

**Supplementary Figure 1.** a, **Blimp1 expression in L. monocytogenes-infected BMDM and Neutrophils.** RNA was isolated from untreated or Lm-infected BMDM 2, 4, 8 or 24 hpi and Blimp1 gene expression was quantified by qPCR. Data were normalized with β-Actin and are representative of 3 independent experiments. **b, Blimp1 transcription in different myeloid cell types.** Blimp1 gene expression was monitored in freshly isolated FLT3-L DC, GMCSF DC, BMDM, PEC and neutrophils by qPCR. Data were normalized with β-Actin. **c, Deletion of Blimp1 in neutrophils derived from Blimp1 CKO mice.** Lysozyme M-driven cre-mediated deletion of Blimp1 was confirmed by PCR in genomic DNA of freshly isolated neutrophils from WT or Blimp1 CKO mice. **d, Blimp1 expression was monitored by qPCR in neutrophils** from bone marrow or peripheral blood left untreated or treated for 4h with LPS or L. monocytogenes. Enhanced protection of myeloid-specific Blimp1-deficient mice to infection with L. monocytogenes. **e, WT or Blimp1 CKO mice were infected i.v.** with 3x104cfu of L. monocytogenes and bacterial loads from livers and spleens were calculated 20, 48 and 72hpi. Counts from 2 mice per condition are depicted and are representative of two experiments conducted independently. \*p<0.05 (two-tailed Student's t-test). **f, WT (n=19) or Blimp1 CKO mice (n=17) were infected i.v.** with L. monocytogenes and survival monitored as indicated. **g, C57BL/6 mice and C57BL/6 Mlyz Cre mice** (n=10/each genotype) were infected as stated above and bacterial burdens were monitored in infected spleens and livers.





Supplementary Figure 2. Transcriptional analysis of WT or Blimp1 CKO macrophages identifies BLIMP1-target genes. a, The heatmap shows normalized log-transformed intensities for ninety probe sets with significantly different expression levels between WT and Blimp1 CKO BMDM for either untreated or infected cells (2 hours with LM, MOI=5). The probe set ID is shown when a gene name has not been assigned. <sup>at</sup> Biological triplicates were performed for each experimental condition (wt un= untreated WT mice, wt L= LM-infected WT mice, Cko un= untreated Blimp1 CKO mice, CKO L= LM-infected Blimp1 CKO mice).

http://wrpise
h, Atm, Mpa2L, Arhgap25, Pldn, Tmem87a, Tm7sf4 and Rasgrp1 gene
expression was validated by real-time RT-PCR in total RNA isolated from
turtreated or 2h LM-treated BMDM from WT or Blimp1 CKO mice.
Data were normalized with β-actin. The experiment is representative of
3 conducted separately. c, CCL2 is chemoattractant for monocytes but
not for neutrophils. Percentages of CD11bint/Ly6Chi monocytes and
CD11b/Ly6G neutrophils were evaluated by cytometric analysis in peripheral
blood cells from C57BL/6 mice mock treated or injected i.v. with 800ng of
recombinant CCL2 for two consecutive days. Each bar represents the mean
percentage of cells obtained from FACS analysis of four mice of 2 independent
experiments. Error bars represent SEM. \* p < 0.05 as compared with mock controls.</li>

			Total	
			number	
		Frank and a start and	of genes	
	Number of genes	Expected number	in	D. walking
GO Biological process	observed	or genes	category	
regulation of macrophage activation	2 Г	0.022854241	5	0.000203275
regulation of feell activation	5	0.580497715	127	0.000275194
	5		128	0.000285395
regulation of cellular process	33	20.71965465	4533	0.000577988
myeloid leukocyte activation	3	0.182833926	40	0.000791349
macrophage activation	2	0.054850178	12	0.001314345
leukocyte activation	6	1.238699848	2/1	0.00141389
regulation of biological process	33	21.76180802	4/61	0.001576146
protein ubiquitination	3	0.2468258	54	0.001899076
cell activation	6	1.316404266	288	0.001926118
negative regulation of apoptosis	5	0.923311326	202	0.002229077
cytoskeleton organization	6	1.357541899	297	0.002248813
biological regulation	34	23.15591671	5066	0.002285019
negative regulation of programmed	-	0.044504740	225	0.000.007.075
cell death	5	0.941594/18	206	0.002427475
negative regulation of cell death	5	0.941594/18	206	0.002427475
signal transduction	19	9.918740477	2170	0.002468391
nitric oxide biosynthetic process	2	0.077704418	17	0.00266898
nitric oxide metabolic process	2	0.077704418	17	0.00266898
protein modification by small protein	_			
conjugation	3	0.283392585	62	0.002822068
cell communication	20	11.03402743	2414	0.003547852
protein modification by small protein				
conjugation or removal	3	0.315388522	69	0.003822625
immune system process	9	3.231589639	707	0.004396854
negative regulation of type I				
hypersensitivity	1	0.004570848	1	0.004570848
ornithine transport	1	0.004570848	1	0.004570848
branchiomotor neuron axon guidance	1	0.004570848	1	0.004570848
regulation of cytoskeleton				
organization	3	0.342813611	75	0.004832623
protein localization	9	3.359573388	735	0.005663125
regulation of cellular component				
organization	5	1.156424581	253	0.005824961
negative regulation of cell motion	2	0.118842052	26	0.006212534
regulation of immune system process	5	1.179278822	258	0.006319439
actin filament organization	3	0.383951244	84	0.00662539
actin cytoskeleton organization	4	0.767902489	168	0.00718126
macromolecule localization	9	3.524123921	771	0.007690774
antigen processing and presentation			1	
of peptide antigen	2	0.141696293	31	0.008760064
actin filament-based process	4	0.822752666	180	0.009113226
production of nitric oxide during acute				
inflammatory response	1	0.009141696	2	0.009121189
JUN phosphorylation	1	0.009141696	2	0.009121189
lysine transport	1	0.009141696	2	0.009121189
regulation of endocytosis	2	0.150837989	33	0.009889142

Supplementary Table1. List of probe set IDs and gene names corresponding to supplementary figure 2.

	Gene
1444128_at	Arhgap26
1443905_at	SIFS8 Mpp21
1424454 at	Tmem87a
1438754 at	Thicknoy u
1437072_at	Arhgap25
1434295_at	Rasgrp1
1437176_at	NIrc5
1429239_a_at	Stard4
1457088_at	Pldn
1416572_at	Mmp14
1422166_at	Clec2i
1456/92_at	IDCIG2
145/9/0_at	Actria Vinc20
1421205 at	Atm
1449001 at	Ivd
1460558 at	Ccdc32
1447150_at	Mycbp2
1436590_at	Ppp1r3b
1457936_at	Mapk8
1421275_s_at	Socs4
1454617_at	Arrdc3
143100/_at	GIII 3435
1455682_at	ADIZ Cdkp1b
1425908 at	Gnh1
1423908_at	Rora
1440506 at	Slc7a2
1423555 a at	Ifi44
1428693_at	
1447927_at	Mpa2l
1437514_at	
1426481_at	Klhl22
1442959_at	Birc6
1428917_at	Stx17
1430151_at	Nisch
1424976_at	Rhov
1428760_at	Snapc3
1435719_at	AU013203
1436524 at	A1440504
1423903 at	Pvr
1460203 at	Itpr1
1456479_at	Snx30
1445534_at	Flnb
1441229_at	
1448942_at	Gng11
1453077_a_at	Snapc3
1416205_at	Glb1
1439840_at	Poib
1460363_at	
1415761 at	MrnI52
1449048 s at	Rab4a
1449168 a at	Akap2
1422807 at	Arf5
1449152_at	Cdkn2b
1455332_x_at	Fcgr2b
1446365_at	Vti1a
1460701_a_at	Mrpl52
1443628_at	Wwp1
14306WA at	
1419004_dl	Ccl8
1419684_dt 1442118_at	Ccl8 Fcgr2b
1419664_at 1442118_at 1417069_a_at	Ccl8 Fcgr2b Gmfb
1419004_at 1442118_at 1417069_a_at 1431046_at 1434328_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15
1419084_at 1442118_at 1417069_a_at 1431046_at 1434328_at 1433954_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15
1442118_at 1442069_a_at 1417069_a_at 1431046_at 1434328_at 1433954_at 1420425_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1
1419064_dt 1442118_at 1417069_a_at 1431046_at 1434328_at 1433954_at 1420425_at 1437003_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1
1442118_at 14421069_a_at 1417069_a_at 1431046_at 1434328_at 1433954_at 1420425_at 1437003_at 1423153_x_at	Ccl8       Fcgr2b       Gmfb       Ppfia3       Rpl15       Prdm1       Cfh
1419084_at 1442118_at 1417069_a_at 1431046_at 1433954_at 1420425_at 1437003_at 1423153_x_at 143818_x_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn
1442118_at 1442118_at 1417069_a_at 1431046_at 1434328_at 1433954_at 1420425_at 1420425_at 1437003_at 1423153_x_at 143818_x_at 1434446_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr
1442118_at 1442106_a_at 1431046_at 1434328_at 1433954_at 1423954_at 1420425_at 142703_at 1423153_x_at 143818_x_at 143846_at 1455011_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4
1442118_at 1442106_a_at 1417069_a_at 1431046_at 143302_at 1433954_at 1423053_at 1420425_at 1427003_at 1423153_x_at 1438318_x_at 1438446_at 1455011_at 145558_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7
1442118_at 1442178_at 1417069_a_at 1431046_at 1433054_at 1433954_at 1423025_at 1427003_at 1423153_x_at 1438318_x_at 1438446_at 1455511_at 1451558_at 1432329_a_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk
1442118_at 144218_at 1417069_a_at 1431046_at 1433954_at 1433954_at 1420425_at 1420425_at 1423153_x_at 1438318_x_at 1438318_x_at 1438446_at 145558_at 1432329_a_at 1428909_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk
1442118_at 1442118_at 1417069_a_at 1431046_at 1434328_at 1433954_at 1420425_at 1437003_at 1423153_x_at 143818_x_at 143818_x_at 1434446_at 1455011_at 1455011_at 1451558_at 1432329_a_at 1428909_at 1428909_at 1451988_s_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7cf4
1442118_at 1442168_at 1431046_at 1431046_at 1433054_at 1433954_at 1420425_at 1420425_at 1427003_at 1423153_x_at 143818_x_at 1438318_x_at 143846_at 14355011_at 145558_at 1432329_a_at 1428909_at 1454988_s_at 1431970_at 1429000_at 1429000_at 1429000_at 1429000_at 14	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4
1442118_at 144216_at 1431046_at 1431046_at 1433054_at 1433954_at 1423053_at 1420425_at 142703_at 1423153_x_at 143818_x_at 1438318_x_at 14382329_a_at 143558_at 1432329_a_at 1428909_at 1454988_s_at 1431970_at 1429240_at 142660_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Stard4 Stard4
1442118_at 1442106_a_at 1417069_a_at 1431046_at 1433054_at 1433954_at 1433954_at 1420425_at 1427003_at 1423153_x_at 1438318_x_at 1438318_x_at 1435011_at 1451558_at 1432329_a_at 1428909_at 1454988_s_at 1431970_at 1429240_at 1436360_at 1418536_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-07
1442118_at 144218_at 1417069_a_at 1431046_at 1433054_at 1433954_at 1433954_at 1423053_at 142425_at 1437003_at 1423153_x_at 1438318_x_at 1434446_at 1453558_at 145258_at 145299_at 145299_at 1454988_s_at 1451970_at 1429240_at 1429240_at 1418536_at 1460064_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-Q7 BCO28789
1442118_at 1442118_at 143046_at 1433046_at 1433046_at 1433054_at 1433054_at 1420425_at 1437003_at 1423153_x_at 143818_x_at 143818_x_at 1434446_at 1455011_at 1455011_at 145588_at 1432329_a_at 1428909_at 1428909_at 142940_at 1436366_at 1448536_at 1435896_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-Q7 BC028789 Sfxn2
1442118 at 1442118 at 1431046 at 1433054 at 1433954 at 1420425 at 1420425 at 1420425 at 1427003 at 1423153 x at 1432153 x at 143818 x at 143446 at 1435011 at 1455011 at 14558 at 1432329 a at 1428909 at 1454988 s at 1431970 at 1429240 at 143536 at 1418536 at 1435896 at 1435896 at 1435896 at 1435896 at 1435896 at 1435896 at 14569 at 145	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-Q7 BC028789 Sfxn2
1442118_at 1442106_a_at 1417069_a_at 1431046_at 1434328_at 1433954_at 14230425_at 1420425_at 142703_at 1423153_x_at 143818_x_at 143818_x_at 143818_x_at 14382329_a_at 1455011_at 145558_at 1432329_a_at 1428909_at 1454988_s_at 1431970_at 1429240_at 143536_at 1460064_at 1435896_at 1448538_at 144883_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-Q7 BC028789 Sfxn2 Mmp14
1442118_at 1442106_a_at 1431046_at 1431046_at 1433054_at 1433954_at 1433954_at 1420425_at 1420425_at 142703_at 1423153_x_at 1438318_x_at 1438446_at 1455011_at 1455011_at 145509_at 1428909_at 1428909_at 1436360_at 1436360_at 144536_at 1435896_at 143883_at 143883_at 143883_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-Q7 BC028789 Sfxn2 Mmp14 Gm4951-201
1442118_at 144218_at 1417069_a_at 1431046_at 1433054_at 1433954_at 1433954_at 1423053_at 1420425_at 1437003_at 1423153_x_at 1438318_x_at 1438318_x_at 1435011_at 1451558_at 1432329_a_at 1428909_at 1428909_at 1429240_at 1429240_at 1429240_at 1436366_at 143586_at 1435896_at 1435896_at 1438381_at 1427660_x_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-Q7 BC028789 Sfxn2 Mmp14 Gm4951-201 Igk-C
1442118 at 1442118 at 1417069_a_at 1431046_at 1433046_at 1433054_at 1433054_at 1420425_at 1432003_at 1423153_x_at 143318_x_at 143818_x_at 1434446_at 1455011_at 1455011_at 14558_at 1432329_a_at 1428909_at 1428909_at 1428909_at 1428909_at 1436360_at 1418536_at 1436360_at 1448536_at 14456419_at 14456419_at 1445539_at 1427660_x_at 1445539_at	Ccl8 Fcgr2b Gmfb Ppfia3 Rpl15 Prdm1 Cfh Ngdn Insr Stard4 Fbxw7 Matk Rab22a Tm7sf4 Stard4 Zscan22 H2-Q7 BC028789 Sfxn2 Mmp14 Gm4951-201 Igk-C Pde7b

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Supplementary Table2. GO enrichment analysis for genes with significantly different expression levels (p < 0.05). A GO enrichment analysis was performed on the set of genes in supplementary Table 1. GO biological processes are ordered by P-values obtained from the hypergeometric test.