

Supplementary Table 1. The genes showing altered expression in THP-1 macrophage cells after *B. abortus* mutant strain C1 infection.

Gene_Symbol	Accession No.	Fold changes	P-value	Gene description
<i>LGI2</i>	NM_018176.2	2.27	<i>P</i> =0	leucine-rich repeat LGI family, member 2 (<i>LGI2</i>)
<i>SPN</i>	NM_001030288.1	2.12	<i>P</i> =0	sialophorin (<i>SPN</i>)
<i>RFTN1</i>	NM_015150.1	-2.00	<i>P</i> <0.001	raftlin, lipid raft linker 1 (<i>RFTN1</i>)
<i>HERC6</i>	NM_017912.3	-2.01	<i>P</i> <0.001	hect domain and RLD 6 (<i>HERC6</i>)
<i>TP53INP2</i>	NM_021202.1	-2.01	<i>P</i> <0.001	tumor protein p53 inducible nuclear protein 2 (<i>TP53INP2</i>)
<i>GJA1</i>	NM_000165.3	-2.02	<i>P</i> <0.001	gap junction protein, alpha 1, 43kDa (<i>GJA1</i>)
<i>IFIT1</i>	NM_001548.3	-2.02	<i>P</i> <0.001	interferon-induced protein with tetratricopeptide repeats 1 (<i>IFIT1</i>)
<i>ALDH1A1</i>	NM_000689.3	-2.04	<i>P</i> <0.001	aldehyde dehydrogenase 1 family, member A1 (<i>ALDH1A1</i>)
<i>NFKBIZ</i>	NM_001005474.1	-2.04	<i>P</i> <0.001	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta (<i>NFKBIZ</i>)
<i>CYP27A1</i>	NM_000784.2	-2.05	<i>P</i> <0.001	cytochrome P450, family 27, subfamily A, polypeptide 1 (<i>CYP27A1</i>)
<i>G0S2</i>	NM_015714.2	-2.05	<i>P</i> <0.001	G0/G1switch 2 (<i>G0S2</i>)
<i>IER5</i>	NM_016545.4	-2.05	<i>P</i> <0.001	immediate early response 5 (<i>IER5</i>)
<i>STX11</i>	NM_003764.2	-2.06	<i>P</i> <0.001	syntaxin 11 (<i>STX11</i>)
<i>HERC5</i>	NM_016323.2	-2.06	<i>P</i> <0.001	hect domain and RLD 5 (<i>HERC5</i>)
<i>ACSL1</i>	NM_001995.2	-2.06	<i>P</i> <0.001	acyl-CoA synthetase long-chain family member 1 (<i>ACSL1</i>)
<i>RND3</i>	NM_005168.3	-2.06	<i>P</i> <0.001	Rho family GTPase 3 (<i>RND3</i>)
<i>CTGF</i>	NM_001901.1	-2.06	<i>P</i> <0.001	connective tissue growth factor (<i>CTGF</i>)
<i>SLAMF7</i>	NM_021181.3	-2.06	<i>P</i> <0.001	SLAM family member 7 (<i>SLAMF7</i>)
<i>NAMPT</i>	NM_005746.2	-2.07	<i>P</i> <0.001	nicotinamide phosphoribosyltransferase (<i>NAMPT</i>)
<i>GBP1</i>	NM_002053.1	-2.07	<i>P</i> <0.001	guanylate binding protein 1, interferon-inducible, 67kDa (<i>GBP1</i>)
<i>TNIP1</i>	NM_006058.3	-2.09	<i>P</i> <0.001	TNFAIP3 interacting protein 1 (<i>TNIP1</i>)
<i>AMPD3</i>	NM_000480.2	-2.09	<i>P</i> <0.001	adenosine monophosphate deaminase (isoform E) (<i>AMPD3</i>)
<i>KIAA1199</i>	NM_018689.1	-2.11	<i>P</i> <0.001	KIAA1199 (<i>KIAA1199</i>)
<i>RNF14</i>	NM_183401.1	-2.11	<i>P</i> <0.001	ring finger protein 14 (<i>RNF14</i>)
<i>SLC39A8</i>	NM_022154.5	-2.12	<i>P</i> <0.001	solute carrier family 39 (zinc transporter), member 8 (<i>SLC39A8</i>)
<i>PIM2</i>	NM_006875.2	-2.12	<i>P</i> <0.001	pim-2 oncogene (<i>PIM2</i>)
<i>GRAMD1A</i>	NM_020895.2	-2.13	<i>P</i> <0.001	GRAM domain containing 1A (<i>GRAMD1A</i>)
<i>TFAP2A</i>	NM_001042425.1	-2.15	<i>P</i> <0.001	transcription factor AP-2 alpha (activating enhancer binding protein 2 alpha) (<i>TFAP2A</i>)
<i>IDO1</i>	NM_002164.4	-2.15	<i>P</i> <0.001	indoleamine 2,3-dioxygenase 1 (<i>IDO1</i>)
<i>GBP4</i>	NM_052941.3	-2.16	<i>P</i> <0.001	guanylate binding protein 4 (<i>GBP4</i>)
<i>TSPAN7</i>	NM_004615.2	-2.16	<i>P</i> <0.001	tetraspanin 7 (<i>TSPAN7</i>)
<i>IFIT3</i>	NM_001031683.1	-2.17	<i>P</i> <0.001	interferon-induced protein with tetratricopeptide repeats 3 (<i>IFIT3</i>)
<i>RELB</i>	NM_006509.2	-2.17	<i>P</i> <0.001	v-rel reticuloendotheliosis viral oncogene homolog B (<i>RELB</i>)
<i>PTGS2</i>	NM_000963.1	-2.20	<i>P</i> <0.001	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) (<i>PTGS2</i>)
<i>IL23A</i>	NM_016584.2	-2.20	<i>P</i> <0.001	interleukin 23, alpha subunit p19 (<i>IL23A</i>)
<i>TNFAIP2</i>	NM_006291.2	-2.20	<i>P</i> <0.001	tumor necrosis factor, alpha-induced protein 2 (<i>TNFAIP2</i>)
<i>ISG20</i>	NM_002201.4	-2.20	<i>P</i> <0.001	interferon stimulated exonuclease gene 20kDa (<i>ISG20</i>)
<i>NAV3</i>	NM_014903.4	-2.21	<i>P</i> <0.001	neuron navigator 3 (<i>NAV3</i>)
<i>BCAR3</i>	NM_003567.2	-2.21	<i>P</i> <0.001	breast cancer anti-estrogen resistance 3 (<i>BCAR3</i>)
<i>PAOX</i>	NM_152911.2	-2.21	<i>P</i> <0.001	polyamine oxidase (exo-N4-amino) (<i>PAOX</i>)
<i>GJA3</i>	NM_021954.3	-2.23	<i>P</i> <0.001	gap junction protein, alpha 3, 46kDa (<i>GJA3</i>)
<i>PION</i>	NM_017439.3	-2.25	<i>P</i> <0.001	pigeon homolog (<i>Drosophila</i>) (<i>PION</i>)

<i>MIR1974</i>	NR_031738.1	-2.25	<i>P</i> <0.001	microRNA 1974 (MIR1974)
<i>PTGER2</i>	NM_000956.2	-2.25	<i>P</i> <0.001	prostaglandin E receptor 2 (subtype EP2), 53kDa (PTGER2)
<i>IFITM1</i>	NM_003641.3	-2.26	<i>P</i> <0.001	interferon induced transmembrane protein 1 (9-27) (IFITM1)
<i>TRAF1</i>	NM_005658.3	-2.27	<i>P</i> <0.001	TNF receptor-associated factor 1 (TRAF1)
<i>DMXL2</i>	NM_015263.2	-2.27	<i>P</i> <0.001	Dmx-like 2 (DMXL2)
<i>IFIT2</i>	NM_001547.4	-2.29	<i>P</i> <0.001	interferon-induced protein with tetratricopeptide repeats 2 (IFIT2)
<i>DRAM1</i>	NM_018370.2	-2.30	<i>P</i> <0.001	DNA-damage regulated autophagy modulator 1 (DRAM1)
<i>KYNU</i>	NM_001032998.1	-2.30	<i>P</i> <0.001	kynureninase (L-kynurenine hydrolase) (KYNU)
<i>THBS1</i>	NM_003246.2	-2.32	<i>P</i> <0.001	thrombospondin 1 (THBS1)
<i>RGL1</i>	NM_015149.3	-2.32	<i>P</i> <0.001	ral guanine nucleotide dissociation stimulator-like 1 (RGL1)
<i>NFKBIA</i>	NM_020529.1	-2.33	<i>P</i> <0.001	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha (NFKBIA)
<i>IL18R1</i>	NM_003855.2	-2.36	<i>P</i> <0.001	interleukin 18 receptor 1 (IL18R1)
<i>SRC</i>	NM_198291.1	-2.36	<i>P</i> <0.001	v-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian) (SRC)
<i>C5orf20</i>	NM_130848.2	-2.37	<i>P</i> <0.001	chromosome 5 open reading frame 20 (C5orf20)
<i>IL4I1</i>	NM_172374.1	-2.37	<i>P</i> <0.001	interleukin 4 induced 1 (IL4I1)
<i>MARCKSL1</i>	NM_023009.4	-2.39	<i>P</i> <0.001	MARCKS-like 1 (MARCKSL1)
<i>CXCR5</i>	NM_032966.1	-2.41	<i>P</i> <0.001	chemokine (C-X-C motif) receptor 5 (CXCR5)
<i>NCF1</i>	NM_000265.4	-2.41	<i>P</i> <0.001	neutrophil cytosolic factor 1 (NCF1)
<i>WDR63</i>	NM_145172.2	-2.41	<i>P</i> <0.001	WD repeat domain 63 (WDR63)
<i>MSC</i>	NM_005098.3	-2.42	<i>P</i> <0.001	musculin (activated B-cell factor-1) (MSC)
<i>CD38</i>	NM_001775.2	-2.43	<i>P</i> <0.001	CD38 molecule (CD38)
<i>MCOLN2</i>	NM_153259.2	-2.43	<i>P</i> <0.001	mucolipin 2 (MCOLN2)
<i>NR1H3</i>	NM_005693.1	-2.44	<i>P</i> <0.001	nuclear receptor subfamily 1, group H, member 3 (NR1H3)
<i>IFI44L</i>	NM_006820.1	-2.45	<i>P</i> <0.001	interferon-induced protein 44-like (IFI44L)
<i>CXCL12</i>	NM_199168.2	-2.47	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1) (CXCL12)
<i>EMR3</i>	NM_032571.2	-2.49	<i>P</i> <0.001	egf-like module containing, mucin-like, hormone receptor-like 3 (EMR3)
<i>PSTPIP2</i>	NM_024430.2	-2.51	<i>P</i> <0.001	proline-serine-threonine phosphatase interacting protein 2 (PSTPIP2)
<i>RARRES1</i>	NM_206963.1	-2.53	<i>P</i> <0.001	retinoic acid receptor responder (tazarotene induced) 1 (RARRES1)
<i>BHLHB3</i>	NM_030762.1	-2.55	<i>P</i> <0.001	basic helix-loop-helix domain containing, class B, 3 (BHLHB3)
<i>LOC100133866</i>	XM_001719715.1	-2.59	<i>P</i> <0.001	PREDICTED: similar to phosphodiesterase 4D interacting protein (myomegalin) (LOC100133866)
<i>MCTP1</i>	NM_024717.3	-2.62	<i>P</i> <0.001	multiple C2 domains, transmembrane 1 (MCTP1)
<i>ICAM1</i>	NM_000201.1	-2.63	<i>P</i> <0.001	intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1)
<i>CD44</i>	NM_001001392.1	-2.63	<i>P</i> <0.001	CD44 molecule (Indian blood group) (CD44)
<i>ADORA2A</i>	NM_000675.3	-2.67	<i>P</i> <0.001	adenosine A2a receptor (ADORA2A)
<i>NFE2L3</i>	NM_004289.5	-2.68	<i>P</i> <0.001	nuclear factor (erythroid-derived 2)-like 3 (NFE2L3)
<i>OLIG2</i>	NM_005806.2	-2.72	<i>P</i> <0.001	oligodendrocyte lineage transcription factor 2 (OLIG2)
<i>PTAFR</i>	NM_000952.3	-2.74	<i>P</i> <0.001	platelet-activating factor receptor (PTAFR)
<i>BCL3</i>	NM_005178.2	-2.79	<i>P</i> <0.001	B-cell CLL/lymphoma 3 (BCL3)
<i>MIR1275</i>	NR_031681.1	-2.80	<i>P</i> <0.001	microRNA 1275 (MIR1275)
<i>MAFF</i>	NM_012323.2	-2.85	<i>P</i> <0.001	v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian) (MAFF)
<i>GLIS3</i>	NM_152629.3	-2.85	<i>P</i> <0.001	GLIS family zinc finger 3 (GLIS3)
<i>CXCL2</i>	NM_002089.3	-2.90	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 2 (CXCL2)
<i>NCF1C</i>	NR_003187.1	-2.90	<i>P</i> <0.001	neutrophil cytosolic factor 1C pseudogene (NCF1C)
<i>EHD1</i>	NM_006795.2	-2.92	<i>P</i> <0.001	EH-domain containing 1 (EHD1)
<i>TNFAIP3</i>	NM_006290.2	-2.94	<i>P</i> <0.001	tumor necrosis factor, alpha-induced protein 3 (TNFAIP3)
<i>FEZ1</i>	NM_005103.3	-3.01	<i>P</i> <0.001	fasciculation and elongation protein zeta 1 (zygin I) (FEZ1)
<i>SLC2A6</i>	NM_017585.2	-3.03	<i>P</i> <0.001	solute carrier family 2 (facilitated glucose transporter), member 6 (SLC2A6)
<i>IER3</i>	NM_003897.3	-3.03	<i>P</i> <0.001	immediate early response 3 (IER3)
<i>CD48</i>	NM_001778.2	-3.06	<i>P</i> <0.001	CD48 molecule (CD48)
<i>ZC3H12A</i>	NM_025079.1	-3.14	<i>P</i> <0.001	zinc finger CCCH-type containing 12A (ZC3H12A)
<i>MIR302C</i>	NR_029858.1	-3.17	<i>P</i> <0.001	microRNA 302c (MIR302C)
<i>PDE4B</i>	NM_002600.3	-3.17	<i>P</i> <0.001	phosphodiesterase 4B, cAMP-specific (phosphodiesterase E4 dunce homolog, <i>Drosophila</i>) (PDE4B)
<i>TNF</i>	NM_000594.2	-3.17	<i>P</i> <0.001	tumor necrosis factor (TNF superfamily, member 2) (TNF)
<i>CCL19</i>	NM_006274.2	-3.21	<i>P</i> <0.001	chemokine (C-C motif) ligand 19 (CCL19)
<i>GCH1</i>	NM_001024071.1	-3.23	<i>P</i> <0.001	GTP cyclohydrolase 1 (GCH1)

<i>BIRC3</i>	NM_001165.3	-3.32	<i>P</i> <0.001	baculoviral IAP repeat-containing 3 (BIRC3)
<i>CYP4B1</i>	NM_000779.2	-3.35	<i>P</i> <0.001	cytochrome P450, family 4, subfamily B, polypeptide 1 (CYP4B1)
<i>SERPINE2</i>	NM_006216.2	-3.49	<i>P</i> <0.001	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2 (SERPINE2)
<i>IL32</i>	NM_001012633.1	-3.51	<i>P</i> <0.001	interleukin 32 (IL32)
<i>IRAK2</i>	NM_001570.3	-3.56	<i>P</i> <0.001	interleukin-1 receptor-associated kinase 2 (IRAK2)
<i>TNFRSF9</i>	NM_001561.4	-3.72	<i>P</i> <0.001	tumor necrosis factor receptor superfamily, member 9 (TNFRSF9)
<i>RNF144B</i>	NM_182757.2	-3.74	<i>P</i> <0.001	ring finger protein 144B (RNF144B)
<i>FCAMR</i>	NM_032029.1	-3.96	<i>P</i> <0.001	Fc receptor, IgA, IgM, high affinity (FCAMR)
<i>CXCL10</i>	NM_001565.2	-4.04	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 10 (CXCL10)
<i>IGFBP3</i>	NM_001013398.1	-4.11	<i>P</i> <0.001	insulin-like growth factor binding protein 3 (IGFBP3)
<i>SOD2</i>	NM_001024466.1	-4.50	<i>P</i> <0.001	superoxide dismutase 2, mitochondrial (SOD2)
<i>CCL3L3</i>	NM_001001437.3	-4.50	<i>P</i> <0.001	chemokine (C-C motif) ligand 3-like 3 (CCL3L3)
<i>SLC25A24</i>	NM_013386.3	-4.69	<i>P</i> <0.001	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24 (SLC25A24)
<i>GJB2</i>	NM_004004.4	-4.74	<i>P</i> <0.001	gap junction protein, beta 2, 26kDa (GJB2)
<i>CCL3</i>	NM_002983.1	-4.78	<i>P</i> <0.001	chemokine (C-C motif) ligand 3 (CCL3)
<i>LAMP3</i>	NM_014398.2	-4.85	<i>P</i> <0.001	lysosomal-associated membrane protein 3 (LAMP3)
<i>CCL3L1</i>	NM_021006.4	-4.88	<i>P</i> <0.001	chemokine (C-C motif) ligand 3-like 1 (CCL3L1)
<i>EBI3</i>	NM_005755.2	-4.89	<i>P</i> <0.001	Epstein-Barr virus induced 3 (EBI3)
<i>CXCL13</i>	NM_006419.1	-5.21	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 13 (B-cell chemoattractant) (CXCL13)
<i>IL1B</i>	NM_000576.2	-5.23	<i>P</i> <0.001	interleukin 1, beta (IL1B)
<i>IL8</i>	NM_000584.2	-5.25	<i>P</i> <0.001	interleukin 8 (IL8)
<i>CCL2</i>	NM_002982.3	-5.45	<i>P</i> <0.001	chemokine (C-C motif) ligand 2 (CCL2)
<i>CCL4L2</i>	NM_207007.2	-5.52	<i>P</i> <0.001	chemokine (C-C motif) ligand 4-like 2 (CCL4L2)
<i>CCL4L1</i>	NM_001001435.2	-5.80	<i>P</i> <0.001	chemokine (C-C motif) ligand 4-like 1 (CCL4L1)
<i>CXCL1</i>	NM_001511.1	-5.92	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) (CXCL1)
<i>CCL20</i>	NM_004591.1	-5.96	<i>P</i> <0.001	chemokine (C-C motif) ligand 20 (CCL20)
<i>SHRM</i>	NM_020859.1	-5.99	<i>P</i> <0.001	shroom (SHRM)
<i>CCL8</i>	NM_005623.2	-6.13	<i>P</i> <0.001	chemokine (C-C motif) ligand 8 (CCL8)
<i>TNFAIP6</i>	NM_007115.2	-6.47	<i>P</i> <0.001	tumor necrosis factor, alpha-induced protein 6 (TNFAIP6)
<i>CXCL6</i>	NM_002993.2	-6.78	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2) (CXCL6)

Supplementary Table 2. The genes showing altered expression in THP-1 macrophage cells after *B. abortus* mutant strain C10 infection

Gene_Symbol	Accession No.	Fold changes	P-value	Gene description
<i>LGI2</i>	NM_018176.2	2.26	<i>P</i> =0	leucine-rich repeat LGI family, member 2 (<i>LGI2</i>)
<i>PHACTR3</i>	NM_183246.1	2.03	<i>P</i> =0	phosphatase and actin regulator 3 (<i>PHACTR3</i>)
<i>WTAP</i>	NM_152858.1	-2.01	<i>P</i> <0.001	Wilms tumor 1 associated protein (<i>WTAP</i>)
<i>RFTN1</i>	NM_015150.1	-2.02	<i>P</i> <0.001	raftlin, lipid raft linker 1 (<i>RFTN1</i>)
<i>ADA</i>	NM_000022.2	-2.03	<i>P</i> <0.001	adenosine deaminase (<i>ADA</i>)
<i>MT2A</i>	NM_005953.2	-2.04	<i>P</i> <0.001	metallothionein 2A (<i>MT2A</i>)
<i>TSPAN7</i>	NM_004615.2	-2.04	<i>P</i> <0.001	tetraspanin 7 (<i>TSPAN7</i>)
<i>CYP27A1</i>	NM_000784.2	-2.06	<i>P</i> <0.001	cytochrome P450, family 27, subfamily A, polypeptide 1 (<i>CYP27A1</i>)
<i>CD40</i>	NM_001250.4	-2.06	<i>P</i> <0.001	CD40 molecule, TNF receptor superfamily member 5 (<i>CD40</i>)
<i>GPR84</i>	NM_020370.1	-2.06	<i>P</i> <0.001	G protein-coupled receptor 84 (<i>GPR84</i>)
<i>OLIG1</i>	NM_138983.1	-2.06	<i>P</i> <0.001	oligodendrocyte transcription factor 1 (<i>OLIG1</i>)
<i>TP53INP2</i>	NM_021202.1	-2.07	<i>P</i> <0.001	tumor protein p53 inducible nuclear protein 2 (<i>TP53INP2</i>)
<i>IFI27</i>	NM_005532.3	-2.07	<i>P</i> <0.001	interferon, alpha-inducible protein 27 (<i>IFI27</i>)
<i>MIR1974</i>	NR_031738.1	-2.08	<i>P</i> <0.001	microRNA 1974 (<i>MIR1974</i>)
<i>HCK</i>	NM_002110.2	-2.08	<i>P</i> <0.001	hemopoietic cell kinase (<i>HCK</i>)
<i>TNFAIP8</i>	NM_001077654.1	-2.08	<i>P</i> <0.001	tumor necrosis factor, alpha-induced protein 8 (<i>TNFAIP8</i>)
<i>CD58</i>	NM_001779.1	-2.08	<i>P</i> <0.001	CD58 molecule (<i>CD58</i>)
<i>TMEM171</i>	NM_173490.5	-2.08	<i>P</i> <0.001	transmembrane protein 171 (<i>TMEM171</i>)
<i>IFI44L</i>	NM_006820.1	-2.09	<i>P</i> <0.001	interferon-induced protein 44-like (<i>IFI44L</i>)
<i>TNIP1</i>	NM_006058.3	-2.09	<i>P</i> <0.001	TNFAIP3 interacting protein 1 (<i>TNIP1</i>)
<i>STX11</i>	NM_003764.2	-2.11	<i>P</i> <0.001	syntaxin 11 (<i>STX11</i>)
<i>CTGF</i>	NM_001901.1	-2.11	<i>P</i> <0.001	connective tissue growth factor (<i>CTGF</i>)
<i>NFKB1</i>	NM_003998.2	-2.12	<i>P</i> <0.001	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (<i>NFKB1</i>)
<i>AMPD3</i>	NM_000480.2	-2.12	<i>P</i> <0.001	adenosine monophosphate deaminase (isoform E) (<i>AMPD3</i>)
<i>PTGS2</i>	NM_000963.1	-2.12	<i>P</i> <0.001	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) (<i>PTGS2</i>)
<i>IFIT2</i>	NM_001547.4	-2.13	<i>P</i> <0.001	interferon-induced protein with tetratricopeptide repeats 2 (<i>IFIT2</i>)
<i>GPR68</i>	NM_003485.3	-2.13	<i>P</i> <0.001	G protein-coupled receptor 68 (<i>GPR68</i>)
<i>RNF19B</i>	NM_153341.1	-2.13	<i>P</i> <0.001	ring finger protein 19B (<i>RNF19B</i>)
<i>NAMPT</i>	NM_005746.2	-2.14	<i>P</i> <0.001	nicotinamide phosphoribosyltransferase (<i>NAMPT</i>)
<i>IER5</i>	NM_016545.4	-2.15	<i>P</i> <0.001	immediate early response 5 (<i>IER5</i>)
<i>ATF5</i>	NM_012068.3	-2.15	<i>P</i> <0.001	activating transcription factor 5 (<i>ATF5</i>)
<i>PTGER2</i>	NM_000956.2	-2.16	<i>P</i> <0.001	prostaglandin E receptor 2 (subtype EP2), 53kDa (<i>PTGER2</i>)
<i>ACSL1</i>	NM_001995.2	-2.16	<i>P</i> <0.001	acyl-CoA synthetase long-chain family member 1 (<i>ACSL1</i>)
<i>BCAR3</i>	NM_003567.2	-2.18	<i>P</i> <0.001	breast cancer anti-estrogen resistance 3 (<i>BCAR3</i>)
<i>RNF14</i>	NM_183401.1	-2.18	<i>P</i> <0.001	ring finger protein 14 (<i>RNF14</i>)
<i>GBP4</i>	NM_052941.3	-2.19	<i>P</i> <0.001	guanylate binding protein 4 (<i>GBP4</i>)
<i>RND3</i>	NM_005168.3	-2.20	<i>P</i> <0.001	Rho family GTPase 3 (<i>RND3</i>)
<i>MARCKS</i>	NM_002356.5	-2.20	<i>P</i> <0.001	myristoylated alanine-rich protein kinase C substrate (<i>MARCKS</i>)
<i>WDR63</i>	NM_145172.2	-2.20	<i>P</i> <0.001	WD repeat domain 63 (<i>WDR63</i>)
<i>GRAMD1A</i>	NM_020895.2	-2.21	<i>P</i> <0.001	GRAM domain containing 1A (<i>GRAMD1A</i>)
<i>NAV3</i>	NM_014903.4	-2.21	<i>P</i> <0.001	neuron navigator 3 (<i>NAV3</i>)
<i>IDO1</i>	NM_002164.4	-2.22	<i>P</i> <0.001	indoleamine 2,3-dioxygenase 1 (<i>IDO1</i>)
<i>GPR35</i>	NM_005301.2	-2.22	<i>P</i> <0.001	G protein-coupled receptor 35 (<i>GPR35</i>)
<i>PCDH20</i>	NM_022843.2	-2.22	<i>P</i> <0.001	protocadherin 20 (<i>PCDH20</i>)
<i>PION</i>	NM_017439.3	-2.22	<i>P</i> <0.001	pigeon homolog (<i>Drosophila</i>) (<i>PION</i>)
<i>CD80</i>	NM_005191.3	-2.22	<i>P</i> <0.001	CD80 molecule (<i>CD80</i>)
<i>KIAA1199</i>	NM_018689.1	-2.23	<i>P</i> <0.001	KIAA1199 (<i>KIAA1199</i>)
<i>ISG20</i>	NM_002201.4	-2.24	<i>P</i> <0.001	interferon stimulated exonuclease gene 20kDa (<i>ISG20</i>)
<i>SRC</i>	NM_198291.1	-2.24	<i>P</i> <0.001	v-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian) (<i>SRC</i>)
<i>PIM2</i>	NM_006875.2	-2.27	<i>P</i> <0.001	pim-2 oncogene (<i>PIM2</i>)
<i>SLC39A8</i>	NM_022154.5	-2.30	<i>P</i> <0.001	solute carrier family 39 (zinc transporter), member 8 (<i>SLC39A8</i>)
<i>GJA1</i>	NM_000165.3	-2.30	<i>P</i> <0.001	gap junction protein, alpha 1, 43kDa (<i>GJA1</i>)

<i>CD83</i>	NM_004233.3	-2.32	<i>P</i> <0.001	CD83 molecule (CD83)
<i>TFAP2A</i>	NM_001042425.1	-2.34	<i>P</i> <0.001	transcription factor AP-2 alpha (activating enhancer binding protein 2 alpha) (TFAP2A)
<i>GJA3</i>	NM_021954.3	-2.34	<i>P</i> <0.001	gap junction protein, alpha 3, 46kDa (GJA3)
<i>CXCR5</i>	NM_032966.1	-2.36	<i>P</i> <0.001	chemokine (C-X-C motif) receptor 5 (CXCR5)
<i>RGL1</i>	NM_015149.3	-2.36	<i>P</i> <0.001	ral guanine nucleotide dissociation stimulator-like 1 (RGL1)
<i>PTAFR</i>	NM_000952.3	-2.37	<i>P</i> <0.001	platelet-activating factor receptor (PTAFR)
<i>MIR1275</i>	NR_031681.1	-2.38	<i>P</i> <0.001	microRNA 1275 (MIR1275)
<i>DRAM1</i>	NM_018370.2	-2.38	<i>P</i> <0.001	DNA-damage regulated autophagy modulator 1 (DRAM1)
<i>NFKB2</i>	NM_001077493.1	-2.38	<i>P</i> <0.001	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) (NFKB2)
<i>NFKBIZ</i>	NM_001005474.1	-2.40	<i>P</i> <0.001	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta (NFKBIZ)
<i>EMR3</i>	NM_032571.2	-2.42	<i>P</i> <0.001	egf-like module containing, mucin-like, hormone receptor-like 3 (EMR3)
<i>PAOX</i>	NM_152911.2	-2.42	<i>P</i> <0.001	polyamine oxidase (exo-N4-amino) (PAOX)
<i>DMXL2</i>	NM_015263.2	-2.43	<i>P</i> <0.001	Dmx-like 2 (DMXL2)
<i>IL18R1</i>	NM_003855.2	-2.43	<i>P</i> <0.001	interleukin 18 receptor 1 (IL18R1)
<i>TRAF1</i>	NM_005658.3	-2.44	<i>P</i> <0.001	TNF receptor-associated factor 1 (TRAF1)
<i>RELB</i>	NM_006509.2	-2.45	<i>P</i> <0.001	v-rel reticuloendotheliosis viral oncogene homolog B (RELB)
<i>MARCKSL1</i>	NM_023009.4	-2.47	<i>P</i> <0.001	MARCKS-like 1 (MARCKSL1)
<i>CD38</i>	NM_001775.2	-2.48	<i>P</i> <0.001	CD38 molecule (CD38)
<i>NR1H3</i>	NM_005693.1	-2.52	<i>P</i> <0.001	nuclear receptor subfamily 1, group H, member 3 (NR1H3)
<i>KYNU</i>	NM_001032998.1	-2.52	<i>P</i> <0.001	kynureninase (L-kynurenine hydrolase) (KYNU)
<i>PSTPIP2</i>	NM_024430.2	-2.56	<i>P</i> <0.001	proline-serine-threonine phosphatase interacting protein 2 (PSTPIP2)
<i>THBS1</i>	NM_003246.2	-2.59	<i>P</i> <0.001	thrombospondin 1 (THBS1)
<i>CXCL12</i>	NM_199168.2	-2.59	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1) (CXCL12)
<i>MCOLN2</i>	NM_153259.2	-2.61	<i>P</i> <0.001	mucolipin 2 (MCOLN2)
<i>IL4I1</i>	NM_172374.1	-2.63	<i>P</i> <0.001	interleukin 4 induced 1 (IL4I1)
<i>MSC</i>	NM_005098.3	-2.64	<i>P</i> <0.001	musculin (activated B-cell factor-1) (MSC)
<i>C5orf20</i>	NM_130848.2	-2.64	<i>P</i> <0.001	chromosome 5 open reading frame 20 (C5orf20)
<i>MCTP1</i>	NM_024717.3	-2.65	<i>P</i> <0.001	multiple C2 domains, transmembrane 1 (MCTP1)
<i>NCF1</i>	NM_000265.4	-2.65	<i>P</i> <0.001	neutrophil cytosolic factor 1 (NCF1)
<i>ADORA2A</i>	NM_000675.3	-2.65	<i>P</i> <0.001	adenosine A2a receptor (ADORA2A)
<i>TNFAIP2</i>	NM_006291.2	-2.71	<i>P</i> <0.001	tumor necrosis factor, alpha-induced protein 2 (TNFAIP2)
<i>NFE2L3</i>	NM_004289.5	-2.73	<i>P</i> <0.001	nuclear factor (erythroid-derived 2)-like 3 (NFE2L3)
<i>NFKBIA</i>	NM_020529.1	-2.73	<i>P</i> <0.001	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha (NFKBIA)
<i>BHLHB3</i>	NM_030762.1	-2.78	<i>P</i> <0.001	basic helix-loop-helix domain containing, class B, 3 (BHLHB3)
<i>CD48</i>	NM_001778.2	-2.79	<i>P</i> <0.001	CD48 molecule (CD48)
<i>OLIG2</i>	NM_005806.2	-2.79	<i>P</i> <0.001	oligodendrocyte lineage transcription factor 2 (OLIG2)
<i>SERPINE2</i>	NM_006216.2	-2.86	<i>P</i> <0.001	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2 (SERPINE2)
<i>RARRES1</i>	NM_206963.1	-2.88	<i>P</i> <0.001	retinoic acid receptor responder (tazarotene induced) 1 (RARRES1)
<i>CD44</i>	NM_001001392.1	-2.95	<i>P</i> <0.001	CD44 molecule (Indian blood group) (CD44)
<i>NCF1C</i>	NR_003187.1	-2.96	<i>P</i> <0.001	neutrophil cytosolic factor 1C pseudogene (NCF1C)
<i>BCL3</i>	NM_005178.2	-2.99	<i>P</i> <0.001	B-cell CLL/lymphoma 3 (BCL3)
<i>GLIS3</i>	NM_152629.3	-3.01	<i>P</i> <0.001	GLIS family zinc finger 3 (GLIS3)
<i>ICAM1</i>	NM_000201.1	-3.01	<i>P</i> <0.001	intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1)
<i>MIR302C</i>	NR_029858.1	-3.06	<i>P</i> <0.001	microRNA 302c (MIR302C)
<i>MAFF</i>	NM_012323.2	-3.06	<i>P</i> <0.001	v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian) (MAFF)
<i>CCL19</i>	NM_006274.2	-3.19	<i>P</i> <0.001	chemokine (C-C motif) ligand 19 (CCL19)
<i>EHD1</i>	NM_006795.2	-3.29	<i>P</i> <0.001	EH-domain containing 1 (EHD1)
<i>GCH1</i>	NM_001024071.1	-3.33	<i>P</i> <0.001	GTP cyclohydrolase 1 (GCH1)
<i>TNFAIP3</i>	NM_006290.2	-3.42	<i>P</i> <0.001	tumor necrosis factor, alpha-induced protein 3 (TNFAIP3)
<i>CXCL2</i>	NM_002089.3	-3.44	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 2 (CXCL2)
<i>IER3</i>	NM_003897.3	-3.47	<i>P</i> <0.001	immediate early response 3 (IER3)
<i>PDE4B</i>	NM_002600.3	-3.53	<i>P</i> <0.001	phosphodiesterase 4B, cAMP-specific (phosphodiesterase E4 dunce homolog, Drosophila) (PDE4B)
<i>FEZ1</i>	NM_005103.3	-3.53	<i>P</i> <0.001	fasciculation and elongation protein zeta 1 (zygin I) (FEZ1)
<i>CYP4B1</i>	NM_000779.2	-3.60	<i>P</i> <0.001	cytochrome P450, family 4, subfamily B, polypeptide 1 (CYP4B1)
<i>SLC2A6</i>	NM_017585.2	-3.63	<i>P</i> <0.001	solute carrier family 2 (facilitated glucose transporter), member 6 (SLC2A6)

<i>TNFRSF9</i>	NM_001561.4	-3.74	<i>P</i> <0.001	tumor necrosis factor receptor superfamily, member 9 (TNFRSF9)
<i>TNF</i>	NM_000594.2	-3.82	<i>P</i> <0.001	tumor necrosis factor (TNF superfamily, member 2) (TNF)
<i>FCAMR</i>	NM_032029.1	-3.83	<i>P</i> <0.001	Fc receptor, IgA, IgM, high affinity (FCAMR)
<i>IRAK2</i>	NM_001570.3	-3.90	<i>P</i> <0.001	interleukin-1 receptor-associated kinase 2 (IRAK2)
<i>IL32</i>	NM_001012633.1	-3.92	<i>P</i> <0.001	interleukin 32 (IL32)
<i>BIRC3</i>	NM_001165.3	-4.02	<i>P</i> <0.001	baculoviral IAP repeat-containing 3 (BIRC3)
<i>ZC3H12A</i>	NM_025079.1	-4.02	<i>P</i> <0.001	zinc finger CCCH-type containing 12A (ZC3H12A)
<i>RNF144B</i>	NM_182757.2	-4.04	<i>P</i> <0.001	ring finger protein 144B (RNF144B)
<i>GJB2</i>	NM_004004.4	-4.31	<i>P</i> <0.001	gap junction protein, beta 2, 26kDa (GJB2)
<i>IGFBP3</i>	NM_000598.4	-4.60	<i>P</i> <0.001	insulin-like growth factor binding protein 3 (IGFBP3)
<i>SLC25A24</i>	NM_013386.3	-4.95	<i>P</i> <0.001	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24 (SLC25A24)
<i>LAMP3</i>	NM_014398.2	-5.03	<i>P</i> <0.001	lysosomal-associated membrane protein 3 (LAMP3)
<i>CXCL10</i>	NM_001565.2	-5.06	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 10 (CXCL10)
<i>CCL3L3</i>	NM_001001437.3	-5.20	<i>P</i> <0.001	chemokine (C-C motif) ligand 3-like 3 (CCL3L3)
<i>EBI3</i>	NM_005755.2	-5.37	<i>P</i> <0.001	Epstein-Barr virus induced 3 (EBI3)
<i>SOD2</i>	NM_001024466.1	-5.40	<i>P</i> <0.001	superoxide dismutase 2, mitochondrial (SOD2)
<i>CXCL13</i>	NM_006419.1	-5.42	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 13 (B-cell chemoattractant) (CXCL13)
<i>CCL3L1</i>	NM_021006.4	-5.67	<i>P</i> <0.001	chemokine (C-C motif) ligand 3-like 1 (CCL3L1)
<i>CXCL1</i>	NM_001511.1	-5.99	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) (CXCL1)
<i>CCL3</i>	NM_002983.1	-6.01	<i>P</i> <0.001	chemokine (C-C motif) ligand 3 (CCL3)
<i>CCL4L1</i>	NM_001001435.2	-6.01	<i>P</i> <0.001	chemokine (C-C motif) ligand 4-like 1 (CCL4L1)
<i>CCL2</i>	NM_002982.3	-6.02	<i>P</i> <0.001	chemokine (C-C motif) ligand 2 (CCL2)
<i>IL1B</i>	NM_000576.2	-6.19	<i>P</i> <0.001	interleukin 1, beta (IL1B)
<i>CXCL6</i>	NM_002993.2	-6.43	<i>P</i> <0.001	chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2) (CXCL6)
<i>CCL4L2</i>	NM_207007.2	-6.43	<i>P</i> <0.001	chemokine (C-C motif) ligand 4-like 2 (CCL4L2)
<i>SHRM</i>	NM_020859.1	-6.59	<i>P</i> <0.001	shroom (SHRM)
<i>IL8</i>	NM_000584.2	-6.87	<i>P</i> <0.001	interleukin 8 (IL8)
<i>CCL20</i>	NM_004591.1	-7.13	<i>P</i> <0.001	chemokine (C-C motif) ligand 20 (CCL20)
<i>TNFAIP6</i>	NM_007115.2	-7.63	<i>P</i> <0.001	tumor necrosis factor, alpha-induced protein 6 (TNFAIP6)
<i>CCL8</i>	NM_005623.2	-8.94	<i>P</i> <0.001	chemokine (C-C motif) ligand 8 (CCL8)

Supplementary Table 3. The genes showing altered expression in THP-1 macrophage cells after *B. abortus* mutant strain C27 infection

Gene_Symbol	Accession No.	Fold changes	P-value	Gene description
<i>IDO1</i>	NM_002164.4	9.51	<i>P</i> =0	indoleamine 2,3-dioxygenase 1 (IDO1)
<i>CCL8</i>	NM_005623.2	5.59	<i>P</i> =0	chemokine (C-C motif) ligand 8 (CCL8)
<i>CXCL13</i>	NM_006419.1	5.14	<i>P</i> =0	chemokine (C-X-C motif) ligand 13 (B-cell chemoattractant) (CXCL13)
<i>CCL2</i>	NM_002982.3	4.76	<i>P</i> =0	chemokine (C-C motif) ligand 2 (CCL2)
<i>TNFSF10</i>	NM_003810.2	4.51	<i>P</i> =0	tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10)
<i>IFI27</i>	NM_005532.3	4.30	<i>P</i> =0	interferon, alpha-inducible protein 27 (IFI27)
<i>IFI44L</i>	NM_006820.1	3.78	<i>P</i> =0	interferon-induced protein 44-like (IFI44L)
<i>CXCL10</i>	NM_001565.2	3.69	<i>P</i> =0	chemokine (C-X-C motif) ligand 10 (CXCL10)
<i>RSAD2</i>	NM_080657.4	3.42	<i>P</i> =0	radical S-adenosyl methionine domain containing 2 (RSAD2)
<i>ISG20</i>	NM_002201.4	3.36	<i>P</i> =0	interferon stimulated exonuclease gene 20kDa (ISG20)
<i>IFIT3</i>	NM_001031683.1	3.29	<i>P</i> =0	interferon-induced protein with tetratricopeptide repeats 3 (IFIT3)
<i>USP18</i>	NM_017414.3	3.22	<i>P</i> =0	ubiquitin specific peptidase 18 (USP18)
<i>MT2A</i>	NM_005953.2	3.15	<i>P</i> =0	metallothionein 2A (MT2A)
<i>CD80</i>	NM_005191.3	3.14	<i>P</i> =0	CD80 molecule (CD80)
<i>GBP4</i>	NM_052941.3	3.08	<i>P</i> =0	guanylate binding protein 4 (GBP4)
<i>HERC5</i>	NM_016323.2	3.07	<i>P</i> =0	hect domain and RLD 5 (HERC5)
<i>LAMP3</i>	NM_014398.2	3.07	<i>P</i> =0	lysosomal-associated membrane protein 3 (LAMP3)
<i>GBP1</i>	NM_002053.1	3.00	<i>P</i> =0	guanylate binding protein 1, interferon-inducible, 67kDa (GBP1)
<i>HESX1</i>	NM_003865.1	3.00	<i>P</i> =0	HESX homeobox 1 (HESX1)
<i>IFIT2</i>	NM_001547.4	2.92	<i>P</i> =0	interferon-induced protein with tetratricopeptide repeats 2 (IFIT2)
<i>GBP5</i>	NM_052942.2	2.79	<i>P</i> =0	guanylate binding protein 5 (GBP5)
<i>NR1H3</i>	NM_005693.1	2.65	<i>P</i> =0	nuclear receptor subfamily 1, group H, member 3 (NR1H3)
<i>CXCL14</i>	NM_004887.3	2.62	<i>P</i> =0	chemokine (C-X-C motif) ligand 14 (CXCL14)
<i>HES4</i>	NM_021170.2	2.62	<i>P</i> =0	hairy and enhancer of split 4 (Drosophila) (HES4)
<i>AIM2</i>	NM_004833.1	2.62	<i>P</i> =0	absent in melanoma 2 (AIM2)
<i>GJA1</i>	NM_000165.3	2.59	<i>P</i> =0	gap junction protein, alpha 1, 43kDa (GJA1)
<i>DUSP5</i>	NM_004419.3	2.54	<i>P</i> =0	dual specificity phosphatase 5 (DUSP5)
<i>APOL3</i>	NM_145641.1	2.50	<i>P</i> =0	apolipoprotein L, 3 (APOL3)
<i>TNFSF13B</i>	NM_006573.3	2.45	<i>P</i> =0	tumor necrosis factor (ligand) superfamily, member 13b (TNFSF13B)
<i>CCL3L1</i>	NM_021006.4	2.42	<i>P</i> =0	chemokine (C-C motif) ligand 3-like 1 (CCL3L1)
<i>CMPK2</i>	NM_207315.2	2.40	<i>P</i> =0	cytidine monophosphate (UMP-CMP) kinase 2, mitochondrial (CMPK2)
<i>IFITM1</i>	NM_003641.3	2.39	<i>P</i> =0	interferon induced transmembrane protein 1 (9-27) (IFITM1)
<i>STAP1</i>	NM_012108.2	2.38	<i>P</i> =0	signal transducing adaptor family member 1 (STAP1)
<i>STAT1</i>	NM_007315.2	2.38	<i>P</i> =0	signal transducer and activator of transcription 1, 91kDa (STAT1)lpha
<i>IFIT1</i>	NM_001548.3	2.33	<i>P</i> =0	interferon-induced protein with tetratricopeptide repeats 1 (IFIT1)
<i>SRC</i>	NM_198291.1	2.32	<i>P</i> =0	v-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian) (SRC)
<i>OASL</i>	NM_198213.1	2.31	<i>P</i> =0	2'-5'-oligoadenylate synthetase-like (OASL)
<i>DDX58</i>	NM_014314.3	2.30	<i>P</i> =0	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58 (DDX58)
<i>TRIM22</i>	NM_006074.3	2.28	<i>P</i> =0	tripartite motif-containing 22 (TRIM22)
<i>BRDG1</i>	NM_012108.1	2.27	<i>P</i> =0	BCR downstream signaling 1 (BRDG1)
<i>HERC6</i>	NM_017912.3	2.27	<i>P</i> =0	hect domain and RLD 6 (HERC6)
<i>ISG15</i>	NM_005101.1	2.27	<i>P</i> =0	ISG15 ubiquitin-like modifier (ISG15)
<i>HLA-DQA1</i>	XM_936128.2	2.25	<i>P</i> =0	PREDICTED: major histocompatibility complex, class II, DQ alpha 10 (HLA-DQA1)
<i>TMEM140</i>	NM_018295.2	2.22	<i>P</i> =0	transmembrane protein 140 (TMEM140)
<i>ADA</i>	NM_000022.2	2.18	<i>P</i> =0	adenosine deaminase (ADA)
<i>CCL3</i>	NM_002983.1	2.17	<i>P</i> =0	chemokine (C-C motif) ligand 3 (CCL3)
<i>SLAMF7</i>	NM_021181.3	2.17	<i>P</i> =0	SLAM family member 7 (SLAMF7)
<i>IL7R</i>	XM_937367.1	2.16	<i>P</i> =0	PREDICTED: interleukin 7 receptor (IL7R)
<i>TMEM171</i>	NM_173490.5	2.16	<i>P</i> =0	transmembrane protein 171 (TMEM171)
<i>SOD2</i>	NM_000636.2	2.16	<i>P</i> =0	superoxide dismutase 2, mitochondrial (SOD2)
<i>BHLHB3</i>	NM_030762.1	2.15	<i>P</i> =0	basic helix-loop-helix domain containing, class B, 3 (BHLHB3)
<i>MT1A</i>	NM_005946.2	2.15	<i>P</i> =0	metallothionein 1A (MT1A)
<i>PDGFRL</i>	NM_006207.1	2.15	<i>P</i> =0	platelet-derived growth factor receptor-like (PDGFRL)

<i>RNF19B</i>	NM_153341.1	2.11	<i>P</i> =0	ring finger protein 19B (RNF19B)
<i>CXCR5</i>	NM_032966.1	2.10	<i>P</i> =0	chemokine (C-X-C motif) receptor 5 (CXCR5)
<i>OAS1</i>	NM_001032409.1	2.07	<i>P</i> =0	2',5'-oligoadenylate synthetase 1, 40/46kDa (OAS1)
<i>CD48</i>	NM_001778.2	2.07	<i>P</i> =0	CD48 molecule (CD48)
<i>SERPINE2</i>	NM_006216.2	2.06	<i>P</i> =0	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2 (SERPINE2)
<i>CD38</i>	NM_001775.2	2.03	<i>P</i> =0	CD38 molecule (CD38)
<i>C5orf20</i>	NM_130848.2	2.03	<i>P</i> =0	chromosome 5 open reading frame 20 (C5orf20)
<i>IFIH1</i>	NM_022168.2	2.03	<i>P</i> =0	interferon induced with helicase C domain 1 (IFIH1)
<i>SAMD9L</i>	NM_152703.2	2.02	<i>P</i> =0	sterile alpha motif domain containing 9-like (SAMD9L)
<i>LY6E</i>	NM_002346.1	2.02	<i>P</i> =0	lymphocyte antigen 6 complex, locus E (LY6E)
<i>GMPR</i>	NM_006877.2	2.02	<i>P</i> =0	guanosine monophosphate reductase (GMPR)
<i>GCH1</i>	NM_001024071.1	2.01	<i>P</i> =0	GTP cyclohydrolase 1 (GCH1)
<i>PTAFR</i>	NM_000952.3	2.01	<i>P</i> =0	platelet-activating factor receptor (PTAFR)
<i>NCF1C</i>	NR_003187.1	2.00	<i>P</i> =0	neutrophil cytosolic factor 1C pseudogene (NCF1C)
<i>SYT4</i>	NM_020783.2	-2.00	<i>P</i> <0.001	synaptotagmin IV (SYT4)
<i>RNU4-2</i>	NR_003137.2	-2.00	<i>P</i> <0.001	RNA, U4 small nuclear 2 (RNU4-2)
<i>CAT</i>	NM_001752.2	-2.01	<i>P</i> <0.001	catalase (CAT)
<i>PDE7B</i>	NM_018945.3	-2.01	<i>P</i> <0.001	phosphodiesterase 7B (PDE7B)
<i>LILRA2</i>	NM_006866.1	-2.02	<i>P</i> <0.001	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2)
<i>KLF4</i>	NM_004235.3	-2.02	<i>P</i> <0.001	Kruppel-like factor 4 (gut) (KLF4)
<i>OLR1</i>	NM_002543.3	-2.02	<i>P</i> <0.001	oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1)
<i>PLAC8</i>	NM_016619.1	-2.05	<i>P</i> <0.001	placenta-specific 8 (PLAC8)
<i>ATP1B1</i>	NM_001001787.1	-2.06	<i>P</i> <0.001	ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide (ATP1B1)
<i>CD1D</i>	NM_001766.3	-2.07	<i>P</i> <0.001	CD1d molecule (CD1D)
<i>PYGL</i>	NM_002863.3	-2.08	<i>P</i> <0.001	phosphorylase, glycogen, liver (PYGL)
<i>CD300A</i>	NM_007261.2	-2.09	<i>P</i> <0.001	CD300a molecule (CD300A)
<i>C10orf54</i>	NM_022153.1	-2.12	<i>P</i> <0.001	chromosome 10 open reading frame 54 (C10orf54)
<i>NFE2</i>	NM_006163.1	-2.12	<i>P</i> <0.001	nuclear factor (erythroid-derived 2), 45kDa (NFE2)
<i>RNU4-1</i>	NR_003925.1	-2.13	<i>P</i> <0.001	RNA, U4 small nuclear 1 (RNU4-1)
<i>SIGLEC16</i>	NR_002825.1	-2.13	<i>P</i> <0.001	sialic acid binding Ig-like lectin 16 (gene/pseudogene) (SIGLEC16)
<i>COLEC12</i>	NM_130386.1	-2.13	<i>P</i> <0.001	collectin sub-family member 12 (COLEC12)
<i>MS4A6A</i>	NM_152851.1	-2.14	<i>P</i> <0.001	membrane-spanning 4-domains, subfamily A, member 6A (MS4A6A)
<i>BEX1</i>	NM_018476.3	-2.16	<i>P</i> <0.001	brain expressed, X-linked 1 (BEX1)
<i>FPR1</i>	NM_002029.3	-2.17	<i>P</i> <0.001	formyl peptide receptor 1 (FPR1)
<i>NTSR1</i>	NM_002531.2	-2.18	<i>P</i> <0.001	neurotensin receptor 1 (high affinity) (NTSR1)
<i>C1orf162</i>	NM_174896.2	-2.19	<i>P</i> <0.001	chromosome 1 open reading frame 162 (C1orf162)
<i>PTCRA</i>	NM_138296.2	-2.23	<i>P</i> <0.001	pre T-cell antigen receptor alpha (PTCRA)
<i>HP</i>	NM_005143.2	-2.26	<i>P</i> <0.001	haptoglobin (HP)
<i>PPARG</i>	NM_015869.4	-2.29	<i>P</i> <0.001	peroxisome proliferator-activated receptor gamma (PPARG)
<i>SLC11A1</i>	NM_000578.3	-2.33	<i>P</i> <0.001	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1 (SLC11A1)
<i>CX3CR1</i>	NM_001337.3	-2.36	<i>P</i> <0.001	chemokine (C-X3-C motif) receptor 1 (CX3CR1)
<i>CTSG</i>	NM_001911.2	-2.38	<i>P</i> <0.001	cathepsin G (CTSG)
<i>DHRS9</i>	NM_005771.3	-2.39	<i>P</i> <0.001	dehydrogenase/reductase (SDR family) member 9 (DHRS9)
<i>RNASE1</i>	NM_198235.1	-2.41	<i>P</i> <0.001	ribonuclease, RNase A family, 1 (pancreatic) (RNASE1)
<i>CEACAM6</i>	NM_002483.3	-2.43	<i>P</i> <0.001	carcinoembryonic antigen-related cell adhesion molecule 6 (non-specific cross reacting antigen) (CEACAM6)
<i>TM6SF1</i>	NM_023003.2	-2.48	<i>P</i> <0.001	transmembrane 6 superfamily member 1 (TM6SF1)
<i>FAM84B</i>	NM_174911.3	-2.50	<i>P</i> <0.001	family with sequence similarity 84, member B (FAM84B)
<i>PDK4</i>	NM_002612.3	-2.69	<i>P</i> <0.001	pyruvate dehydrogenase kinase, isozyme 4 (PDK4)
<i>TOX2</i>	NM_001098797.1	-2.71	<i>P</i> <0.001	TOX high mobility group box family member 2 (TOX2)
<i>PHACTR3</i>	NM_183246.1	-2.87	<i>P</i> <0.001	phosphatase and actin regulator 3 (PHACTR3)
<i>VCAN</i>	NM_004385.2	-3.08	<i>P</i> <0.001	versican (VCAN)
<i>OLFML3</i>	NM_020190.2	-3.16	<i>P</i> <0.001	olfactomedin-like 3 (OLFML3)
<i>NPTX1</i>	NM_002522.2	-3.23	<i>P</i> <0.001	neuronal pentraxin I (NPTX1)
<i>ID1</i>	NM_181353.1	-3.24	<i>P</i> <0.001	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein (ID1)

ID3

NM_002167.2

-3.66 $P < 0.001$

inhibitor of DNA binding 3, dominant negative helix-loop-helix protein (ID3)

Supplementary Table 4. The genes showing altered expression in THP-1 macrophage cells after *B. abortus* mutant strain C32 infection

Gene_Symbol	Accession No.	Fold changes	P-value	Gene description
<i>IDO1</i>	NM_002164.4	6.88	<i>P</i> =0	indoleamine 2,3-dioxygenase 1 (IDO1)
<i>TNFSF10</i>	NM_003810.2	5.23	<i>P</i> =0	tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10)
<i>CCL8</i>	NM_005623.2	4.85	<i>P</i> =0	chemokine (C-C motif) ligand 8 (CCL8)
<i>CXCL13</i>	NM_006419.1	4.41	<i>P</i> =0	chemokine (C-X-C motif) ligand 13 (B-cell chemoattractant) (CXCL13)
<i>CXCL10</i>	NM_001565.2	4.01	<i>P</i> =0	chemokine (C-X-C motif) ligand 10 (CXCL10)
<i>IFIT3</i>	NM_001031683.1	3.99	<i>P</i> =0	interferon-induced protein with tetratricopeptide repeats 3 (IFIT3)
<i>RSAD2</i>	NM_080657.4	3.90	<i>P</i> =0	radical S-adenosyl methionine domain containing 2 (RSAD2)
<i>IFI27</i>	NM_005532.3	3.76	<i>P</i> =0	interferon, alpha-inducible protein 27 (IFI27)
<i>ISG20</i>	NM_002201.4	3.54	<i>P</i> =0	interferon stimulated exonuclease gene 20kDa (ISG20)
<i>IFI44L</i>	NM_006820.1	3.53	<i>P</i> =0	interferon-induced protein 44-like (IFI44L)
<i>HESX1</i>	NM_003865.1	3.50	<i>P</i> =0	HESX homeobox 1 (HESX1)
<i>HERC5</i>	NM_016323.2	3.49	<i>P</i> =0	hect domain and RLD 5 (HERC5)
<i>IFIT2</i>	NM_001547.4	3.48	<i>P</i> =0	interferon-induced protein with tetratricopeptide repeats 2 (IFIT2)
<i>USP18</i>	NM_017414.3	3.38	<i>P</i> =0	ubiquitin specific peptidase 18 (USP18)
<i>AIM2</i>	NM_004833.1	3.18	<i>P</i> =0	absent in melanoma 2 (AIM2)
<i>GBP4</i>	NM_052941.3	3.08	<i>P</i> =0	guanylate binding protein 4 (GBP4)
<i>OASL</i>	NM_198213.1	3.05	<i>P</i> =0	2'-5'-oligoadenylate synthetase-like (OASL)
<i>BRDG1</i>	NM_012108.1	2.98	<i>P</i> =0	BCR downstream signaling 1 (BRDG1)
<i>STAP1</i>	NM_012108.2	2.95	<i>P</i> =0	signal transducing adaptor family member 1 (STAP1)
<i>TNFSF13B</i>	NM_006573.3	2.94	<i>P</i> =0	tumor necrosis factor (ligand) superfamily, member 13b (TNFSF13B)
<i>GBP1</i>	NM_002053.1	2.91	<i>P</i> =0	guanylate binding protein 1, interferon-inducible, 67kDa (GBP1)
<i>IFIT1</i>	NM_001548.3	2.90	<i>P</i> =0	interferon-induced protein with tetratricopeptide repeats 1 (IFIT1)
<i>CCL2</i>	NM_002982.3	2.85	<i>P</i> =0	chemokine (C-C motif) ligand 2 (CCL2)
<i>GBP5</i>	NM_052942.2	2.71	<i>P</i> =0	guanylate binding protein 5 (GBP5)
<i>STAT1</i>	NM_007315.2	2.71	<i>P</i> =0	signal transducer and activator of transcription 1, 91kDa (STAT1)
<i>ISG15</i>	NM_005101.1	2.70	<i>P</i> =0	ISG15 ubiquitin-like modifier (ISG15)
<i>IFITM1</i>	NM_003641.3	2.57	<i>P</i> =0	interferon induced transmembrane protein 1 (9-27) (IFITM1)
<i>DDX58</i>	NM_014314.3	2.55	<i>P</i> =0	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58 (DDX58)
<i>TRIM22</i>	NM_006074.3	2.54	<i>P</i> =0	tripartite motif-containing 22 (TRIM22)
<i>CMPK2</i>	NM_207315.2	2.50	<i>P</i> =0	cytidine monophosphate (UMP-CMP) kinase 2, mitochondrial (CMPK2)
<i>HERC6</i>	NM_017912.3	2.38	<i>P</i> =0	hect domain and RLD 6 (HERC6)
<i>GMPR</i>	NM_006877.2	2.36	<i>P</i> =0	guanosine monophosphate reductase (GMPR)
<i>TMEM171</i>	NM_173490.5	2.33	<i>P</i> <0.001	transmembrane protein 171 (TMEM171)
<i>SAMD9L</i>	NM_152703.2	2.32	<i>P</i> =0	sterile alpha motif domain containing 9-like (SAMD9L)
<i>IL1RN</i>	NM_173843.1	2.31	<i>P</i> =0	interleukin 1 receptor antagonist (IL1RN)
<i>BATF2</i>	NM_138456.3	2.30	<i>P</i> <0.001	basic leucine zipper transcription factor, ATF-like 2 (BATF2)
<i>MT2A</i>	NM_005953.2	2.30	<i>P</i> =0	metallothionein 2A (MT2A)
<i>HES4</i>	NM_021170.2	2.27	<i>P</i> <0.001	hairy and enhancer of split 4 (Drosophila) (HES4)
<i>TMEM140</i>	NM_018295.2	2.27	<i>P</i> <0.001	transmembrane protein 140 (TMEM140)
<i>SP110</i>	NM_004510.2	2.26	<i>P</i> =0	SP110 nuclear body protein (SP110)
<i>SERPINE2</i>	NM_006216.2	2.25	<i>P</i> =0	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2 (SERPINE2)
<i>OAS1</i>	NM_001032409.1	2.24	<i>P</i> =0	2',5'-oligoadenylate synthetase 1, 40/46kDa (OAS1)
<i>IRF7</i>	NM_004029.2	2.24	<i>P</i> =0	interferon regulatory factor 7 (IRF7)
<i>KIAA1618</i>	NM_020954.2	2.24	<i>P</i> =0	KIAA1618 (KIAA1618)
<i>IFIH1</i>	NM_022168.2	2.23	<i>P</i> =0	interferon induced with helicase C domain 1 (IFIH1)
<i>DUSP5</i>	NM_004419.3	2.18	<i>P</i> <0.001	dual specificity phosphatase 5 (DUSP5)
<i>MX2</i>	NM_002463.1	2.17	<i>P</i> =0	myxovirus (influenza virus) resistance 2 (mouse) (MX2)
<i>SAMD4A</i>	NM_015589.3	2.15	<i>P</i> <0.001	sterile alpha motif domain containing 4A (SAMD4A)
<i>IFI16</i>	NM_005531.1	2.12	<i>P</i> =0	interferon, gamma-inducible protein 16 (IFI16)
<i>IFI44</i>	NM_006417.3	2.09	<i>P</i> =0	interferon-induced protein 44 (IFI44)
<i>TRIM5</i>	NM_033034.1	2.08	<i>P</i> <0.001	tripartite motif-containing 5 (TRIM5)
<i>UBE2L6</i>	NM_004223.3	2.08	<i>P</i> =0	ubiquitin-conjugating enzyme E2L 6 (UBE2L6)

<i>LY6E</i>	NM_002346.1	2.06	<i>P</i> =0	lymphocyte antigen 6 complex, locus E (LY6E)
<i>PDGFRL</i>	NM_006207.1	2.05	<i>P</i> <0.001	platelet-derived growth factor receptor-like (PDGFRL)
<i>MX1</i>	NM_002462.2	2.05	<i>P</i> =0	myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse) (MX1)
<i>NCOA7</i>	NM_181782.2	2.04	<i>P</i> <0.001	nuclear receptor coactivator 7 (NCOA7)
<i>OAS2</i>	NM_002535.2	2.03	<i>P</i> <0.001	2'-5'-oligoadenylate synthetase 2, 69/71kDa (OAS2)
<i>IFI35</i>	NM_005533.2	2.01	<i>P</i> =0	interferon-induced protein 35 (IFI35)
<i>ID1</i>	NM_181353.1	-2.06	<i>P</i> <0.001	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein (ID1)
<i>ID3</i>	NM_002167.2	-2.07	<i>P</i> <0.001	inhibitor of DNA binding 3, dominant negative helix-loop-helix protein (ID3)
<i>CXCR7</i>	NM_020311.2	-2.09	<i>P</i> <0.001	chemokine (C-X-C motif) receptor 7 (CXCR7)
<i>CEACAM6</i>	NM_002483.3	-2.11	<i>P</i> <0.001	carcinoembryonic antigen-related cell adhesion molecule 6 (non-specific cross reacting antigen) (CEACAM6)
<i>OLFML3</i>	NM_020190.2	-2.23	<i>P</i> <0.001	olfactomedin-like 3 (OLFML3)
<i>NPTX1</i>	NM_002522.2	-2.44	<i>P</i> <0.001	neuronal pentraxin I (NPTX1)

Supplementary Table 5. Expression of cytokine inducible genes from cells infected by *B. abortus* mutants

Gene_Symbol	Accession	C1/W.fc	Definition
<i>CXCL6</i>	NM_002993.2	-6.78	chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2)
<i>CCL8</i>	NM_005623.2	-6.13	chemokine (C-C motif) ligand 8
<i>CCL20</i>	NM_004591.1	-5.96	chemokine (C-C motif) ligand 20
<i>CXCL1</i>	NM_001511.1	-5.92	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
<i>CCL4L1</i>	NM_001001435.2	-5.80	chemokine (C-C motif) ligand 4-like 1
<i>CCL4L2</i>	NM_207007.2	-5.52	chemokine (C-C motif) ligand 4-like 2
<i>CCL2</i>	NM_002982.3	-5.45	chemokine (C-C motif) ligand 2
<i>IL8</i>	NM_000584.2	-5.25	interleukin 8
<i>IL1B</i>	NM_000576.2	-5.23	interleukin 1, beta
<i>CXCL13</i>	NM_006419.1	-5.21	chemokine (C-X-C motif) ligand 13 (B-cells chemoattractant)
<i>CCL3L1</i>	NM_021006.4	-4.88	chemokine (C-C motif) ligand 3-like 1 (CCL3L1)
<i>CCL3</i>	NM_002983.1	-4.78	chemokine (C-C motif) ligand 3
<i>CXCL10</i>	NM_001565.2	-4.04	chemokine (C-X-C motif) ligand 10
<i>CCL19</i>	NM_006274.2	-3.21	chemokine (C-C motif) ligand 19
<i>TNF</i>	NM_000594.2	-3.17	tumor necrosis factor (TNF superfamily, member 2)
<i>CXCL2</i>	NM_002089.3	-2.90	chemokine (C-X-C motif) ligand 2
<i>BCL3</i>	NM_005178.2	-2.79	B-cells CLL/lymphoma 3
<i>PTAFR</i>	NM_000952.3	-2.74	platelet-activating factor receptor
<i>CXCL12</i>	NM_199168.2	-2.47	chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)
<i>CXCR5</i>	NM_032966.1	-2.41	chemokine (C-X-C motif) receptor 5
<i>SLAMF7</i>	NM_021181.3	-2.06	SLAM family member 7
Gene_Symbol	Accession	C10/W.fc	Definition
<i>CCL8</i>	NM_005623.2	-8.94	chemokine (C-C motif) ligand 8
<i>CCL20</i>	NM_004591.1	-7.13	chemokine (C-C motif) ligand 20
<i>IL8</i>	NM_000584.2	-6.87	interleukin 8
<i>CCL4L2</i>	NM_207007.2	-6.43	chemokine (C-C motif) ligand 4-like 2
<i>CXCL6</i>	NM_002993.2	-6.43	chemokine (C-X-C motif) ligand 6
<i>IL1B</i>	NM_000576.2	-6.19	interleukin 1, beta
<i>CCL2</i>	NM_002982.3	-6.02	chemokine (C-C motif) ligand 2
<i>CCL4L1</i>	NM_001001435.2	-6.01	chemokine (C-C motif) ligand 4-like 1
<i>CCL3</i>	NM_002983.1	-6.01	chemokine (C-C motif) ligand 3
<i>CXCL1</i>	NM_001511.1	-5.99	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
<i>CCL3L1</i>	NM_021006.4	-5.67	chemokine (C-C motif) ligand 3-like 1
<i>CXCL13</i>	NM_006419.1	-5.42	chemokine (C-X-C motif) ligand 13 (B-cells chemoattractant)
<i>CXCL10</i>	NM_001565.2	-5.06	chemokine (C-X-C motif) ligand 10
<i>TNF</i>	NM_000594.2	-3.82	tumor necrosis factor (TNF superfamily, member 2)
<i>CXCL2</i>	NM_002089.3	-3.44	chemokine (C-X-C motif) ligand 2
<i>CCL19</i>	NM_006274.2	-3.19	chemokine (C-C motif) ligand 19
<i>BCL3</i>	NM_005178.2	-2.99	B-cells CLL/lymphoma 3
<i>CXCL12</i>	NM_199168.2	-2.59	chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)
<i>PTAFR</i>	NM_000952.3	-2.37	platelet-activating factor receptor
<i>CXCR5</i>	NM_032966.1	-2.36	chemokine (C-X-C motif) receptor 5
<i>CD80</i>	NM_005191.3	-2.22	CD80 molecule
<i>ADA</i>	NM_000022.2	-2.03	adenosine deaminase
Gene_Symbol	Accession	C27/W.fc	Definition
<i>PTAFR</i>	NM_000952.3	2.01	platelet-activating factor receptor
<i>CXCR5</i>	NM_032966.1	2.10	chemokine (C-X-C motif) receptor 5
<i>SLAMF7</i>	NM_021181.3	2.17	SLAM family member 7
<i>CCL3</i>	NM_002983.1	2.17	chemokine (C-C motif) ligand 3
<i>ADA</i>	NM_000022.2	2.18	adenosine deaminase

<i>CCL3L1</i>	NM_021006.4	2.42	chemokine (C-C motif) ligand 3-like 1
<i>CXCL14</i>	NM_004887.3	2.62	chemokine (C-X-C motif) ligand 14
<i>CD80</i>	NM_005191.3	3.14	CD80 molecule
<i>CXCL10</i>	NM_001565.2	3.69	chemokine (C-X-C motif) ligand 10
<i>CCL2</i>	NM_002982.3	4.76	chemokine (C-C motif) ligand 2
<i>CXCL13</i>	NM_006419.1	5.14	chemokine (C-X-C motif) ligand 13 (B-cells chemoattractant)
<i>CCL8</i>	NM_005623.2	5.59	chemokine (C-C motif) ligand 8

Gene Symbol	Accession	C32/W.fc	Definition
<i>CCL2</i>	NM_002982.3	2.85	chemokine (C-C motif) ligand 2
<i>CXCL10</i>	NM_001565.2	4.01	chemokine (C-X-C motif) ligand 10
<i>CXCL13</i>	NM_006419.1	4.41	chemokine (C-X-C motif) ligand 13 (B-cells chemoattractant)
<i>CCL8</i>	NM_005623.2	4.85	chemokine (C-C motif) ligand 8
