

**Table S4. Gene transcripts exclusively upregulated in macrophages stimulated with live *Borrelia burgdorferi* (Bb) and added IL-10 after 4 h post-stimulation**

Gene number	Annotation	Fold change	
		Live Bb + IL-10	Description/function
<b>Cytokine</b>			
NM_026907	Sectm1	4.46	Secreted and transmembrane 1B
NM_008352	Il12b	3.15	Interleukin 12b
NM_010554	Il1a	2.93	Interleukin 1 alpha
NM_009969	Csf2	2.76	Colony stimulating factor 2 (granulocyte-macrophage)
NM_021524	Pbef1	2.62	Pre-B-cell colony-enhancing factor 1
<b>Enzyme</b>			
NM_133779	Pigt	7.86	Phosphatidylinositol glycan anchor biosynthesis, class T
NM_007409	Adh1	5.52	Alcohol dehydrogenase 1 (class I)
NM_021439	Chst11	4.27	Carbohydrate sulfotransferase 11
NM_007444	Amd2	3.82	S-adenosylmethionine decarboxylase 1
AK036738	Aars	3.55	unknown
NM_153168	Lars2	3.53	unknown
NM_144903	Aldob	3.31	Aldolase 2, B isoform
NM_180600	Ube2q2	3.24	Ubiquitin-conjugating enzyme E2Q (putative) 2
NM_009763	Bst1	3.06	Bone marrow stromal cell antigen 1
NM_011636	Plscr1	3.06	Phospholipid scramblase 1
NM_009801	Car2	2.97	Carbonic anhydrase 2
AK032988	5630401D06Rik	2.95	Chromodomain helicase DNA binding protein 2
NM_181072	Myo1e mean	2.77	Myosin IE
AK003078	Ube2s	2.68	Ubiquitin-conjugating enzyme E2S
AK169992	AK169992	2.6	Peroxiredoxin 1
NM_133777	Ube2s	2.55	Ubiquitin-conjugating enzyme E2S
NM_010476	Hsd17b7	2.53	Hydroxysteroid (17-beta) dehydrogenase 7
NM_010699	Ldha	2.44	Lactate dehydrogenase A
NM_010442	Hmox1	2.23	Heme oxygenase (decycling) 1
NM_010477	Hspd1	2.2	Heat shock protein 1 (chaperonin)
NM_020494	Ddx24	2.19	DEAD (Asp-Glu-Ala-Asp) box polypeptide 24
<b>G-protein coupled receptor</b>			
NM_009987	Cx3cr1	5.29	Chemokine (C-X3-C) receptor 1
NM_146718	Olfir430	4.49	Olfactory receptor 430
NM_146651	Olfir1403	4.41	Olfactory receptor 1403
NM_146994	Olfir201	3.87	Olfactory receptor 201
NM_147076	Olfir619	3.74	Olfactory receptor 619
NM_146998	Olfir195	3.16	Olfactory receptor 195
X89687	Olfir22-ps1	3.14	Olfactory receptor 22, pseudogene 1
NM_172435	P2ry10	2.28	Purinergic receptor P2Y, G-protein coupled 10
NM_147003	Olfir139	2.24	Olfactory receptor 139
<b>Growth factor</b>			
NM_008175	Grn	3.42	Granulin
NM_011057	Pdgfb	3.18	Platelet derived growth factor, B polypeptide

NM_020263	Cacna2d2	5.02	<b>Ion channel</b> Calcium channel, voltage-dependent, alpha 2/delta subunit 2
AB012393	Itrp2	3.65	Inositol 1,4,5-triphosphate receptor 2
AK034069	Gabrb2	2.44	unknown
NM_026578	Nola1	2.05	Nucleolar protein family A, member 1 (H/ACA small nucleolar RNPs)
			<b>Kinase</b>
NM_007936	Epha4	5.61	Eph receptor A4
NM_011102	Prkcc	5	Protein kinase C, gamma
NM_008551	Mapkapk2	4.16	MAP kinase-activated protein kinase 2
NM_177326	Pak2	2.91	P21 (CDKN1A)-activated kinase 2
NM_007746	Map3k8	2.75	Mitogen activated protein kinase kinase kinase 8
NM_146145	Jak1	2.75	Janus kinase 1
NM_016895	Ak2	2.45	Adenylate kinase 2
NM_008847	Pip5k1b	2.33	Phosphatidylinositol-4-phosphate 5-kinase, type 1 alpha
NM_080708	Bmp2k	2.29	BMP2 inducible kinase
NM_010693	Lck	2.21	Lymphocyte protein tyrosine kinase
NM_020021	Mos	2.16	Moloney sarcoma oncogene
AK017353	Csnk1a1	2.1	Casein kinase 1, alpha 1
			<b>Peptidase</b>
NM_172845	Adamts4	6.6	A disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 4
AK031819	Vcpip1	2.35	Unknown
NM_011909	Usp18	2.07	Ubiquitin specific peptidase 18
			<b>Phosphatase</b>
NM_173745	Dusp18	5.12	Dual specificity phosphatase 18
NM_023418	Pgam1	2.28	Phosphoglycerate mutase 1
			<b>Transcription regulator</b>
AK075660	Trp53bp1	8.37	Transformation related protein 53 binding protein 1
NM_030557	Mynn	5.82	Myoneurin
NM_011641	Trp63	4.31	Transformation related protein 63
NM_012051	Etv3	4.09	Ets variant gene 3
AK136463	Lass6	3.57	Longevity assurance homolog 6 ( <i>S. cerevisiae</i> )
NM_018807	Plagl2	3.04	Pleiomorphic adenoma gene-like 2
NM_008088	Gas7	3.02	Growth arrest specific 7
BC059256	Notch2	2.82	Notch gene homolog 2 ( <i>Drosophila</i> )
NM_001001176	Taf9b	2.7	TAF9B RNA polymerase II, TATA box binding protein (TBP)-associated factor
NM_054089	Ncoa6ip	2.65	Trimethylguanosine synthase homolog ( <i>S. cerevisiae</i> )
NM_139149	Fus	2.51	Fusion, derived from t(12;16) malignant liposarcoma (human)
NM_015753	Zfx1b	2.46	Zinc finger E-box binding homeobox 2
NM_011751	Zfp207	2.33	Zinc finger protein 207
NM_145996	Arid5a	2.29	AT rich interactive domain 5A (Mrf1 like)
NM_010496	Id2	2.23	Inhibitor of DNA binding 2
AK144446	Pbx1	2.21	Pre B-cell leukemia transcription factor 1

NM_019466	Dscr1	2.17	Regulator of calcineurin 1
NM_011809	Ets2	2.1	E26 avian leukemia oncogene 2, 3' domain
AK020013	Ctnnb1	2.03	Catenin (cadherin associated protein), beta 1
<b>Translation regulator</b>			
NM_173363	Eif5	3.5	Eukaryotic translation initiation factor 5
NM_025840	Bzw2	2.77	Basic leucine zipper and W2 domains 2
NM_198303	Eif5b	2.26	Eukaryotic translation initiation factor 5B
NM_010120	Eif1a	2.14	Eukaryotic translation initiation factor 1A
<b>Transmembrane receptor</b>			
NM_001008700	Il4ra	5.58	Interleukin 4 receptor, alpha
NM_022723	Scube1	3.81	Signal peptide, CUB domain, EGF-like 1
AK154286	Csf2rb1	2.53	Colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage)
NM_009841	Cd14	2.16	CD14 antigen
NM_133990	Il13ra1	2.12	Interleukin 13 receptor, alpha 1
<b>Transporter</b>			
AK047497	Tm9sf4	6.07	Transmembrane 9 superfamily protein member 4
NM_172980	Slc28a2	4.21	Solute carrier family 28 (sodium-coupled nucleoside transporter), member 2
NM_024406	Fabp4	3.92	Fatty acid binding protein 4, adipocyte
NM_009692	Apoa1	3.69	Apolipoprotein A-I
NM_011552	Tcof1	2.27	Treacher Collins Franceschetti syndrome 1, homolog
AK080543	Atp2a2	2.26	ATPase, Ca <sup>++</sup> transporting, cardiac muscle, slow twitch 2
NM_177866	Catsper4	2.11	Channel, sperm associated 4
<b>Other</b>			
AK032804	D5Ert579e	35.16	unknown
AK049252	-	20.39	ES cells cDNA, RIKEN full-length enriched library, clone:C330017D18 product:unclassifiable, full insert
BC051052	Ccar1	11.59	Cell division cycle and apoptosis regulator 1
AK051598	-	11.08	unknown
AT_L_M	AT_L_M	9.03	unknown
AK084422	-	8.4	Unknown sequence
NM_007993	Fbn1	7.03	Fibrillin 1
AK050249	Mipol1	6.7	Mirror-image polydactyly gene 1 homolog (human)
AK081803	Abi2	6.58	Abl-interactor 2
NM_021496	Pvr13	6.37	Poliovirus receptor-related 3
NM_011896	Spry1	6.15	Sprouty homolog 1 (Drosophila)
AK009064	2310001H17Rik	5.95	RIKEN cDNA 2310001H17 gene
AK035485	-	5.91	Adult male urinary bladder cDNA, RIKEN full-length enriched library, clone:9530055M18 product:unclassifiable,
AK037854	-	5.86	Unknown
NM_171826	Cldnd1	5.86	Claudin domain containing 1
NM_172706	9330182L06Rik	5.76	RIKEN cDNA 9330182L06 gene
BY759546/ NM_011119	Pa2g4	5.69	Proliferation-associated 2G4
NM_130886	Card14	5.54	Caspase recruitment domain family, member 14
A_52_P525705	-	5.46	Unknown

NM_010104	Edn1	5.45	Endothelin 1
NM_177079	6030445D17Rik	5.35	Unknown
NM_145369	Wfdc5	5.29	WAP four-disulfide core domain 5
NM_008440	Kif1a	5.27	Kinesin family member 1A
NM_007776	Crygd	5.21	Crystallin, gamma D
BC024774	2610034M16Rik	5.08	RIKEN cDNA 2610034M16 gene
NM_001039146	B430211C08Rik	4.88	RIKEN cDNA B430211C08 gene
NM_029362	Chmp4b	4.8	Chromatin modifying protein 4B
AK083533	AK083533	4.77	Expressed sequence AW146242
BC089618	BC089618	4.66	Predicted gene, OTTMUSG00000000971
AK038135	Thoc2	4.56	Unknown
NM_010778	Cd46	4.55	CD46 antigen, complement regulatory protein
ENSMUST00000064814		4.42	Unknown
NM_177865	A430070M19	4.34	Predicted gene, OTTMUSG00000008540
NM_001029868	Pdzd4	4.13	PDZ domain containing 4
AK169742	LOC14433	4.11	Unknown
AK040628	AK040628	4.1	0 day neonate thymus cDNA, RIKEN full-length enriched library, clone:A430110K16 product:unclassifiable, full insert
NM_027878	1200002N14Rik	4.05	RIKEN cDNA 1200002N14 gene
XR_003860	LOC672434	3.99	unknown
AK164505	Gas2l3	3.98	Growth arrest-specific 2 like 3
NM_030699	Ntng1	3.92	Netrin G1
AK032310	4930413O22Rik	3.87	Centrosome and spindle pole associated protein 1
AK047015	AK047015	3.83	10 days neonate cerebellum cDNA, RIKEN full-length enriched library, clone:B930011I04 product:unclassifiable, RIKEN cDNA E130014J05 gene
AK080016	AK080016	3.7	
NM_008630	Mt2	3.65	Metallothionein 2
AT_ssM_RR_5	AT_ssM_RR_5	3.62	Unknown
AK084688	Wrb	3.61	Tryptophan rich basic protein
NM_134125	Trip10	3.56	Thyroid hormone receptor interactor 10
XM_130233	Mnab	3.53	Unknown
NM_028044	Cnn3	3.5	Calponin 3, acidic
AK041495	9330169L03Rik	3.49	RIKEN cDNA 9330169L03 gene
NM_001017426	Jmjd3	3.49	Jumonji domain containing 3
J00623	J00623	3.44	Unknown
NM_001002786	9830134C10Rik	3.33	RIKEN cDNA 9830134C10 gene
NAP040991-1	NAP040991-1	3.31	Unknown
NM_021893	Cd274	3.31	CD274 antigen
XM_991213	Otud1	3.3	Unknown
BC036642	BC036642	3.29	Mus musculus, clone IMAGE:3371217, mRNA
NM_145133	T2bp	3.28	Traf2 binding protein
BC012020	BC012020	3.27	CDNA clone IMAGE:40049146
NM_145746	Odf4	3.22	Outer dense fiber of sperm tails 4
XM_486684	4930527E24Rik	3.22	Unknown
AK157824	Cnot10	3.21	CCR4-NOT transcription complex, subunit 10

AK078584	AK078584	3.15	Unknown
BC027262	Mt1	3.15	Metallothionein 1
XM_994784	Sfpq	3.12	Unknown
NM_011631	Hsp90b1	3.11	Heat shock protein 90kDa beta (Grp94), member 1
NM_183426	Stno	3.1	Strawberry notch homolog 2 (Drosophila)
NM_153801	Srd5a2l2	3.09	Steroid 5 alpha-reductase 2-like 2
AT_ssM_AB_5	AT_ssM_AB_5	3.04	Unknown
NAP112463-1	NAP112463-1	3.03	Unknown
NM_172600	6720456H20Rik	3.01	RIKEN cDNA 6720456H20 gene
AF221104	Kifc5c	3	Kinesin family member C5C
NM_029595	Pbp2	2.99	Phosphatidylethanolamine binding protein 2
XM_984911	LOC666606	2.97	Unknown
AK035950	AK035950	2.95	16 days neonate cerebellum cDNA, RIKEN full-length enriched library, clone:9630020E20 product:unclassifiable, Androgen binding protein beta
NM_203502	Abpb	2.95	Androgen binding protein beta
BI107163	LOC628211	2.93	Unknown
AK147452	Snx27	2.92	Sorting nexin family member 27
AT_T_M	AT_T_M	2.92	Unknown
L04961	Xist	2.92	Inactive X specific transcripts
NM_053088	Ifitm5	2.91	Interferon induced transmembrane protein 5
XM_885832	LOC621431	2.91	Unknown
AK084846	Ptbp2	2.9	Polypyrimidine tract binding protein 2
NM_001013816	LOC434459	2.9	Predicted gene, EG434459
AT_nB_3	AT_nB_3	2.88	Unknown
TC1443778	TC1443778	2.87	Unknown
AK089809	AK089809	2.84	EF-hand domain (C-terminal) containing 2
XR_002277	LOC668978	2.84	Unknown
AK088581	Hist1h1d	2.82	Histone cluster 1, H1d
ENSMUST00000030808	ENSMUST000000	2.82	Unknown
NAP057940-1	NAP057940-1	2.82	Unknown
NM_178729/ AK159744	fbx5	2.82	F-box and leucine-rich repeat protein 5
NM_013798	NM_013798	2.81	Unknown
NM_025815	Cpne8	2.8	Copine VIII
AK046043	ApoL2	2.79	Apolipoprotein L 8
NM_023876	Elp4	2.78	Elongation protein 4 homolog (S. cerevisiae)
NM_033592	Pcdhga9	2.77	Protocadherin gamma subfamily A, 12
BC030336	BC030336	2.76	CDNA sequence BC030336
AK083897	-	2.75	12 days embryo spinal ganglion cDNA, RIKEN full-length enriched library, clone:D130053N18 product:unclassifiable, Protocadherin beta 15
NM_053140	Pcdhb15	2.75	Protocadherin beta 15
NM_173383	Dnd1	2.74	Dead end homolog 1 (zebrafish)
AK019492	4632411P08Rik	2.73	RIKEN cDNA 4632411P08 gene
AK079007	AK079007	2.73	Unknown
AT_ssM_TR_5	AT_ssM_TR_5	2.73	Unknown
NM_133833	Dst	2.73	Dystonin
ENSMUST00000072181	-	2.67	Unknown

U49739	Myo6	2.66	Myosin VI
NM_199063	Ssx9	2.65	Synovial sarcoma, X breakpoint 9
TC1445366	-	2.64	Unknown
TC1459708	-	2.62	Unknown
AK019388	Hnrpa0	2.61	Heterogeneous nuclear ribonucleoprotein A0
AK041645	-	2.61	3 days neonate thymus cDNA, RIKEN full-length enriched library, clone:A630026J16 product:unclassifiable, full insert sequence
NM_026054	2810474O19Rik	2.6	RIKEN cDNA 2810474O19 gene
AK043005	AK043005	2.56	Unknown
NM_001012326	-	2.53	Unknown
NM_030694	Ifitm2	2.53	Interferon induced transmembrane protein 2
AK017750	Casc5	2.52	Cancer susceptibility candidate 5
AK031098	AK031098	2.52	Predicted gene, ENSMUSG00000055370
AK039077	AK039077	2.52	Unknown
NM_019458	Paf1	2.52	Paf1, RNA polymerase II associated factor, homolog (S. cerevisiae)
AK220487	Kif1a	2.49	Kinesin family member 1A
NM_001039209	LOC195531	2.49	Predicted gene, OTTMUSG00000010671
NM_033175	Spr11	2.49	Late cornified envelope 3C
AK031482	Kif13b	2.48	Kinesin family member 13B
AK045479	AK045479	2.48	Unknown
AK132230	2610101J03Rik	2.47	ESF1, nucleolar pre-rRNA processing protein, homolog (S. cerevisiae)
AK011855	2610201A13Rik	2.46	RIKEN cDNA 2610201A13 gene
BC052902	Gdap10	2.45	Ganglioside-induced differentiation-associated-protein 10
NM_018785	Prpf40a	2.45	PRP40 pre-mRNA processing factor 40 homolog A (yeast)
NM_080638	Mvp	2.45	Major vault protein
NM_152839	Igj	2.45	Immunoglobulin joining chain
NM_175035	Gimap5	2.44	GTPase, IMAP family member 5
NM_030201	Stch	2.42	Stress 70 protein chaperone, microsome-associated, human homolog
NM_153489	Ubap21	2.4	Ubiquitin associated protein 2-like
A_52_P997449	A_52_P997449	2.39	Unknown
AK043743	AK043743	2.39	10 days neonate cortex cDNA, RIKEN full-length enriched library, clone:A830027F20 product:unclassifiable, full insert sequence
NM_172572	Rhbf2	2.39	Rhomboid 5 homolog 2 (Drosophila)
XM_883948	LOC619750	2.39	Predicted gene, EG619750
NM_001034037	1700024G13Rik	2.38	RIKEN cDNA 1700024G13 gene
NM_028385	Setd5	2.38	SET domain containing 5
NM_138744	Ssx2ip	2.38	Synovial sarcoma, X breakpoint 2 interacting protein
XM_885873	Baz1a	2.38	Bromodomain adjacent to zinc finger domain 1A
NAP102462-1	-	2.37	Unknown
NM_027696	Mier1	2.37	Mesoderm induction early response 1 homolog (Xenopus laevis)

TC1459687	-	2.37	Unknown
AK199310	-	2.35	Coiled-coil domain containing 90A
TC1523833	TC1523833	2.35	Unknown
AK042296	Med12l	2.33	Mediator of RNA polymerase II transcription, subunit 12 homolog (yeast)-like
AW122171	AW122171	2.33	Transcribed locus
ENSMUST00000036208	-	2.33	Unknown
NAP060490-1	-	2.32	Unknown
NM_029499	Ms4a4c	2.32	Membrane-spanning 4-domains, subfamily A, member 4C
NM_019453	Mefv	2.31	Mediterranean fever
NM_182650	Hnrpa2b1	2.31	Heterogeneous nuclear ribonucleoprotein A2/B1
AK017269	Mfap3l	2.3	Microfibrillar-associated protein 3-like
NM_023731	Ccdc86	2.3	Coiled-coil domain containing 86
NM_011590	Timm17a	2.28	Translocase of inner mitochondrial membrane 17a
NM_026130	Srpr	2.27	Signal recognition particle receptor ('docking protein')
NM_153074	Lrrc25	2.27	Leucine rich repeat containing 25
NM_199466	Eml4	2.27	Echinoderm microtubule associated protein like 4
XM_133543	Akap13	2.27	A kinase (PRKA) anchor protein 13
AK079535	Wac	2.26	WW domain containing adaptor with coiled-coil
NM_007669	Cdkn1a	2.26	Cyclin-dependent kinase inhibitor 1A (P21)
NM_009610	Actg2	2.26	Actin, gamma 2, smooth muscle, enteric
NM_026934	2610312B22Rik	2.24	Zinc finger CCCH-type containing 15
NM_133780	Tpr	2.24	Translocated promoter region
X59728	Gas5	2.23	Growth arrest specific 5
NM_030259	BC003324	2.22	CDNA sequence BC003324
NM_026835	Ms4a6d	2.21	Membrane-spanning 4-domains, subfamily A, member 6D
NM_031179	Sf3b1	2.21	Splicing factor 3b, subunit 1
XR_002509	LOC385319	2.19	Unknown
NM_001040401	D530031C13Rik	2.15	Unknown
AK079190	AK079190	2.14	Unknown
AY100450	Wfikkn2	2.14	WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 2
A_52_P1021640	A_52_P1021640	2.12	Unknown
NM_026989	Sfrs11	2.12	Splicing factor, arginine/serine-rich 11
A_52_P517668	-	2.06	Unknown

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.