

Table S5. Gene transcripts exclusively upregulated in macrophages stimulated with live *Borrelia burgdorferi* (Bb) at 24 h post-stimulation

Gene number	Annotation	Fold change	Description/function
		Live Bb	
Cytokine			
NM_031168	Il6	10.65	Interleukin 6
AK076547	AK076547	4.39	unknown
NM_021380	Il20	4.32	Interleukin 20
NM_019932	Cxcl4	2.21	Chemokine (C-X-C motif) ligand 4
Enzyme			
AK044842	AK044842	7.3	Phospholipase C, beta 4
NM_145209	Oas11	6.6	2'-5' oligoadenylate synthetase-like 1
NM_010356	Gsta3	5.65	Glutathione S-transferase, alpha 3
NM_021384	Rsad2	4.76	Radical S-adenosyl methionine domain containing 2
NM_172689	Ddx58	4.24	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58
NM_011866	Pde10a	4.2	Phosphodiesterase 10A
NM_010260	Gbp2	4.06	Guanylate nucleotide binding protein 2
AK076333	Ganc	3.45	Glucosidase, alpha; neutral C
NM_010239	Fth1	3.29	Ferritin heavy chain 1
NM_011637	Trex1	3.27	Three prime repair exonuclease 1
NM_145226	Oas3	3.18	2'-5' oligoadenylate synthetase 3
NM_024198	Gpx7	2.99	Glutathione peroxidase 7
NM_016903	Esd	2.9	Esterase D/formylglutathione hydrolase
NM_011854	Oas12	2.79	2'-5' oligoadenylate synthetase-like 2
NM_011227	Rab20	2.67	RAB20, member RAS oncogene family
NM_016676	Rab10	2.58	RAB10, member RAS oncogene family
NM_028803	Gbe1	2.58	Glucan (1,4-alpha-), branching enzyme 1
NM_133348	Acot7	2.48	Acyl-CoA thioesterase 7
NM_011408	Slfn2	2.46	Schlafen 2
NM_007981	Acs11	2.31	Acyl-CoA synthetase long-chain family member 1
NM_011034	Prdx1	2.27	unknown
NM_010927	Nos2	2.19	Nitric oxide synthase 2, inducible, macrophage
NM_008102	Gch1	2.16	GTP cyclohydrolase 1
G-protein coupled receptor			
NM_029573	Idh3a	2.02	Isocitrate dehydrogenase 3 (NAD+) alpha
NM_146758	Olfir678	16.03	Olfactory receptor 678
NM_145066	Gpr85	4.04	G protein-coupled receptor 85
NM_017466	Ccr12	3.79	Chemokine (C-C motif) receptor-like 2
Growth factor			
NM_146488	Olfir137	3.62	Olfactory receptor 137
Ion channel			
NM_011819	Gdf15	2.18	Growth differentiation factor 15
Kinase			
NM_024412	Clcnka	3.39	Chloride channel Ka
AK036317	Raf1	7.41	V-raf-leukemia viral oncogene 1

NM_020557	Tyki	6.43	Thymidylate kinase family LPS-inducible member
NM_172161	Irak2	3.02	Interleukin-1 receptor-associated kinase 2
NM_001024856	Ttbk2	2.31	Tau tubulin kinase 2
NM_008413	Jak2	2.28	Janus kinase 2
NM_024182	Riok3	2.26	RIO kinase 3 (yeast)
Peptidase			
NM_007793	Cstb	2.03	Cystatin B
NM_001013767	Capn11	4.53	Calpain 11
NM_175440	Prss27	2.76	Protease, serine 27
BC022737	A530088I07Rik	2.64	RIKEN cDNA A530088I07 gene
Phosphatase			
NM_009807	Casp1	2.22	Caspase 1
NM_008976	Ptpn14	5.16	Protein tyrosine phosphatase, non-receptor type 14
NM_008903	Ppap2a	3.04	Phosphatidic acid phosphatase 2a
NM_022883	Lpin3	2.97	Lipin 3
Transcription regulator			
NM_007387	Acp2	2.23	Acid phosphatase 2, lysosomal
NM_010755	Maff	3.49	V-maf musculoaponeurotic fibrosarcoma oncogene family, protein F (avian)
NM_010468	Hoxd3	3.44	Homeo box D3
NM_009546	Trim25	3.22	Tripartite motif protein 25
NM_008329	Ifi204	3.03	Interferon activated gene 204
BC052532	BC006779	2.79	CDNA sequence BC006779
NM_007837	Ddit3	2.65	DNA-damage inducible transcript 3
NM_010908	Nfkbib	2.57	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, beta
NM_016883	Psmc10	2.5	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 10
NM_010723	Lmo4	2.42	LIM domain only 4
NM_177821	Ep300	2.39	E1A binding protein p300
NM_007591	Calr	2.22	Calreticulin
NM_010928	Notch2	2.21	Notch gene homolog 2 (Drosophila)
NM_008601	Mitf	2.09	Microphthalmia-associated transcription factor
NM_008689	Nfkb1	2.06	Nuclear factor of kappa light chain gene enhancer in B-cells 1, p105
Translation regulator			
NM_018807	Plagl2	2.03	Pleiomorphic adenoma gene-like 2
Transmembrane receptor			
NM_013507	Eif4g2	2.24	Eukaryotic translation initiation factor 4, gamma 2
NM_011150	Lgals3bp	2.64	Lectin, galactoside-binding, soluble, 3 binding protein
NM_009259	Spn	2.46	Sialophorin
NM_011113	Plaur	2.2	Plasminogen activator, urokinase receptor
Transporter			
NM_023680	Tnfrsf22	2.18	Tumor necrosis factor receptor superfamily, member 22
NM_030683	Slc14a2	8.3	Solute carrier family 14 (urea transporter), member 2
NM_011990	Slc7a11	5.97	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 11
NM_013790	Abcc5	2.85	ATP-binding cassette, sub-family C (CFTR/MRP), member 5

NM_013612	Slc11a1	2.75	Solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1
NM_001012305	Slc39a12	2.62	Solute carrier family 39 (zinc transporter), member 12
NM_175090	Slc31a1	2.58	Solute carrier family 31, member 1
NM_023044	Slc15a3	2.5	Solute carrier family 15, member 3
NM_172659	Slc2a6	2.39	Solute carrier family 2 (facilitated glucose transporter), member 6
NM_007423	Afp	2.33	Alpha fetoprotein
Other			
NM_027915	Ap2b1	2.16	Adaptor-related protein complex 2, beta 1 subunit
NM_138671	Nadk	2.17	NAD kinase
AK032364	D4Ert478e	8.46	Oxysterol binding protein-like 9
BC068233	BC068233	8.46	unknown
NM_011627	Tpbp	7.79	Trophoblast glycoprotein
NM_207238	Fbxo27	7.23	F-box protein 27
AK045754	AK045754	6.66	unknown
AK046877	Tshz2	6.48	Teashirt zinc finger family member 2
NM_178381	Trp53i5	6.3	Transmembrane protein 16J
AK046736	Fbxo39	5.32	F-box protein 39
A_52_P940816	A_52_P940816	5.3	unknown
AK017269	Mfap3l1	5.19	Microfibrillar-associated protein 3-like
NM_025549	Arrdc4	5.03	Arrestin domain containing 4
NM_198635	LOC333669	4.76	Predicted gene, EG333669
NM_023386	Rtp4	4.69	Receptor transporter protein 4
AK035387	9530028C05	4.6	Sterile alpha motif domain containing 9-like
AK031754	C130092O11Rik	4.59	RIKEN cDNA C130092O11 gene
AK085249	AK085249	4.41	Predicted gene, ENSMUSG00000054178
AK050750	AK050750	4.39	9 days embryo whole body cDNA, RIKEN full-length enriched library, clone:D030015J17 product:serine/threonine kinase 13 (aurora/IPL-like), full insert sequence
NM_001008427	LOC434179	4.38	Predicted gene, EG434179
NM_010259	Gbp1	4.38	Guanylate nucleotide binding protein 1
AK084077	AK084077	4.28	unknown
AK015510	4930465M20Rik	4.16	RIKEN cDNA 4930465M20 gene
NM_009805	Cflar	4.03	CASP8 and FADD-like apoptosis regulator
NM_008331	Ifit1	4.02	Interferon-induced protein with tetratricopeptide repeats 1
NM_198176	Fastkd5	3.97	FAST kinase domains 5
NM_007535	Bcl2a1c	3.95	B-cell leukemia/lymphoma 2 related protein A1c
NM_009920	Cnih2	3.94	Cornichon homolog 2 (Drosophila)
AK081000	E230024E03Rik	3.83	RIKEN cDNA E230024E03 gene
AK010122	2310069B03Rik	3.82	unknown
AB010317	AB010317	3.78	unknown
AK030769	Rab11fip1	3.72	RAB11 family interacting protein 1 (class I)
AK046529	Ptcd2	3.58	Adult male adrenal gland cDNA, RIKEN full-length enriched library, clone:B330013C06 product:unclassifiable, full insert sequence
NAP102122-1	NAP102122-1	3.56	unknown
NAP007796-001	NAP007796-001	3.54	unknown

NM_133871	Ifi44	3.43	Interferon-induced protein 44
NM_008528	Blnk	3.39	B-cell linker
U89435	Nup188	3.39	Nucleoporin 188
AK006923	1700069L16Rik	3.21	RIKEN cDNA 1700069L16 gene
NM_145153	Oas1f	3.19	2'-5' oligoadenylate synthetase 1F
AK042825	AK042825	3.18	unknown
NM_008655	Gadd45b	3.16	Growth arrest and DNA-damage-inducible 45 beta
NM_183177	BC052046	3.16	Zinc finger protein 811
AK033743	Lcn6	3.14	Lipocalin 6
AK048646	AK048646	3.14	unknown
BC025186	LOC628856	3.11	Predicted gene, ENSMUSG00000053531
NM_175326	D330045A20Rik	2.99	RIKEN cDNA D330045A20 gene
AB041806	AB041806	2.97	Hypothetical protein, MNCb-2457
TC1471783	TC1471783	2.95	unknown
NM_148925	Fyco1	2.94	FYVE and coiled-coil domain containing 1
XM_203999	Rapgef2	2.92	unknown
NM_011171	Procr	2.91	Protein C receptor, endothelial
NM_019992	AI586015	2.91	Signal transducing adaptor family member 1
AV030849	AV030849	2.9	unknown
XM_977926	Ggps1	2.9	unknown
NM_029145	Rnase10	2.88	Ribonuclease, RNase A family, 10 (non-active)
NM_199015	D14Ert668e	2.81	DNA segment, Chr 14, ERATO Doi 668, expressed
AK044390	AK044390	2.8	unknown
NM_009896	Socs1	2.79	Suppressor of cytokine signaling 1
NM_011426	Siglec1	2.79	Sialic acid binding Ig-like lectin 1, sialoadhesin
AK083897	AK083897	2.78	12 days embryo spinal ganglion cDNA, RIKEN full-length enriched library, clone:D130053N18 product:unclassifiable, full insert sequence
AK087910	D130020L05Rik	2.77	SMEK homolog 1, suppressor of mek1 (Dictyostelium)
ENSMUST00000016144	ENSMUST00000016144	2.76	unknown
AK011495	Lman1	2.74	Lectin, mannose-binding, 1
NM_011191	Psme2b-ps	2.71	unknown
NM_001029892	MGC107415	2.68	unknown
NM_001040005	D11Ert759e	2.68	Ring finger protein 213
NM_146097	Cbwd1	2.64	COBW domain containing 1
NM_019914	Mllt11	2.63	Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 11
NM_008909	Ppl	2.61	Periplakin
NM_027649	Spats1	2.6	Spermatogenesis associated, serine-rich 1
NM_203507	Rwdd4a	2.57	RWD domain containing 4A
NAP063869-1	NAP063869-1	2.56	unknown
NM_001039530	Parp14	2.55	Poly (ADP-ribose) polymerase family, member 14
NM_010807	Marcks11	2.53	MARCKS-like 1
NM_007534	Bcl2a1b	2.52	B-cell leukemia/lymphoma 2 related protein A1b
BC076612	3110043O21Rik	2.51	RIKEN cDNA 3110043O21 gene
NM_031367	H28	2.47	Histocompatibility 28

NM_009099	Trim30	2.45	Tripartite motif protein 30
A_52_P214516	A_52_P214516	2.42	unknown
NM_029714	1700067C01Rik	2.41	RIKEN cDNA 1700067C01 gene
NM_145950	BC010311	2.41	Oxidative stress induced growth inhibitor family member 2
NM_172603	Phf11	2.41	PHD finger protein 11
NM_008210	H3f3a	2.4	H3 histone, family 3A
NM_025431	1190005P17Rik	2.39	RIKEN cDNA 1190005P17 gene
NM_029000	Gvin1	2.37	GTPase, very large interferon inducible 1
NM_030259	BC003324	2.36	CDNA sequence BC003324
NAP045112-1	NAP045112-1	2.34	unknown
NM_198001	1110008P14Rik	2.34	RIKEN cDNA 1110008P14 gene
NM_026719	Lmbrd1	2.32	LMBR1 domain containing 1
AK041358	Dfna5h	2.29	Deafness, autosomal dominant 5 homolog (human)
BC056356	LOC381508	2.27	Similar to RIKEN cDNA 2610524H06 gene
NAP025806-1	NAP025806-1	2.25	unknown
NM_153058	Mapre2	2.24	Microtubule-associated protein, RP/EB family, member 2
AK043880	C630043F03Rik	2.2	RIKEN cDNA C630043F03 gene
NM_022310	Hspa5	2.17	Heat shock protein 5
NM_013562	Ifrd1	2.16	Interferon-related developmental regulator 1
AK032921	AK032921	2.14	unknown
NM_011743	Zfp106	2.13	Zinc finger protein 106
BC004622	Gas5	2.11	Growth arrest specific 5
NM_026031	Utp111	2.09	UTP11-like, U3 small nucleolar ribonucleoprotein, (yeast)
XM_283757	Rtf1	2.09	Rtf1, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)
NM_053158	Mrp11	2.04	Mitochondrial ribosomal protein L1

A corrected one-way analysis of variance was used to analyze the microarray data. Genes whose expression levels changed by at least 2-fold or more up-regulated genes ($P < 0.05$) as compared to unstimulated cells were considered to be differentially expressed in a statistically significant manner.