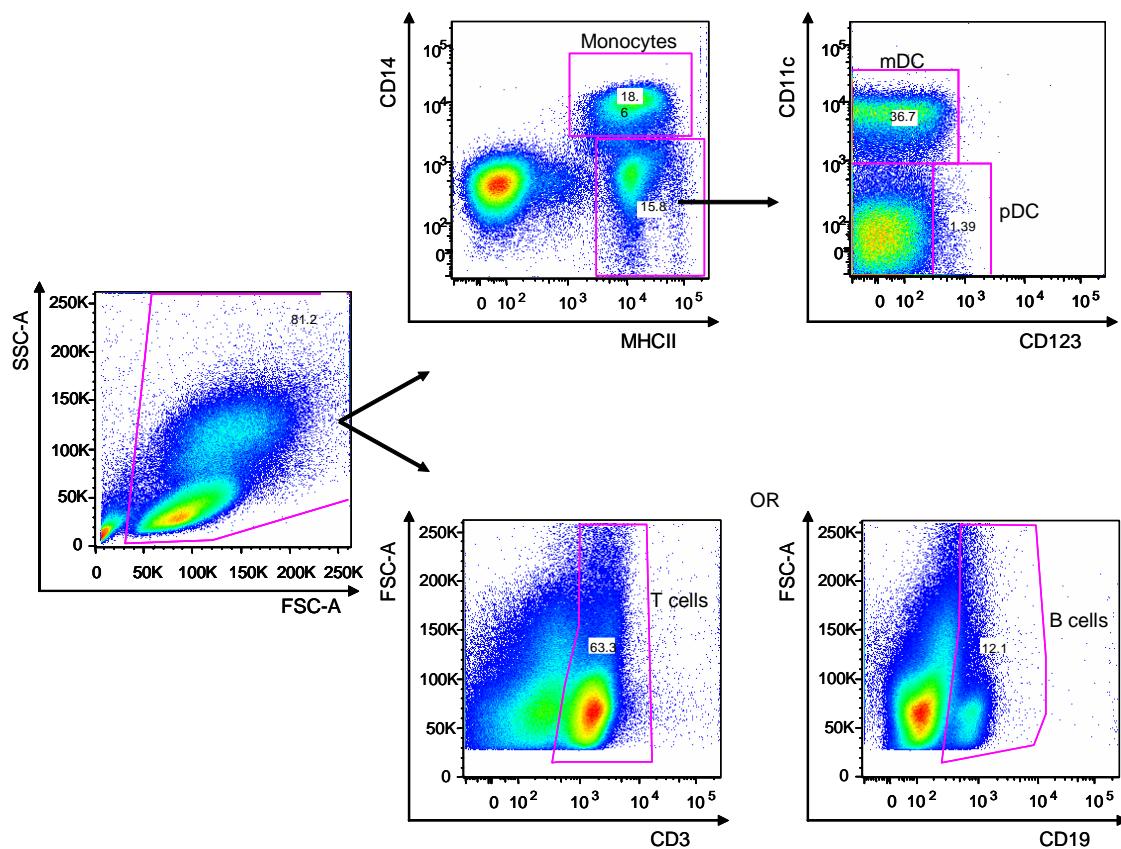


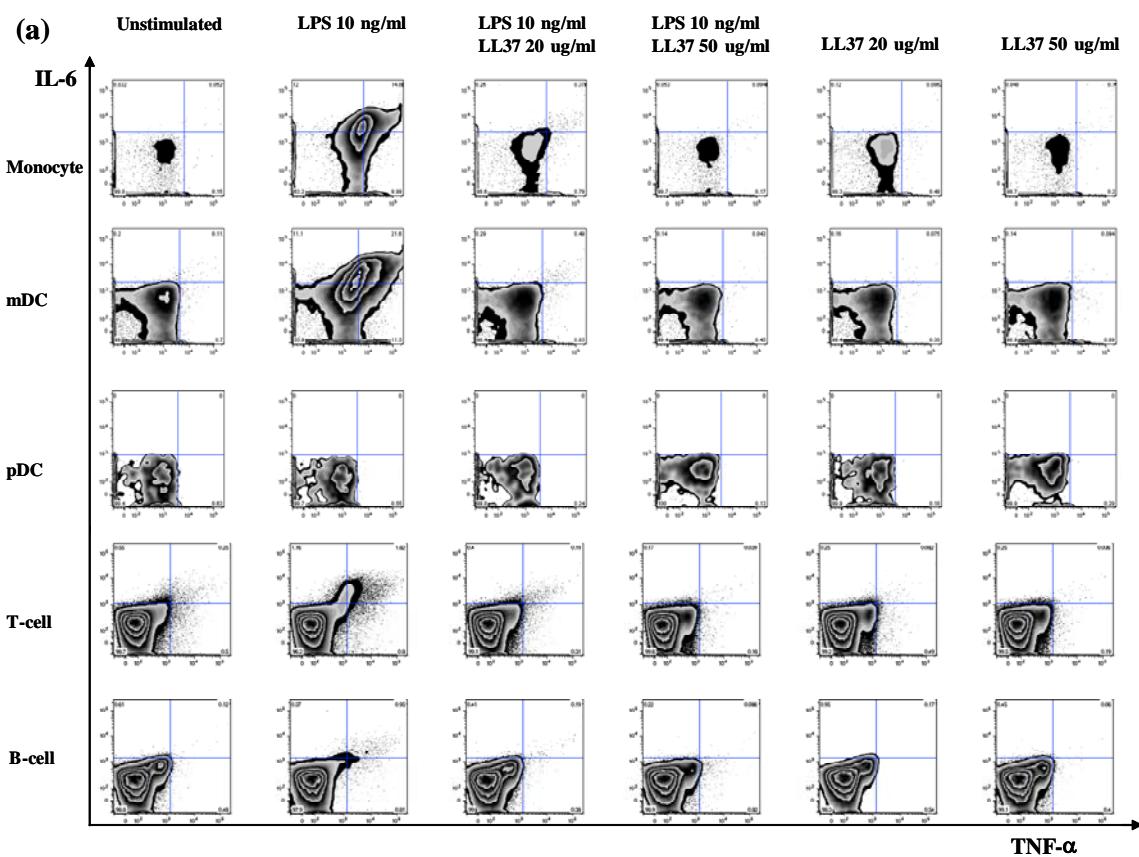
SUPPLEMENTARY DATA

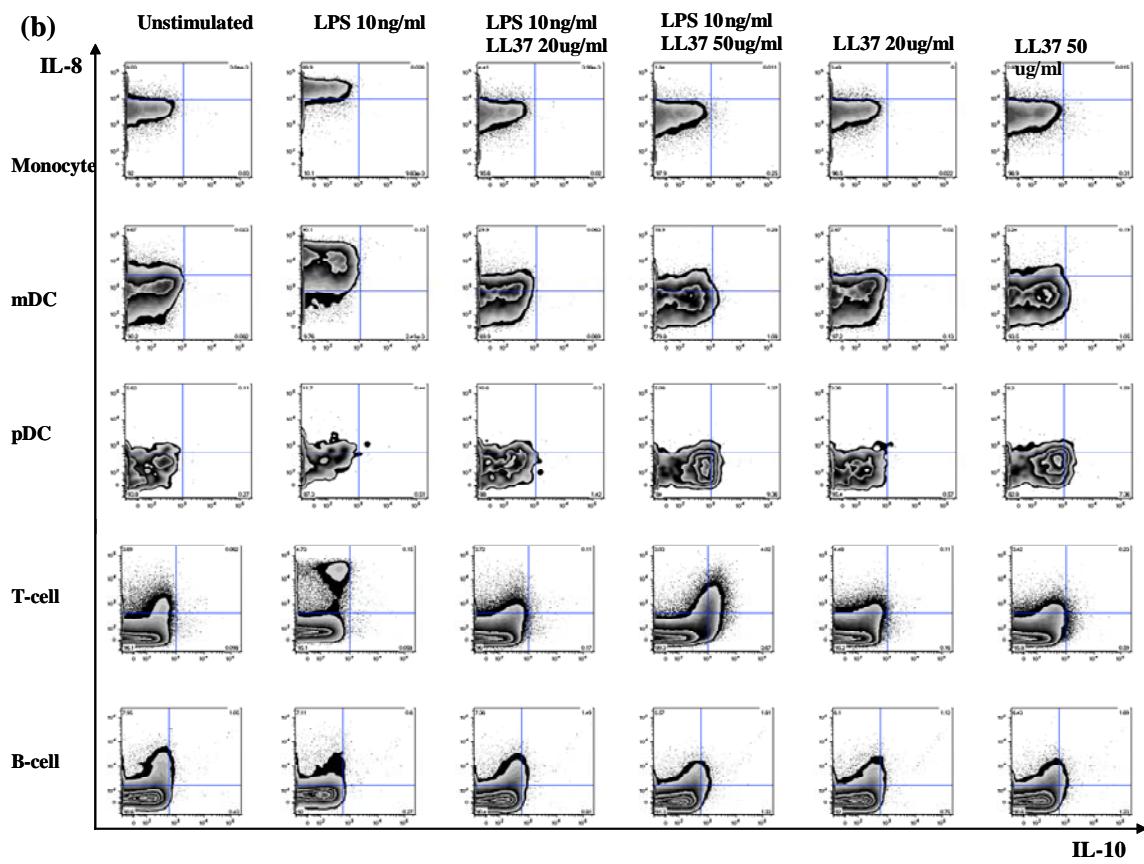
Supplementary Figure 1: Gating Strategy for human PBMC samples. Shown is the gating strategy to identify various immune cell subsets: monocytes (MHCIIpos, CD14pos), myeloid DCs (MHCIIpos, CD14neg/low, CD123neg, CD11cpos), plasmacytoid DCs (MHCIIpos, CD14neg/low, CD11cneg, CD123pos), B cells (CD19pos), T cells (CD3pos).

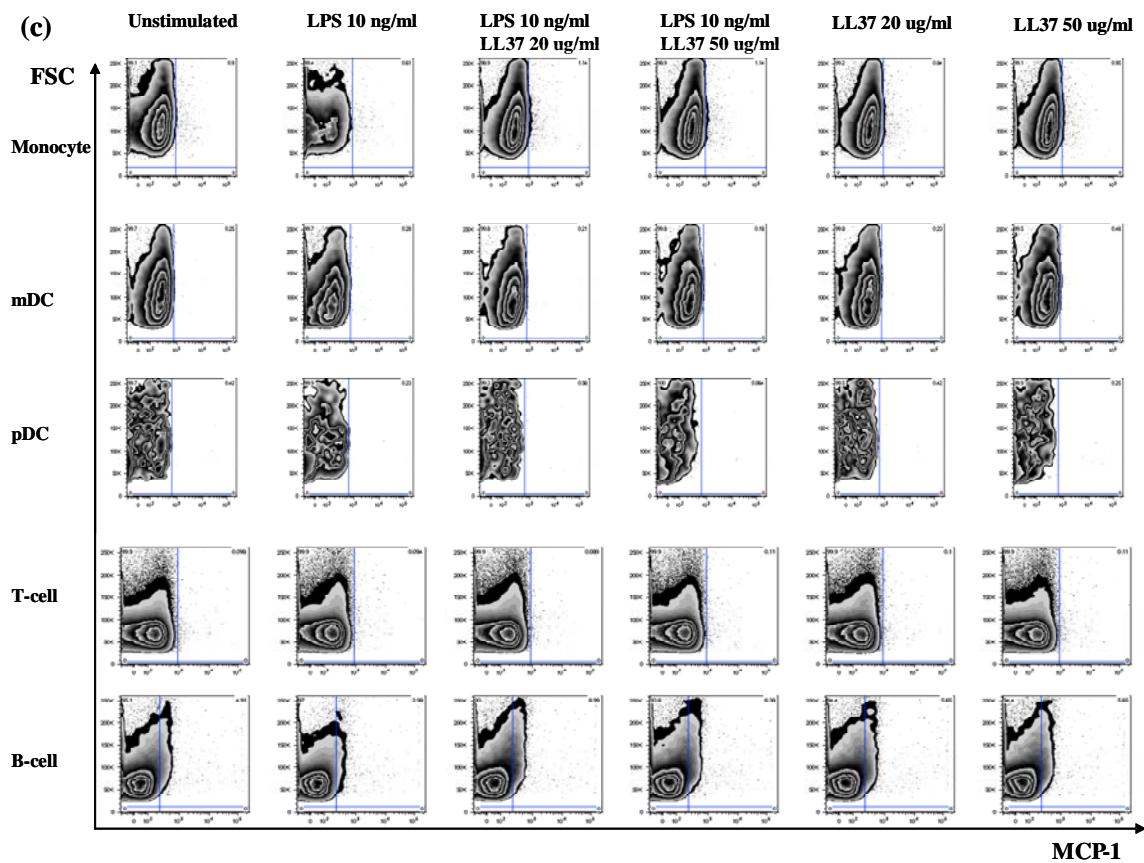


Supplementary Figure 2: Analysis of LL-37-mediated immune response for individual cell type within human PBMC cell population using polychromatic flow cytometry.

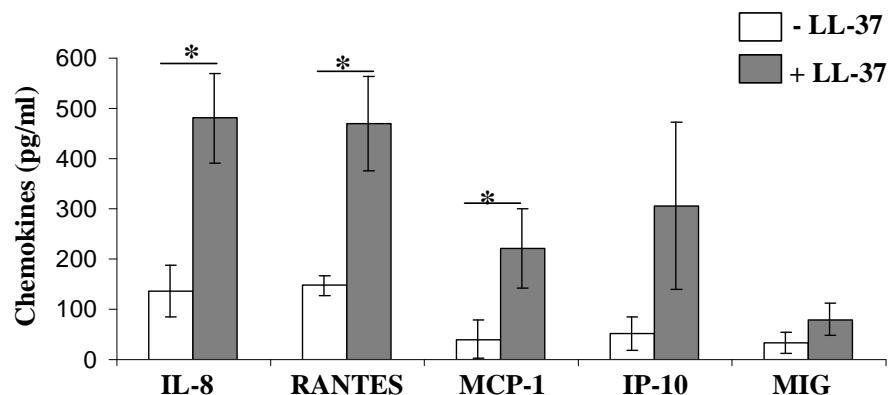
Human PBMC (10 million cells/ml) were stimulated with LL-37 (20 or 50) in the presence and absence of TLR4-agonist LPS (10 ng/ml) for 18 hr at 37°C in 5% CO₂ in a 96-well format. The cells were analyzed on an FACS Aria Flow cytometer (Becton Dickinson). Staining panel for intracellular cytokines and the cell surface marker antibodies used are summarized in Supplementary Table I. Compensation beads (Becton Dickinson) were used to standardize voltage and used as single stain controls. At least 500,000 events were acquired uncompensated through a high-throughput sampler. Induction of intracellular cytokines; (**a**) IL-6 and TNF- α , (**b**) IL-8 and IL-10, and (**c**) chemokine MCP-1, were analyzed within each individual cell type employing cell surface markers to distinguish between monocytes, pDC, mDC, T-cell and B-cell.







Supplementary Figure 3: Chemokines induced in human PBMC following LL-37 stimulation. Human PBMC were stimulated with LL-37 (20 µg/ml) for 24 hr. Tissue culture supernatant were monitored for the production of chemokines employing Multiplex BD™ Cytometric bead array (CBA) human chemokine kit as per the manufacturer's instructions. Results represent average of three independent experiments from independent donors ± standard error (**p<0.01).



Supplementary Table I: List of differentially expressed genes in CD14+ monocytes following stimulation of PBMC with LL-37.

Probe ID	ENSG	EntrezGene	HGNC	Fold Change	p-student	Description
H200000261	ENSG00000111405	8909		-3.2275	0.0373	Placental protein 11 precursor (PP11).
H200007608	ENSG00000164975	6619	SNAPC3	-2.972	0.0248	small nuclear RNA activating complex, polypeptide 3, 50kDa
H200004257	ENSG00000169122	90362	FAM110B	-2.623	0.0112	family with sequence similarity 110, member B
H200020971	ENSG00000174989	26259	FBXW8	-2.1812	0.0044	F-box and WD repeat domain containing 8
H200013998	ENSG00000157823	10239	AP3S2	-2.1491	0.0463	adaptor-related protein complex 3, sigma 2 subunit
H200020254	ENSG00000162520	81493	SYNC1	-2.109	0.0278	syncolin, intermediate filament 1
H200004502	ENSG00000092929	201294	UNC13D	-2.1073	0.012	unc-13 homolog D (<i>C. elegans</i>)
H200005039	ENSG00000120278	57480	PLEKHG1	-2.031	0.0385	pleckstrin homology domain containing, family G (with RhoGef domain) member 1
H200001718	ENSG00000173369	713	C1QB	-1.9834	0.0126	complement component 1, q subcomponent, B chain
H200003822	ENSG00000073711	5523	PPP2R3A	-1.9566	0.0411	protein phosphatase 2 (formerly 2A), regulatory subunit B'', alpha
H200001919	ENSG00000136856	29988	SLC2A8	-1.9313	0.0144	solute carrier family 2, (facilitated glucose transporter) member 8
H200002825	ENSG00000165948	122509	FAM14B	-1.9162	0.0495	family with sequence similarity 14, member B
H200019770	ENSG00000066697	91283	C9orf30/TMEFF1	-1.8513	0.0481	transmembrane protein with EGF-like and two follistatin-like domains 1 chromosome 9 open reading frame 30
H200012111	ENSG00000075618	6624	FSCN1	-1.8511	0.0354	fascin homolog 1, actin-bundling protein (<i>Strongylocentrotus purpuratus</i>)
H200015344	ENSG00000001630	1595	CYP51A1	-1.7574	0.004	cytochrome P450, family 51, subfamily A, polypeptide 1
H200013747	ENSG00000128829	440275	EIF2AK4	-1.7493	0.0077	eukaryotic translation initiation factor 2 alpha kinase 4
H200011492	ENSG00000143442	23126	POGZ	-1.7375	0.0096	pogo transposable element with ZNF domain
H200017902	ENSG00000155229	64210	MMS19	-1.7315	0.0079	MMS19 nucleotide excision repair homolog (<i>S. cerevisiae</i>)
H200005082	ENSG00000126778	6495	SIX1	-1.729	0.0375	SIX homeobox 1
H200009399	ENSG00000158195	10163		-1.7258	0.0303	WAS protein family, member 2
H200002944	ENSG00000118473	84251	SGIP1	-1.7044	0.0089	SH3-domain GRB2-like (endophilin) interacting protein 1

H200017435	ENSG00000119838			-1.6955	0.0038	
H200019593	ENSG00000188171	199777	ZNF626	-1.6882	0.011	zinc finger protein 626
H200007765	ENSG00000090339	3383	ICAM1	-1.6845	0.0362	intercellular adhesion molecule 1 (CD54), human rhinovirus receptor
H200003639	ENSG00000172269	1798	DPAGT1	-1.6771	0.0094	dolichyl-phosphate (UDP-N-acetylglucosamine) N-acetylglucosamineprophosphotransferase 1 (GlcNAc-1-P transferase)
H200000415	ENSG00000165178	648998	NCF1C	-1.6677	0.0037	neutrophil cytosolic factor 1C pseudogene
H200014865	ENSG00000116031	50489	CD207	-1.6663	0.0331	CD207 molecule, langerin
H200001857	ENSG00000149257	871	SERPINH1	-1.6532	0.0234	serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)
H200012108	ENSG00000105717	80714	PBX4	-1.6446	0.0464	pre-B-cell leukemia homeobox 4
H200010229	ENSG00000186807	652846	ANXA8L2	-1.6438	0.0196	annexin A8-like 2
H200001505	ENSG00000173230	2804	GOLGB1	-1.6366	0.007	golgin B1, golgi integral membrane protein
H200013706	ENSG00000077800	8468	FKBP6	-1.6197	0.0243	FK506 binding protein 6, 36kDa
H200006609	ENSG00000163788	54861	SNRK	-1.6113	0.0364	SNF related kinase
H200002159	ENSG00000146426	26230	TIAM2	-1.6007	0.0073	RNA binding motif protein 16 T-cell lymphoma invasion and metastasis 2
H200011658	ENSG00000047634	6322	SCML1	-1.595	0.0142	sex comb on midleg-like 1 (Drosophila)
H200001484	ENSG00000084070	64744	SMAP1L	-1.5832	0.0213	stromal membrane-associated GTPase-activating protein 2
H200011097	ENSG00000169131	6940	ZNF354A	-1.5592	0.0199	zinc finger protein 354A
H200002071	ENSG00000112299	8876	VNN1	-1.5589	0.0008	vanin 1
H200006501	ENSG00000133392	4629	MYH11	-1.5567	0.026	myosin, heavy chain 11, smooth muscle
H200015713	ENSG00000143850	22874	PLEKHA6	-1.5348	0.0491	pleckstrin homology domain containing, family A member 6
H200016344	ENSG00000130414	4705	NDUFA10	-1.5294	0.0198	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 10, 42kDa
H200000078	ENSG00000127472	5322	PLA2G5	-1.5186	0.0465	phospholipase A2, group V
H200019403	ENSG00000215019			-1.5173	0.0062	ATXN1 protein (Fragment).

H200008974	ENSG00000143612	25912	C1orf43	-1.5124	0.0093	chromosome 1 open reading frame 43
H200007927	ENSG00000213079	22828	RBM16	1.5037	0.0059	Putative RNA-binding protein 16 (RNA-binding motif protein 16).
H200013650	ENSG00000213585	7416	VDAC1/VDAC4	1.5053	0.0193	voltage-dependent anion channel 4
H200001561	ENSG00000160145	8997	KALRN	1.5059	0.0112	kalirin, RhoGEF kinase
H200014962	ENSG00000109536	642236	FRG1	1.5092	0.0247	FSHD region gene 1
H200007836	ENSG00000095539	57715	SEMA4G	1.5099	0.0471	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4G
H200007881	ENSG00000153936	9653	HS2ST1	1.5154	0.0285	heparan sulfate 2-O-sulfotransferase 1
H200008631	ENSG00000196911	3841	KPNA5	1.5208	0.0085	karyopherin alpha 5 (importin alpha 6)
H200006130	ENSG00000148484	6251	RSU1	1.5226	0.0458	Ras suppressor protein 1
H200005149	ENSG00000154127	84959		1.5268	0.0494	ubiquitin associated and SH3 domain containing, B
H200015093	ENSG00000144460	57624		1.5312	0.0035	CDNA FLJ30664 fis, clone FCBBF1000604, weakly similar to Myosin heavy chain Myr 8b.
H200006561	ENSG00000107929	23185	LARP5	1.5332	0.0373	La ribonucleoprotein domain family, member 5
H200012797	ENSG00000148400	4851	NOTCH1	1.5393	0.0001	Notch homolog 1, translocation-associated (<i>Drosophila</i>)
H200019404	ENSG00000077549	832	CAPZB	1.5397	0.0487	capping protein (actin filament) muscle Z-line, beta
H200011489	ENSG00000125755	8189	SYMPK	1.5418	0.022	symplekin
H200002975	ENSG00000181191	64219	PJA1	1.5458	0.0008	praja 1
H200001160	ENSG00000100884	9362	CPNE6	1.5567	0.0171	copine VI (neuronal)
H200016015	ENSG00000211803			1.5581	0.0409	T-cell receptor alpha V gene segment
H200001706	ENSG00000117643	57134	MAN1C1	1.5635	0.0398	mannosidase, alpha, class 1C, member 1
H200000203	ENSG00000163739	2919	CXCL1	1.5656	0.0186	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
H200001516	ENSG00000197329	57162	PELI1	1.5729	0.0464	pellino homolog 1 (<i>Drosophila</i>)
H200000619	ENSG00000168615	8754	ADAM9	1.5788	0.0434	ADAM metallopeptidase domain 9 (meltrin gamma)

H200010425	ENSG00000103197	7249	TSC2	1.5843	0.0084	tuberous sclerosis 2
H200010555	ENSG00000153310	51571	FAM49B	1.5937	0.0242	family with sequence similarity 49, member B
H200005893	ENSG0000025708	1890	ECGF1	1.5965	0.0146	thymidine phosphorylase
H200005426	ENSG00000115239	51130	ASB3	1.5982	0.0381	ankyrin repeat and SOCS box-containing 3
H200020883	ENSG0000086015	23139	MAST2	1.6022	0.0043	microtubule associated serine/threonine kinase 2
H200006542	ENSG0000035681	8439	NSMAF	1.6034	0.0121	neutral sphingomyelinase (N-SMase) activation associated factor
H200021081	ENSG00000140416	7168	TPM1	1.6034	0.0256	tropomyosin 1 (alpha)
H200018199	ENSG00000111752	653441	PHC1	1.6064	0.049	polyhomeotic homolog 1 (<i>Drosophila</i>)
H200008695	ENSG0000099999	200312	RNF215	1.6303	0.0487	ring finger protein 215
H200017513	ENSG00000104774	4125	MAN2B1	1.6323	0.0022	mannosidase, alpha, class 2B, member 1
H200012091	ENSG00000173559	64859	OBFC2A	1.6399	0.005	oligonucleotide/oligosaccharide-binding fold containing 2A
H200002921	ENSG00000141564	57521		1.6435	0.0219	Regulatory-associated protein of mTOR (Raptor) (P150 target of rapamycin (TOR)-scaffold protein).
H200002473	ENSG00000156521	219743	TYSND1	1.6458	0.0379	trypsin domain containing 1
H200010826	ENSG00000107614	1787	TRDMT1	1.6529	0.0227	tRNA aspartic acid methyltransferase 1
H200012634	ENSG00000185519	348487	FAM131C	1.6562	0.0476	family with sequence similarity 131, member C
H200001504	ENSG0000099991	23523		1.6599	0.031	Calcineurin-binding protein Cabin 1 (Calcineurin inhibitor) (CAIN).
H200007210	ENSG00000204644	346171	ZFP57	1.6695	0.0421	zinc finger protein 57 homolog (mouse)
H200007043	ENSG00000179295	647552	PTPN11	1.6813	0.005	protein tyrosine phosphatase, non-receptor type 11 (Noonan syndrome 1)
H200020353	ENSG00000213918	1773	DNASE1	1.6984	0.0489	deoxyribonuclease I
H200016392	ENSG00000180484			1.6997	0.0156	
H200020916	ENSG00000152977	7545	ZIC1	1.7151	0.0409	Zic family member 1 (odd-paired homolog, <i>Drosophila</i>)
H200001070	ENSG00000162923	80232	WDR26	1.7159	0.0081	WD repeat domain 26
H200010493	ENSG00000214357			1.7199	0.0203	
H200000156	ENSG00000169429	3576	IL8	1.721	0.0102	interleukin 8

H200011578	ENSG00000120727	51247	PAIP2	1.7278	0.0164	poly(A) binding protein interacting protein 2
H200007964	ENSG00000168036	1499	CTNNB1	1.7366	0.0263	catenin (cadherin-associated protein), beta 1, 88kDa
H200015049	ENSG00000198624	26112	CCDC69	1.7378	0.0066	coiled-coil domain containing 69
H200002898	ENSG00000185745	3434	IFIT1	1.7402	0.0278	interferon-induced protein with tetratricopeptide repeats 1
H200006627	ENSG00000085832	2060	EPS15	1.7432	0.0199	epidermal growth factor receptor pathway substrate 15
H200004879	ENSG00000101493	9658	ZNF516	1.7473	0.0108	zinc finger protein 516
H200019729	ENSG00000205762			1.7553	0.032	CDNA FLJ46852 fis, clone UTERU3007108.
H200017635	ENSG00000155886	25769	SLC24A2	1.7812	0.0044	solute carrier family 24 (sodium/potassium/calcium exchanger), member 2
H200011602	ENSG00000112144	22858	ICK	1.7849	0.0419	intestinal cell (MAK-like) kinase
H200013158	ENSG00000072756	51095	TRNT1	1.7888	0.0067	tRNA nucleotidyl transferase, CCA-adding, 1
H200000841	ENSG00000167508	4597	MVD	1.7985	0.0342	mevalonate (diphospho) decarboxylase
H200003225	ENSG00000101638	29906	ST8SIA5	1.7997	0.0151	ST8 alpha-N-acetyl-neuraminate alpha-2,8-sialyltransferase 5
H200019816	ENSG00000187784			1.8103	0.0224	
H200013446	ENSG00000135547	23493	HEY2	1.8266	0.0122	hairy/enhancer-of-split related with YRPW motif 2
H200020063	ENSG00000173406	1600	DAB1	1.8409	0.0314	disabled homolog 1 (<i>Drosophila</i>)
H200000169	ENSG00000119888	4072	TACSTD1	1.8409	0.0363	tumor-associated calcium signal transducer 1
H200020064	ENSG00000197900			1.8533	0.0424	CDNA FLJ40468 fis, clone TESTI2042400.
H200015836	ENSG00000139194	83758	RBP5	1.8546	0.0226	retinol binding protein 5, cellular
H200013340	ENSG00000114859	1181	CLCN2	1.8748	0.0407	chloride channel 2
H200019301	ENSG00000123595	9367	RAB9A	1.8929	0.039	RAB9A, member RAS oncogene family
H200010406	ENSG00000104435	11075	STMN2	1.9128	0.0336	stathmin-like 2
H200005315	ENSG00000135960	10913	EDAR	1.925	0.0401	ectodysplasin A receptor
H200008360	ENSG00000073737	10170	DHRS9	1.9476	0.0036	dehydrogenase/reductase (SDR family) member 9
H200001286	ENSG00000106554	54927	CHCHD3	2.0192	0.0113	coiled-coil-helix-coiled-coil-helix domain containing 3

H200008117	ENSG00000160216	56894	AGPAT3	2.0274	0.0126	1-acylglycerol-3-phosphate O-acyltransferase 3
H200007583	ENSG00000142444	90580	C19orf52	2.0278	0.0318	chromosome 19 open reading frame 52
H200014270	ENSG00000164506	134957	STXBP5	2.0465	0.0326	syntaxin binding protein 5 (tomasyn)
H200000887	ENSG00000116221	51253	MRPL37	2.0481	0.023	mitochondrial ribosomal protein L37
H200004356	ENSG00000174775	3265	HRAS	2.0727	0.0405	v-Ha-ras Harvey rat sarcoma viral oncogene homolog
H200006481	ENSG00000135047	1514	CTSL1	2.0805	0.0194	cathepsin L1
H200010136	ENSG00000115459	84173	RBED1	2.0896	0.0315	RNA binding motif and ELMO/CED-12 domain 1
H200006054	ENSG00000110080	6484	ST3GAL4	2.0929	0.0474	ST3 beta-galactoside alpha-2,3-sialyltransferase 4
H200018086	ENSG00000079841	22999	RIMS1	2.1139	0.0428	regulating synaptic membrane exocytosis 1
H200017040	ENSG00000167106	399665	FAM102A	2.1213	0.0118	family with sequence similarity 102, member A
H200009210	ENSG00000124356	10617	STAMBP	2.1572	0.0185	STAM binding protein
H200008901	ENSG00000114857	4820	NKTR	2.2177	0.0054	natural killer-tumor recognition sequence
H200006689	ENSG00000184613	4753	NELL2	2.2251	0.009	NEL-like 2 (chicken)
H200000493	ENSG00000134757	1830	DSG3	2.2592	0.0069	desmoglein 3 (pemphigus vulgaris antigen)
H200011487	ENSG00000100814	57820	CCNB1IP1	2.2746	0.0127	cyclin B1 interacting protein 1
H200013182	ENSG00000092009	1215	CMA1	2.3087	0.0272	chymase 1, mast cell
H200015644	ENSG00000119125	9615	GDA	2.3228	0.0051	guanine deaminase
H200014650	ENSG00000102078	9016	SLC25A14	2.3562	0.0338	solute carrier family 25 (mitochondrial carrier, brain), member 14
H200000891	ENSG00000182482	652968		2.3665	0.0307	CDNA FLJ31025 fis, clone HLUNG2000501.
H200010850	ENSG00000188827	84464	BTBD12	2.377	0.0138	BTB (POZ) domain containing 12
H200003447	ENSG00000169783	84894	LINGO1	2.391	0.0228	leucine rich repeat and Ig domain containing 1
H200007575	ENSG00000156239	29104	N6AMT1	2.3965	0.0419	N-6 adenine-specific DNA methyltransferase 1 (putative)
H200008099	ENSG00000188629	7730	ZNF177	2.3983	0.017	zinc finger protein 177
H200005434	ENSG00000138777	27068	PPA2	2.4016	0.0048	pyrophosphatase (inorganic) 2

H200012325	ENSG00000143322	27	ABL2	2.4187	0.0221	v-abl Abelson murine leukemia viral oncogene homolog 2 (arg, Abelson-related gene)
H200004587	ENSG00000122952	11130	ZWINT	2.4639	0.0388	ZW10 interactor
H200001882	ENSG00000130382	4298	MLLT1	2.4645	0.0447	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 1
H200011251	ENSG00000206579	114786	XKR4	2.4832	0.0135	XK, Kell blood group complex subunit-related family, member 4
H200001417	ENSG00000125703	84938	ATG4C	2.4861	0.0003	ATG4 autophagy related 4 homolog C (<i>S. cerevisiae</i>)
H200011766	ENSG00000143420	2029	ENSA	2.5012	0.0139	endosulfine alpha
H200008868	ENSG00000170836	8493	PPM1D	2.5135	0.0074	protein phosphatase 1D magnesium-dependent, delta isoform
H200021272	ENSG00000197125	26493	OR8B8	2.5151	0.0482	olfactory receptor, family 8, subfamily B, member 8
H200003878	ENSG00000101216	26205	GMEB2	2.5503	0.0412	glucocorticoid modulatory element binding protein 2
H200021153	ENSG00000213347	83463	MXD3	2.5594	0.0198	MAX dimerization protein 3
H200005091	ENSG00000110651	975	CD81	2.573	0.0463	CD81 molecule
H200020148	ENSG00000120137	79646	PANK3	2.586	0.0232	pantothenate kinase 3
H200018873	ENSG00000204217	659	BMPR2	2.5916	0.024	bone morphogenetic protein receptor, type II (serine/threonine kinase)
H200005084	ENSG00000101076	3172	HNF4A	2.5947	0.0106	hepatocyte nuclear factor 4, alpha
H200017147	ENSG00000197321	6840	SVIL	2.6185	0.0331	supervillin
H200007649	ENSG00000080298	5991	RFX3	2.6192	0.0214	regulatory factor X, 3 (influences HLA class II expression)
H200011452	ENSG00000184314			2.646	0.0147	CDNA FLJ12567 fis, clone NT2RM4000855.
H200010119	ENSG00000213639	5500	PPP1CB	2.6532	0.0248	protein phosphatase 1, catalytic subunit, beta isoform
H200019687	ENSG00000129197	84268	RPAIN	2.6589	0.0203	RPA interacting protein
H200019106	ENSG00000119705	81892	C14orf156	2.6718	0.0398	chromosome 14 open reading frame 156
H200012066	ENSG00000213931	3046	HBE1	2.7014	0.0206	Hemoglobin subunit epsilon (Hemoglobin epsilon chain) (Epsilon-globin).
H200010510	ENSG00000123737	5393	EXOSC9	2.7368	0.0002	exosome component 9
H200017816	ENSG00000178982	27335	EIF3K	2.7409	0.0332	eukaryotic translation initiation factor 3, subunit K

H200000407	ENSG00000106689	9355	LHX2	2.7528	0.0485	LIM homeobox 2
H200016722	ENSG00000113119	55374	TMCO6	2.7623	0.0132	transmembrane and coiled-coil domains 6
H200004360	ENSG00000118702	2691	GHRH	2.7749	0.0062	growth hormone releasing hormone
H200013443	ENSG00000168813	22847	ZNF507	2.7869	0.0062	zinc finger protein 507
H200005834	ENSG00000077150	4791	NFKB2	2.8162	0.0353	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)
H200008434	ENSG00000108424	3837	KPNB1	2.8547	0.0333	karyopherin (importin) beta 1
H200004093	ENSG00000155849	9844	ELMO1	2.8649	0.0081	engulfment and cell motility 1
H200007857	ENSG00000114388	10641	TUSC4	2.8902	0.0087	tumor suppressor candidate 4
H200001974	ENSG00000059691	5188	PET112L	2.8988	0.036	PET112-like (yeast)
H200014068	ENSG00000071575	28951	TRIB2	2.9219	0.0056	tribbles homolog 2 (<i>Drosophila</i>)
H200003858	ENSG00000106302	23553	HYAL4	2.9258	0.0048	hyaluronoglucosaminidase 4
H200007862	ENSG00000111796	3820	KLRB1	2.9323	0.0216	killer cell lectin-like receptor subfamily B, member 1
H200007187	ENSG00000011275	54476	RNF216	2.9533	0.0057	ring finger protein 216
H200015183	ENSG00000177000	4524	MTHFR	2.9668	0.0374	5,10-methylenetetrahydrofolate reductase (NADPH)
H200002872	ENSG00000007944	29116	MYLIP	2.9745	0.0221	myosin regulatory light chain interacting protein
H200003645	ENSG00000034053	321	APBA2	3.0354	0.0459	amyloid beta (A4) precursor protein-binding, family A, member 2 (X11-like)
H200012641	ENSG00000049883	79810	PTCD2	3.039	0.0415	pentatricopeptide repeat domain 2
H200017403	ENSG00000164175	51151	SLC45A2	3.0501	0.0078	solute carrier family 45, member 2
H200020167	ENSG00000118267	10778	ZNF271	3.0998	0.0306	zinc finger protein 271
H200009098	ENSG00000167258	51755	CRKRS	3.1247	0.019	Cdc2-related kinase, arginine-serine-rich
H200017222	ENSG00000076108	11176	BAZ2A	3.1381	0.0072	bromodomain adjacent to zinc finger domain, 2A
H200008763	ENSG00000197701	152687	ZNF595	3.1564	0.044	zinc finger protein 595
H200008076	ENSG00000075413	4140	MARK3	3.1637	0.017	MAP/microtubule affinity-regulating kinase 3
H200002308	ENSG00000127388	730896		3.179	0.0035	SCO-spondin homolog (<i>Bos taurus</i>) (SSPO), mRNA

H200005512	ENSG00000168273			3.1804	0.0057	SNHG8 protein (Fragment).
H200019968	ENSG0000089505	51192	CKLF/CMTM1	3.2017	0.0038	chemokine-like factor CKLF-like MARVEL transmembrane domain containing 1
H200018272	ENSG00000160282	10841	FTCD	3.2056	0.0297	formiminotransferase cyclodeaminase
H200012530	ENSG00000162849	55083	KIF26B	3.2319	0.0366	kinesin family member 26B
H200020626	ENSG00000167889	146664	MGAT5B	3.2442	0.0221	mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase, isozyme B
H200002760	ENSG00000142207		URB1	3.3171	0.0192	URB1 ribosome biogenesis 1 homolog (<i>S. cerevisiae</i>)
H200006557	ENSG0000082701	2932	GSK3B	3.3581	0.0124	glycogen synthase kinase 3 beta
H200016693	ENSG00000112394	117247	SLC16A10	3.3723	0.0085	solute carrier family 16, member 10 (aromatic amino acid transporter)
H200011681	ENSG00000129993	863	CBFA2T3	3.3904	0.0187	core-binding factor, runt domain, alpha subunit 2; translocated to, 3
H200011078	ENSG00000101665	4092	SMAD7	3.4421	0.002	SMAD family member 7
H200001166	ENSG00000111077	23371	TENC1	3.4826	0.0038	tensin like C1 domain containing phosphatase (tensin 2)
H200007443	ENSG00000148291	6835	SURF2	3.4831	0.0496	surfeit 2
H200006573	ENSG00000155368	1622	DBI	3.4864	0.0031	diazepam binding inhibitor (GABA receptor modulator, acyl-Coenzyme A binding protein)
H200012952	ENSG00000121101	56155	TEX14	3.4906	0.0331	testis expressed 14
H200002917	ENSG00000165516	23588	KLHDC2	3.5367	0.0003	kelch domain containing 2
H200006034	ENSG0000065559	6416	MAP2K4	3.5377	0.0278	mitogen-activated protein kinase kinase 4
H200000516	ENSG00000211829		TRA@	3.548	0.0059	T cell receptor alpha locus
H200006188	ENSG00000131174	1349	COX7B	3.5608	0.0089	cytochrome c oxidase subunit VIIb
H200017338	ENSG00000151914	667	DST	3.5655	0.0441	dystonin
H200013423	ENSG00000169683	648576	LRRC45	3.5732	0.0402	leucine rich repeat containing 45
H200005675	ENSG00000129451	5655	KLK10	3.6657	0.0093	kallikrein-related peptidase 10
H200013829	ENSG00000135698	10200	MPHOSPH6	3.6667	0.0333	M-phase phosphoprotein 6
H200008004	ENSG00000144559	132001	C3orf31	3.7431	0.0337	chromosome 3 open reading frame 31

H200006461	ENSG00000103855	80381	CD276	3.7681	0.0466	CD276 molecule
H200005739	ENSG00000104722	4741	NEFM	3.7897	0.0048	neurofilament, medium polypeptide 150kDa
H200001266	ENSG0000071054	9448	MAP4K4	3.7911	0.0248	mitogen-activated protein kinase kinase kinase kinase 4
H200007584	ENSG00000135677	2799	GNS	3.8287	0.0127	glucosamine (N-acetyl)-6-sulfatase (Sanfilippo disease IID)
H200017052	ENSG0000088881	57593	EBF4	3.8852	0.0116	early B-cell factor 4
H200020274	ENSG00000114812	7433	VIPR1	3.9546	0.0292	vasoactive intestinal peptide receptor 1
H200018195	ENSG0000042832	7038	TG	3.9654	3.77E-05	thyroglobulin
H200009084	ENSG00000183472			4.0285	0.0166	CDNA FLJ14100 fis, clone MAMMA1000855.
H200010096	ENSG00000135597	85021	REPS1	4.0369	0.0052	RALBP1 associated Eps domain containing 1
H200015558	ENSG0000064393	653052	HIPK2	4.0711	0.02	homeodomain interacting protein kinase 2
H200012136	ENSG0000004975	1856	DVL2	4.083	0.0441	dishevelled, dsh homolog 2 (Drosophila)
H200010107	ENSG00000137074	54840	APTX	4.1141	0.0451	aprataxin
H200017570	ENSG0000063245	29924	EPN1	4.1371	0.0489	epsin 1
H200008037	ENSG00000168807	6645	SNTB2	4.1403	0.0141	syntrophin, beta 2 (dystrophin-associated protein A1, 59kDa, basic component 2)
H200000985	ENSG00000143303	51093	C1orf66	4.1803	0.0446	chromosome 1 open reading frame 66
H200004841	ENSG00000186417	342035	GLDN	4.1939	0.0172	gliomedin
H200008244	ENSG00000136485	10238	WDR68	4.2111	0.0439	WD repeat domain 68
H200017759	ENSG00000125611	84269	CHCHD5	4.2125	0.0352	coiled-coil-helix-coiled-coil-helix domain containing 5
H200014738	ENSG00000114978	55233	MOBKL1B	4.2147	0.0282	MOB1, Mps One Binder kinase activator-like 1B (yeast)
H200016276	ENSG00000187017	83715	ESPN	4.2196	0.0105	espin
H200020482	ENSG00000126733	117154	DACH2	4.2338	0.0196	dachshund homolog 2 (Drosophila)
H200011622	ENSG00000134115	27255	CNTN6	4.2345	0.03	contactin 6
H200018371	ENSG00000138758	55752	SEPT11	4.2378	0.0121	septin 11
H200012344	ENSG00000138303	51008	ASCC1	4.2988	0.0083	activating signal cointegrator 1 complex subunit 1

H200012598	ENSG00000175928	57633	LRRN1	4.3754	0.0069	leucine rich repeat neuronal 1
H200019049	ENSG00000132153	22907	DHX30	4.4069	0.0081	DEAH (Asp-Glu-Ala-His) box polypeptide 30
H200001594	ENSG00000185420	64754	SMYD3	4.4571	0.0139	SET and MYND domain containing 3
H200004424	ENSG00000198203	6819	SULT1C2	4.4603	0.0135	sulfotransferase family, cytosolic, 1C, member 2
H200015156	ENSG00000102230	9468	PCYT1B	4.4913	0.0091	phosphate cytidylyltransferase 1, choline, beta
H200000785	ENSG00000132591	26284	ERAL1	4.499	0.0041	Era G-protein-like 1 (E. coli)
H200020403	ENSG00000002016	5893	RAD52	4.5183	0.0093	RAD52 homolog (S. cerevisiae)
H200013255	ENSG00000066294	8832	CD84	4.5259	0.0453	CD84 molecule
H200004023	ENSG00000180370	5062	PAK2	4.555	0.042	p21 (CDKN1A)-activated kinase 2
H200000996	ENSG00000108639	9144	SYNGR2	4.5578	0.0401	synaptogyrin 2
H200021191	ENSG00000166535	144568	A2ML1	4.589	0.0427	alpha-2-macroglobulin-like 1
H200004072	ENSG00000096717	23411	SIRT1	4.6515	0.0112	sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae)
H200008758	ENSG00000179981	10194	TSHZ1	4.7148	0.0482	teashirt zinc finger homeobox 1
H200004295	ENSG00000113494	5618	PRLR	4.7196	0.033	prolactin receptor
H200014772	ENSG00000178691	23512	SUZ12	4.7266	0.024	suppressor of zeste 12 homolog (Drosophila)
H200001162	ENSG00000137727	57569	ARHGAP20	4.8111	0.0275	Rho GTPase activating protein 20
H200001611	ENSG00000170113	123606	NIPA1	4.8296	0.0189	non imprinted in Prader-Willi/Angelman syndrome 1
H200003759	ENSG00000150403	55002	TMCO3	4.8887	0.0044	transmembrane and coiled-coil domains 3
H200009120	ENSG00000143772	3707	ITPKB	4.9042	0.0338	inositol 1,4,5-trisphosphate 3-kinase B
H200014807	ENSG00000155959	7411	VBP1	4.9071	0.0056	von Hippel-Lindau binding protein 1
H200003393	ENSG00000114331	23527	CENTB2	4.9142	0.0029	centaurin, beta 2
H200012025	ENSG00000103671	9325	TRIP4	4.9202	0.0126	thyroid hormone receptor interactor 4
H200000590	ENSG00000125398	6662	SOX9	4.9246	0.0292	SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-reversal)
H200013987	ENSG00000067715	6857	SYT1	4.9281	0.0214	synaptotagmin I

H200009362	ENSG00000155304	6782	STCH	4.9364	0.0155	stress 70 protein chaperone, microsome-associated, 60kDa
H200011555	ENSG00000139835	79774	GRTP1	4.995	0.0006	growth hormone regulated TBC protein 1
H200009100	ENSG00000136275	80099		5.0211	0.0145	CDNA: FLJ21075 fis, clone CAS02123.
H200017395	ENSG00000071282	29995	LMCD1	5.1141	0.0371	LIM and cysteine-rich domains 1
H200005477	ENSG00000198089	9814	SFI1	5.1223	0.0271	Sfi1 homolog, spindle assembly associated (yeast)
H200008222	ENSG00000144504	51281	ANKMY1	5.1283	0.0166	ankyrin repeat and MYND domain containing 1
H200020161	ENSG00000181704	286451	YIPF6	5.1824	0.0355	Yip1 domain family, member 6
H200020374	ENSG00000082126	58538	MPP4	5.2168	0.0198	membrane protein, palmitoylated 4 (MAGUK p55 subfamily member 4)
H200013113	ENSG00000109674	55247	NEIL3	5.3166	0.0116	nei endonuclease VIII-like 3 (E. coli)
H200012837	ENSG00000196584	7516	XRCC2	5.3317	0.0119	X-ray repair complementing defective repair in Chinese hamster cells 2
H200006403	ENSG00000144224	23190	UBXD2	5.3373	0.0329	UBX domain containing 2
H200019872	ENSG00000101074	140902	R3HDM1	5.3773	0.0376	R3H domain containing-like
H200006872	ENSG00000159069	54461	FBXW5	5.4134	0.0216	F-box and WD repeat domain containing 5
H200005112	ENSG00000158092	4690	NCK1	5.4334	0.0328	NCK adaptor protein 1
H200018060	ENSG00000124212	5740	PTGIS	5.4375	0.0182	prostaglandin I2 (prostacyclin) synthase
H200000971	ENSG00000173992	9973	CCS	5.4972	0.0468	copper chaperone for superoxide dismutase
H200001170	ENSG00000088808	23368	PPP1R13B	5.5051	0.0467	protein phosphatase 1, regulatory (inhibitor) subunit 13B
H200017510	ENSG00000105341	55101		5.5214	0.0359	ATP5S-like
H200002669	ENSG00000150455	114609	TIRAP	5.5494	0.0326	toll-interleukin 1 receptor (TIR) domain containing adaptor protein
H200017043	ENSG00000157168	3084	NRG1	5.5762	0.0294	neuregulin 1
H200020501	ENSG00000139436	9815	GIT2	5.6095	0.0132	G protein-coupled receptor kinase interactor 2
H200008948	ENSG00000119547	9480	ONECUT2	5.6653	0.0048	one cut homeobox 2
H200012627	ENSG00000166912	54893	MTMR10	5.7146	0.0058	myotubularin related protein 10
H200008345	ENSG00000196664	51284	TLR7	5.7284	0.0068	toll-like receptor 7

H200018968	ENSG00000205280			5.7923	0.0106	
H200006629	ENSG00000103018	80777	CYB5B	5.7931	0.004	cytochrome b5 type B (outer mitochondrial membrane)
H200020895	ENSG00000134716	1573	CYP2J2	5.8293	0.0037	cytochrome P450, family 2, subfamily J, polypeptide 2
H200010663	ENSG00000185585	169611	OLFML2A	5.8898	0.0297	olfactomedin-like 2A
H200000277	ENSG00000171601			5.898	0.0449	
H200013754	ENSG00000105376	7087	ICAM5	5.9046	0.0239	intercellular adhesion molecule 5, telencephalin
H200001940	ENSG00000106819	54829	ASPN	5.965	0.0288	asporin
H200009609	ENSG00000079246	7520	XRCC5	5.9731	0.0074	X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining; Ku autoantigen, 80kDa)
H200017863	ENSG00000164379	94234	FOXQ1	6.0075	0.0392	forkhead box Q1
H200006519	ENSG00000099864	5064	PALM	6.0132	0.0056	paralemmin
H200013426	ENSG00000171863	6201	RPS7	6.0287	0.0259	ribosomal protein S7
H200010373	ENSG00000054356	5798	PTPRN	6.0644	0.0001	protein tyrosine phosphatase, receptor type, N
H200019599	ENSG00000134508	91768	CABLES1	6.0799	0.0325	Cdk5 and Abl enzyme substrate 1
H200004888	ENSG00000143493	25896	INTS7	6.082	0.0014	integrator complex subunit 7
H200007741	ENSG00000133997	10001	MED6	6.2065	0.0072	mediator complex subunit 6
H200019614	ENSG00000123154	84292		6.2146	0.0187	Mitogen-activated protein kinase organizer 1 (MAPK organizer 1).
H200013568	ENSG00000130635	1289	COL5A1	6.2263	0.0487	collagen, type V, alpha 1
H200012927	ENSG00000186999			6.2313	0.0218	
H200001241	ENSG00000183479	11219	TREX2	6.3157	0.0041	three prime repair exonuclease 2
H200010344	ENSG00000101977	4168	MCF2	6.318	0.0064	MCF.2 cell line derived transforming sequence
H200008163	ENSG00000162407	8613	PPAP2B	6.3223	0.0093	phosphatidic acid phosphatase type 2B
H200004045	ENSG00000148219	23245	ASTN2	6.6273	0.0172	astrotactin 2
H200006464	ENSG00000061918	2983	GUCY1B3	6.7102	0.0079	guanylate cyclase 1, soluble, beta 3
H200002764	ENSG00000091164	9352	TXNL1	6.7818	0.0174	thioredoxin-like 1

H200013128	ENSG00000134698	192670	EIF2C4	6.849	0.02	eukaryotic translation initiation factor 2C, 4
H200000750	ENSG00000126545	1446	CSN1S1	6.8572	0.041	casein alpha s1
H200015616	ENSG00000077684	79960	PHF17	6.9007	0.0015	PHD finger protein 17
H200019668	ENSG00000164347	84340	GFM2	6.9454	0.0222	G elongation factor, mitochondrial 2
H200006084	ENSG00000177889	7334	UBE2N	7.0038	0.0032	ubiquitin-conjugating enzyme E2N (UBC13 homolog, yeast)
H200014345	ENSG00000199179			7.0054	0.0366	hsa-let-7i
H200015113	ENSG00000188379	3440	IFNA2	7.0087	0.0262	interferon, alpha 2
H200013279	ENSG00000114054	5096	PCCB	7.0102	0.0091	propionyl Coenzyme A carboxylase, beta polypeptide
H200003477	ENSG00000197003			7.1105	0.0088	Protein PRO0461.
H200019196	ENSG00000128313	80831	APOL5	7.1321	0.0352	apolipoprotein L, 5
H200016197	ENSG00000180547			7.1854	0.0056	
H200016491	ENSG00000077080	51412	ACTL6B	7.493	0.0038	actin-like 6B
H200003635	ENSG00000100577	2954	GSTZ1	7.5034	0.031	glutathione transferase zeta 1 (maleylacetoacetate isomerase)
H200015530	ENSG00000132612	27183	VPS4A	7.6667	0.0189	vacuolar protein sorting 4 homolog A (S. cerevisiae)
H200018373	ENSG00000171530	6902	TBCA	7.7611	0.0053	tubulin folding cofactor A
H200003298	ENSG00000118200	23271	CAMSAP1L1	7.7907	0.0045	calmodulin regulated spectrin-associated protein 1-like 1
H200007951	ENSG00000120925	81790	RNF170	7.7982	0.001	ring finger protein 170
H200008739	ENSG00000137876	730628	C15orf15	7.827	0.0001	chromosome 15 open reading frame 15
H200019778	ENSG00000128159	85378	TUBGCP6	8.1089	0.0251	tubulin, gamma complex associated protein 6
H200019082	ENSG00000100575	26520	TIMM9	8.1723	0.0341	translocase of inner mitochondrial membrane 9 homolog (yeast)
H200010458	ENSG00000119041	9330	GTF3C3	8.22	0.017	general transcription factor IIIC, polypeptide 3, 102kDa
H200002495	ENSG00000168090	10980	COPS6	8.2307	0.0159	COP9 constitutive photomorphogenic homolog subunit 6 (Arabidopsis)
H200000387	ENSG00000163132	4487	MSX1	8.2874	0.0017	msh homeobox 1
H200019275	ENSG00000166455	123775	C16orf46	8.3284	0.0219	chromosome 16 open reading frame 46

H200016469	ENSG00000161047			8.3602	0.0116	
H200009447	ENSG00000133812	81846	SBF2	8.3625	0.0013	SET binding factor 2
H200008245	ENSG00000184374	10584	COLEC10	8.3844	0.0079	collectin sub-family member 10 (C-type lectin)
H200019257	ENSG00000184991			8.3868	0.0321	testis-specific transcript, Y-linked 13 (TTTY13) on chromosome Y
H200011684	ENSG00000132517	55065	GPR172B	8.3988	0.0146	G protein-coupled receptor 172B
H200019244	ENSG00000183614			8.6602	0.0303	
H200020820	ENSG00000214880		OR7E5P	8.7133	0.0275	olfactory receptor, family 7, subfamily E, member 5 pseudogene
H200003984	ENSG00000189050	51136		8.8274	0.0335	ring finger protein, transmembrane 1
H200011294	ENSG00000136710	84317	CCDC115	8.8521	0.009	coiled-coil domain containing 115
H200012606	ENSG00000181315	79692	ZNF322A	9.0228	0.0057	zinc finger protein 322A
H200000189	ENSG00000166147	2200	FBN1	9.0453	0.011	fibrillin 1
H200010336	ENSG0000012779	240	ALOX5	9.2276	0.0034	arachidonate 5-lipoxygenase
H200008496	ENSG00000169251	51068	NMD3	9.301	0.0157	NMD3 homolog (<i>S. cerevisiae</i>)
H200005960	ENSG00000105290	333	APLP1	9.3127	0.0005	amyloid beta (A4) precursor-like protein 1
H200019207	ENSG00000147138	84636	GPR174	9.3461	0.0089	G protein-coupled receptor 174
H200018203	ENSG00000111186	81029	WNT5B	9.3928	0.0275	wingless-type MMTV integration site family, member 5B
H200006842	ENSG00000138030	3795	KHK	9.429	0.0366	ketohexokinase (fructokinase)
H200021274	ENSG00000183303	120065	OR5P2	9.6318	0.0295	olfactory receptor, family 5, subfamily P, member 2
H200012753	ENSG00000163106	27306		9.7295	0.0001	Glutathione-requiring prostaglandin D synthase (Glutathione-dependent PGD synthetase) (Prostaglandin-H2 D-isomerase) (Hematopoietic prostaglandin D synthase) (H-PGDS).
H200017074	ENSG00000006025	114881	OSBPL7	9.7377	0.0085	oxysterol binding protein-like 7
H200001690	ENSG00000185619	10336	PCGF3	9.8246	0.0018	polycomb group ring finger 3
H200020880	ENSG00000164683	23462	HEY1	9.9351	0.033	hairy/enhancer-of-split related with YRPW motif 1
H200009239	ENSG00000163874	80149	ZC3H12A	9.9684	0.0064	zinc finger CCCH-type containing 12A

H200002671	ENSG00000204625	10255		10.0707	0.0269	HLA complex group 9
H200007324	ENSG00000099617	1943	EFNA2	10.0815	0.0092	ephrin-A2
H200009906	ENSG00000147454		SLC25A37	10.0855	0.0451	solute carrier family 25, member 37
H200017350	ENSG00000126945	3188	HNRPH2	10.0925	0.0029	heterogeneous nuclear ribonucleoprotein H2 (H ^l)
H200012748	ENSG00000197557	92104	TTC30A	10.4903	0.0357	tetratricopeptide repeat domain 30A
H200007035	ENSG00000053747	3909	LAMA3	10.6139	0.0105	laminin, alpha 3
H200014649	ENSG00000100038	8940	TOP3B	10.6944	0.009	topoisomerase (DNA) III beta
H200014322	ENSG00000214113	57128	LYRM4	10.7268	0.0454	LYR motif-containing protein 4.
H200017815	ENSG00000095203	54566	EPB41L4B	10.8208	0.0266	erythrocyte membrane protein band 4.1 like 4B
H200010100	ENSG0000013288	23324	MAN2B2	10.979	0.0198	mannosidase, alpha, class 2B, member 2
H200014260	ENSG00000105819	9512	PMPCB	11.2026	0.0014	peptidase (mitochondrial processing) beta
H200004865	ENSG00000112249	10973	ASCC3	11.2592	0.0112	activating signal cointegrator 1 complex subunit 3
H200013807	ENSG00000144283	8502	PKP4	11.3081	0.0047	plakophilin 4
H200016939	ENSG00000131018	387079	C6orf98/SYNE1	11.3362	0.0111	spectrin repeat containing, nuclear envelope 1 chromosome 6 open reading frame 98
H200008023	ENSG00000209705			11.3822	0.0477	
H200019170	ENSG00000124098	116151	C20orf108	11.5465	0.0077	chromosome 20 open reading frame 108
H200013893	ENSG00000181852	10193	RNF41	11.5798	0.0039	ring finger protein 41
H200008481	ENSG00000025770	29781	NCAPH2	11.6178	0.0045	non-SMC condensin II complex, subunit H2
H200014123	ENSG00000213402	5790	PTPRCAP	11.7301	0.0234	protein tyrosine phosphatase, receptor type, C-associated protein
H200003489	ENSG00000103266	10273	STUB1	11.7948	0.0142	STIP1 homology and U-box containing protein 1
H200013901	ENSG00000117650	4751	NEK2	11.8074	0.0073	NIMA (never in mitosis gene a)-related kinase 2
H200018301	ENSG00000164619	168667	BMPER	12.0395	0.0024	BMP binding endothelial regulator
H200005190	ENSG00000105849	221830	TWISTNB	12.0894	0.0084	TWIST neighbor
H200000886	ENSG00000074276	54825		12.1119	0.0088	protocadherin 24

H200013925	ENSG00000166998	548596	CKMT1A/CKMT1B	12.2954	0.0249	creatine kinase, mitochondrial 1A
H200020940	ENSG00000185774	80333	KCNIP4	12.4716	0.0084	Kv channel interacting protein 4
H200006652	ENSG00000171791	596	BCL2	12.5115	0.0028	B-cell CLL/lymphoma 2
H200001769	ENSG00000169220	10636	RGS14	12.693	0.0252	regulator of G-protein signaling 14
H200008820	ENSG00000151718	80014	WWC2	12.7011	0.0004	WW and C2 domain containing 2
H200011810	ENSG00000137486	408	ARRB1	12.7109	0.0167	arrestin, beta 1
H200007142	ENSG00000178053	4291	MLF1	12.8446	0.0493	myeloid leukemia factor 1
H200011857	ENSG00000120158	10171	RCL1	13.0246	0.0101	RNA terminal phosphate cyclase-like 1
H200009428	ENSG00000124209	57403	RAB22A	13.1295	0.0168	RAB22A, member RAS oncogene family
H200009508	ENSG00000170616	83482	SCRT1	13.1421	0.0089	scratch homolog 1, zinc finger protein (Drosophila)
H200009826	ENSG00000131737	3885	KRT34	13.1692	0.0069	keratin 34
H200011678	ENSG00000127743	27190	IL17B	13.421	0.0017	interleukin 17B
H200016627	ENSG00000165819	56339	METTL3	13.5401	0.0054	methyltransferase like 3
H200008957	ENSG00000083067	80036	TRPM3	14.2005	0.007	transient receptor potential cation channel, subfamily M, member 3
H200000761	ENSG00000155833	1539	CYLC2	14.351	0.0168	cyclicin, basic protein of sperm head cytoskeleton 2
H200004951	ENSG00000113396	28965	SLC27A6	14.655	0.0206	solute carrier family 27 (fatty acid transporter), member 6
H200015533	ENSG00000112312	51053	GMNN	15.3177	0.0211	geminin, DNA replication inhibitor
H200015495	ENSG00000136872	229	ALDOB	15.3782	0.0085	aldolase B, fructose-bisphosphate
H200021160	ENSG00000127589	56604	TUBB4Q	15.432	0.0151	tubulin, beta polypeptide 4, member Q
H200020609	ENSG00000166253	643923		15.8103	0.0053	CDNA FLJ25337 fis, clone TST00714.
H200011305	ENSG00000126464	57479	PRR12	15.8338	0.0107	proline rich 12
H200003419	ENSG00000163026	80304	C2orf44	16.0192	0.002	chromosome 2 open reading frame 44
H200018393	ENSG00000139793	10150	MBNL2	16.478	0.0229	muscleblind-like 2 (Drosophila)
H200009541	ENSG00000201719		SNORD87	16.9103	0.0025	small nucleolar RNA, C/D box 87 (SNORD87) on chromosome 8

H200006745	ENSG00000111859	4739	NEDD9	17.2313	0.0069	neural precursor cell expressed, developmentally down-regulated 9
H200017363	ENSG00000124391	27189	IL17C	17.3907	0.0054	interleukin 17C
H200009138	ENSG00000162701	163486	DENND1B	17.4052	0.0104	chromosome 1 open reading frame 218 DENN/MADD domain containing 1B
H200010642	ENSG00000099139	5125	PCSK5	17.4946	0.008	proprotein convertase subtilisin/kexin type 5
H200009878	ENSG00000095015	4214	MAP3K1	17.8147	0.0348	mitogen-activated protein kinase kinase kinase 1
H200011262	ENSG00000174899			18.1113	0.0025	Uncharacterized protein C3orf55 (Fragment).
H200019572	ENSG00000052795	57600		18.1372	0.0086	CDNA FLJ12906 fis, clone NT2RP2004373.
H200005256	ENSG00000183386	2275	FHL3	18.4733	0.0003	four and a half LIM domains 3
H200013063	ENSG0000009830	29954	POMT2	18.5378	0.0079	protein-O-mannosyltransferase 2
H200018336	ENSG00000071189	23161	SNX13	18.6283	0.0037	sorting nexin 13
H200008000	ENSG00000067596	1659	DHX8	19.3998	0.0049	DEAH (Asp-Glu-Ala-His) box polypeptide 8
H200004462	ENSG00000148655	83938	C10orf11	19.568	0.0033	chromosome 10 open reading frame 11
H200004977	ENSG00000164898	154791	C7orf55	20.0871	0.0047	chromosome 7 open reading frame 55
H200021001	ENSG00000144468	84236	RHBDD1	20.1338	0.0008	rhomboid domain containing 1
H200010069	ENSG00000163508	8320	EOMES	20.2338	0.021	eomesodermin homolog (<i>Xenopus laevis</i>)
H200013750	ENSG00000118557	83449	PMFBP1	20.2892	0.0123	polyamine modulated factor 1 binding protein 1
H200015791	ENSG00000179915	9378	NRXN1	20.3044	0.0285	neurexin 1
H200019798	ENSG00000197171			21.0562	0.0185	
H200013212	ENSG00000138041	57223	SMEK2	21.2081	0.0418	SMEK homolog 2, suppressor of mek1 (<i>Dictyostelium</i>)
H200020558	ENSG00000101236	11237	RNF24	21.2658	0.0025	ring finger protein 24
H200004900	ENSG00000126091	6487	ST3GAL3	21.3865	0.0011	ST3 beta-galactoside alpha-2,3-sialyltransferase 3
H200004182	ENSG00000111906	51020	HDDC2	21.7419	0.0455	HD domain containing 2
H200007953	ENSG00000050628	5733	PTGER3	21.8288	0.0032	prostaglandin E receptor 3 (subtype EP3)
H200003742	ENSG00000127554	2671	GFER	21.8449	0.0358	growth factor, augmenter of liver regeneration (ERV1 homolog, <i>S. cerevisiae</i>)

H200011319	ENSG00000104804	7288	TULP2	23.4975	0.006	tubby like protein 2
H200018881	ENSG00000137817	56965	PARP6	23.6306	0.0137	poly (ADP-ribose) polymerase family, member 6
H200015526	ENSG00000149972	53942	CNTN5	23.9539	0.0062	contactin 5
H200004477	ENSG00000118308	4033	LRMP	24.5834	0.0012	lymphoid-restricted membrane protein
H200008113	ENSG00000176087	113829	SLC35A4	26.2578	0.0006	solute carrier family 35, member A4
H200004033	ENSG00000095066	29911	HOOK2	26.89	0.0067	hook homolog 2 (<i>Drosophila</i>)
H200006046	ENSG00000067829	3421	IDH3G	27.2408	0.0093	isocitrate dehydrogenase 3 (NAD+) gamma
H200016167	ENSG00000109424	7350	UCP1	28.2351	0.0153	uncoupling protein 1 (mitochondrial, proton carrier)
H200006418	ENSG00000113734	662	BNIP1	28.8151	0.0139	BCL2/adenovirus E1B 19kDa interacting protein 1
H200014627	ENSG00000108854	64750	SMURF2	29.3242	0.0131	SMAD specific E3 ubiquitin protein ligase 2
H200011196	ENSG00000113269	55819	RNF130	29.7387	0.0167	ring finger protein 130
H200011887	ENSG00000197816	57653	KIAA1529	29.9362	0.0021	KIAA1529
H200020087	ENSG00000167210	125336	LOXHD1	29.9603	0.0004	lipoxygenase homology domains 1
H200020149	ENSG00000185551	7026	NR2F2	30.0702	0.0077	nuclear receptor subfamily 2, group F, member 2
H200009400	ENSG00000119242	80212	CCDC92	30.9582	0.0029	coiled-coil domain containing 92
H200000915	ENSG00000130826	1736	DKC1	30.9967	0.0002	dyskeratosis congenita 1, dyskerin
H200016629	ENSG00000124181	5335	PLCG1	31.6276	0.0013	phospholipase C, gamma 1
H200014114	ENSG00000184132			31.6762	0.0435	
H200010169	ENSG00000007384	64285	RHBDF1	31.9303	0.0058	rhomboid 5 homolog 1 (<i>Drosophila</i>)
H200009494	ENSG00000041982	3371	TNC	32.5237	0.0007	tenascin C (hexabrachion)
H200010960	ENSG00000105880	1749	DLX5	32.5302	0.0076	distal-less homeobox 5
H200011136	ENSG00000109794	25854		32.8421	0.0086	family with sequence similarity 149, member A
H200006072	ENSG00000171848	6241	RRM2	33.7388	0.0049	ribonucleotide reductase M2 polypeptide
H200010314	ENSG00000064835	5449	POU1F1	34.4214	0.0118	POU class 1 homeobox 1

H200002733	ENSG00000176410	84277	WBSCR18	34.5233	0.0011	Williams Beuren syndrome chromosome region 18
H200010350	ENSG00000127415	3425	IDUA	35.5822	0.0022	iduronidase, alpha-L-
H200007472	ENSG00000198598	4326	MMP17	36.4776	0.0155	matrix metallopeptidase 17 (membrane-inserted)
H200015703	ENSG00000099337	9424	KCNK6	37.518	0.0119	potassium channel, subfamily K, member 6
H200017615	ENSG00000089335		ZNF302	38.0605	0.0239	zinc finger protein 302
H200017149	ENSG00000122696	92014	MCART1	38.4257	0.0076	mitochondrial carrier triple repeat 1
H200007695	ENSG00000113073	83697	SLC4A9	38.6212	0.0286	solute carrier family 4, sodium bicarbonate cotransporter, member 9
H200011908	ENSG00000146006	26045	LRRTM2	39.9205	0.0118	leucine rich repeat transmembrane neuronal 2
H200004368	ENSG00000126549	6779	STATH	40.4592	0.004	statherin
H200010481	ENSG00000077943	8516	ITGA8	41.0895	0.0082	integrin, alpha 8
H200017065	ENSG00000114861	27086	FOXP1	42.7577	0.0486	forkhead box P1
H200017981	ENSG00000163823	1230	CCR1	43.9668	0.0031	chemokine (C-C motif) receptor 1
H200009721	ENSG00000184611	90134	KCNH7	46.7614	0.0007	potassium voltage-gated channel, subfamily H (eag-related), member 7
H200016041	ENSG00000212831			47.433	0.0053	Similar to Argininosuccinate synthase (Citrulline--aspartate ligase).
H200014583	ENSG00000131127	7700	ZNF141	49.1495	0.0058	zinc finger protein 141
H200005263	ENSG00000150637	10666	CD226	50.2244	0.0219	CD226 molecule
H200007667	ENSG00000143437	405	ARNT	50.6179	0.0071	aryl hydrocarbon receptor nuclear translocator
H200015201	ENSG00000113716			51.9429	0.0379	SMF protein (Fragment).
H200018780	ENSG00000207858			53.7803	0.0004	hsa-mir-622
H200021040	ENSG00000123570	51209	RAB9B	56.6112	0.019	RAB9B, member RAS oncogene family
H200015025	ENSG00000163673	85443	DCLK3	59.7641	0.0013	doublecortin-like kinase 3
H200012279	ENSG00000182791	55231	CCDC87	64.1952	0.0186	coiled-coil domain containing 87
H200016253	ENSG00000163157	29765	TMOD4	71.9344	0.0021	tropomodulin 4 (muscle)
H200020912	ENSG00000132849	10207	INADL	72.2896	0.0018	InaD-like (Drosophila)

H200011148	ENSG00000114115	5947	RBP1	72.5817	0.0067	retinol binding protein 1, cellular
H200002833	ENSG00000130921	91574	C12orf65	72.6419	0.006	chromosome 12 open reading frame 65
H200000605	ENSG00000163810	7047	TGM4	79.0897	0.0095	transglutaminase 4 (prostate)
H200020300	ENSG00000167588	2819	GPD1	83.5054	0.0038	glycerol-3-phosphate dehydrogenase 1 (soluble)
H200021047	ENSG00000170946	120526	DPH4	109.7523	0.0046	DPH4, JJ3 homolog (<i>S. cerevisiae</i>)

Supplementary Table II: Staining panel used for polychromatic flow cytometry. **(A)** Panel used for mDC, pDC, monocyte intracellular cytokine staining. **(B)** Panel used for T cell, B cell intracellular cytokine staining.

A. mDC, pDC, Monocyte ICC

	Antibody Name <i>Clone Name</i>	Vendor cat# <i>dilution used</i>
VIOLET		
AmCy/PO	CD123 AmCyan (9F5)	BD#custom 1:50
PB	IL10 (JES3-9D7)	eBio#57-7108-71 1:100
RED		
APC	CD11c (5HCL3)	BD#340714 1:50
AC7	IL6 (AS12)	BD#custom 1:100
Ax 700	TNF α (Mab11)	BD#557996 1:100
BLUE		
FITC/OG	MCP-1 (23002)	R&D#IC2791F 1:100
PE	IL8 (G265-8)	BD#554720 1:200
PerCPCy5.5	MHCII (TU36)	BD#custom 1:100
PC7	CD14 (61D3)	eBio#25-0149 1:50

B. T-cell, B-cell ICC

	Antibody Name <i>Clone Name</i>	Vendor cat# <i>dilution used</i>
VIOLET		
AmCy/PO	CD3 (UCHT1)	BD#555330 1:50
PB	IL10 (JES3-9D7)	eBio#57-7108-71 1:100
RED		
AC7	IL6 (AS12)	BD#custom 1:100
Ax 700	TNF α (Mab11)	BD#557996 1:100
BLUE		
FITC/OG	MCP-1 (23002)	R&D#IC2791F 1:100
PE	IL8 (G265-8)	BD#554720 1:200
PE-TR	CD19 (HIB19)	BD#554720 1:50

Supplementary Table III: Summary of primers used for qRT-PCR.

Gene	Forward primer (5'-3')	Reverse Primer (5'-3')
GAPDH	GTCGCTGTTGAAGTCAGAGG	GAAACTGTGGCGTGATGG
CXCL1	GCCAGTGCTTGCAGACCCCT	GGCTATGACTTCGGTTGGG
CCL2 (MCP-1)	TCATAGCAGCCACCTTCATT	TAGCGCAGATTCTGGGTTG
CCL7 (MCP-3)	AAGCAGAGGCTGGAGAGCTACA	GGGTCAGCACAGATCTCCTTG
IL-19	GAGCCATCCAAGCTAAGGACA	CTTGGTCACGCAGCACACAT
IL-10	GGTTGCCAAGCCTTGTCTGA	AGGGAGTTCACATGCGCCT
ITPKB	TTCTTCAAGTGCCACGAGGT	TTGGCCTGTTCCCTTGTGTC
MEK-6	GAAGGCAGATGACCTGGAGC	TCACTGCCATGATCTGCC
TNF- α	TGGAGAAGGGTGACCGACTC	TCCTCACAGGGCAATGATCC
TIRAP	CCTTCCCCAGATCCCGAATA	GACCTCATGGAGCAGCCATC
PPAP2B	GCTCATCTGCCTCGACCT	TGCTTGTCTCGATGATGAGG
NRP-1	CACATTCACAAGAAGATTGTGC	CATCAATTAAATTCTGGGTTCTT
CD226	TCTTTACACTTACCCACAGGAAAC	GCACAGCTGCCTAAAACTA
CCR1	CTGTGCAAGTGACGGAGGTG	CAACTGCCGCAGGTACTTCC
ITGA8	ACAATGACATTGCCATCGGA	GGAAGGCTTGGTGTAAAGCC
IFIT1	CAGAGGAGCCTGGCTAACGA	GGATTGCAGATGGCTCCTTC
IFNA2	CAAAAGGCTGAAACCATCCC	AGGAGGGTCTCATCCCAAGC