

# **IRF7 drives macrophages to kill bacteria and improves septic outcomes via autophagy**

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Lianxu Zhao

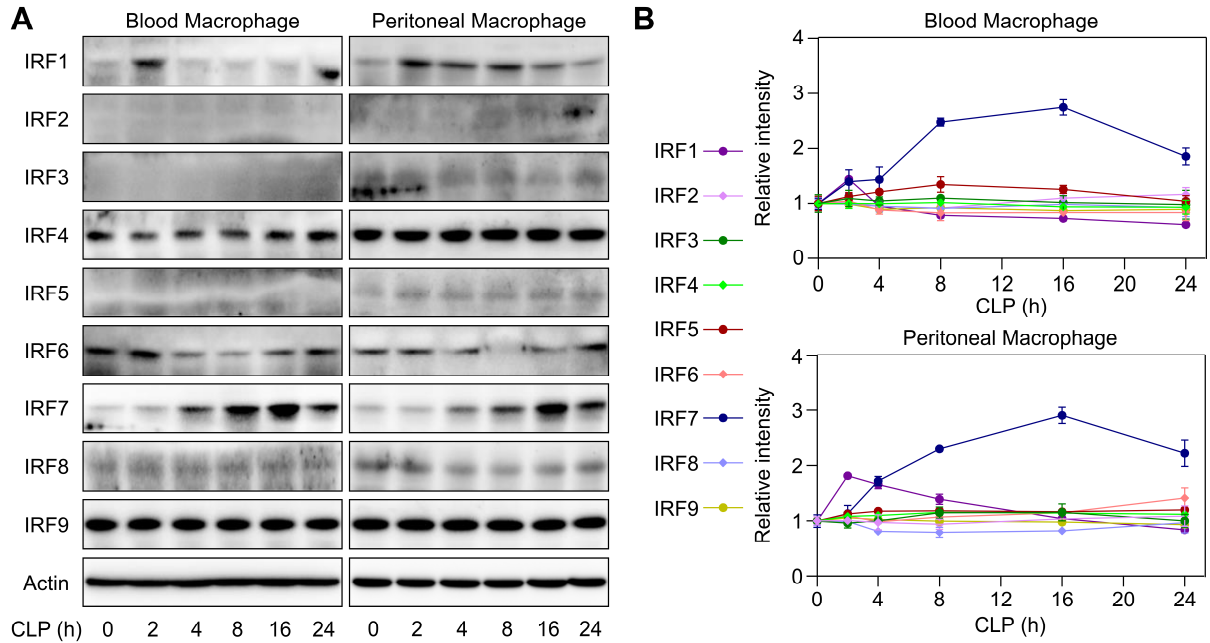
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Shenzhen Hospital of Southern Medical University

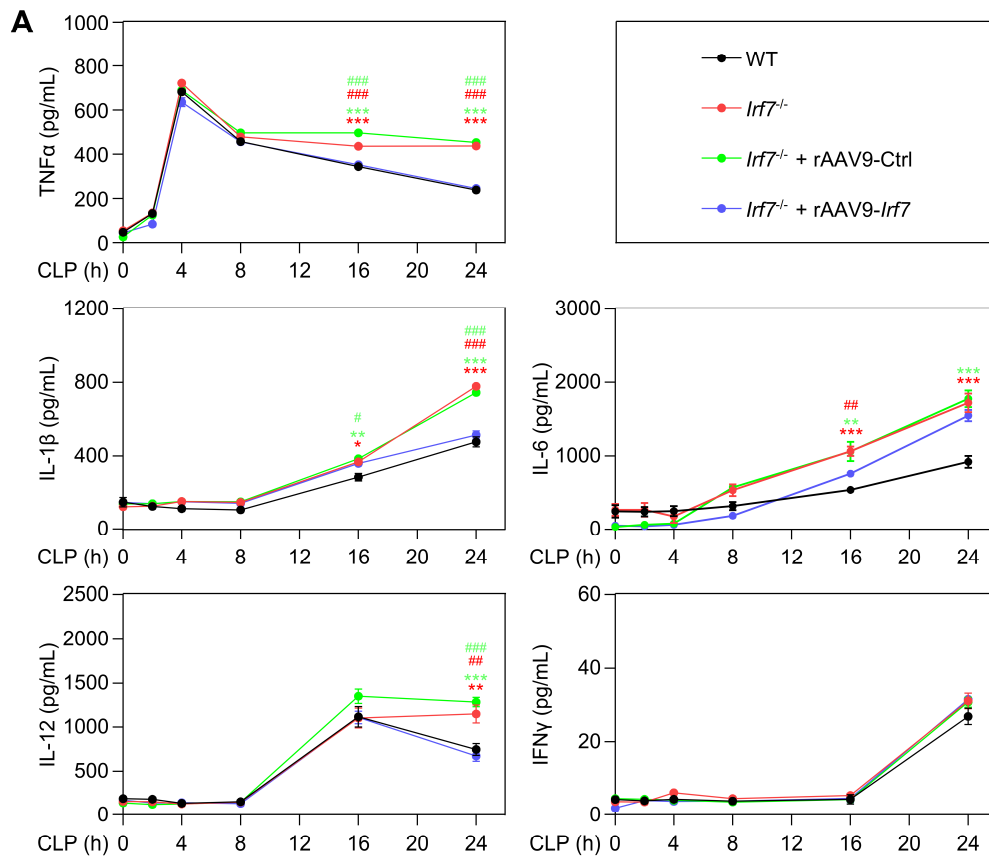
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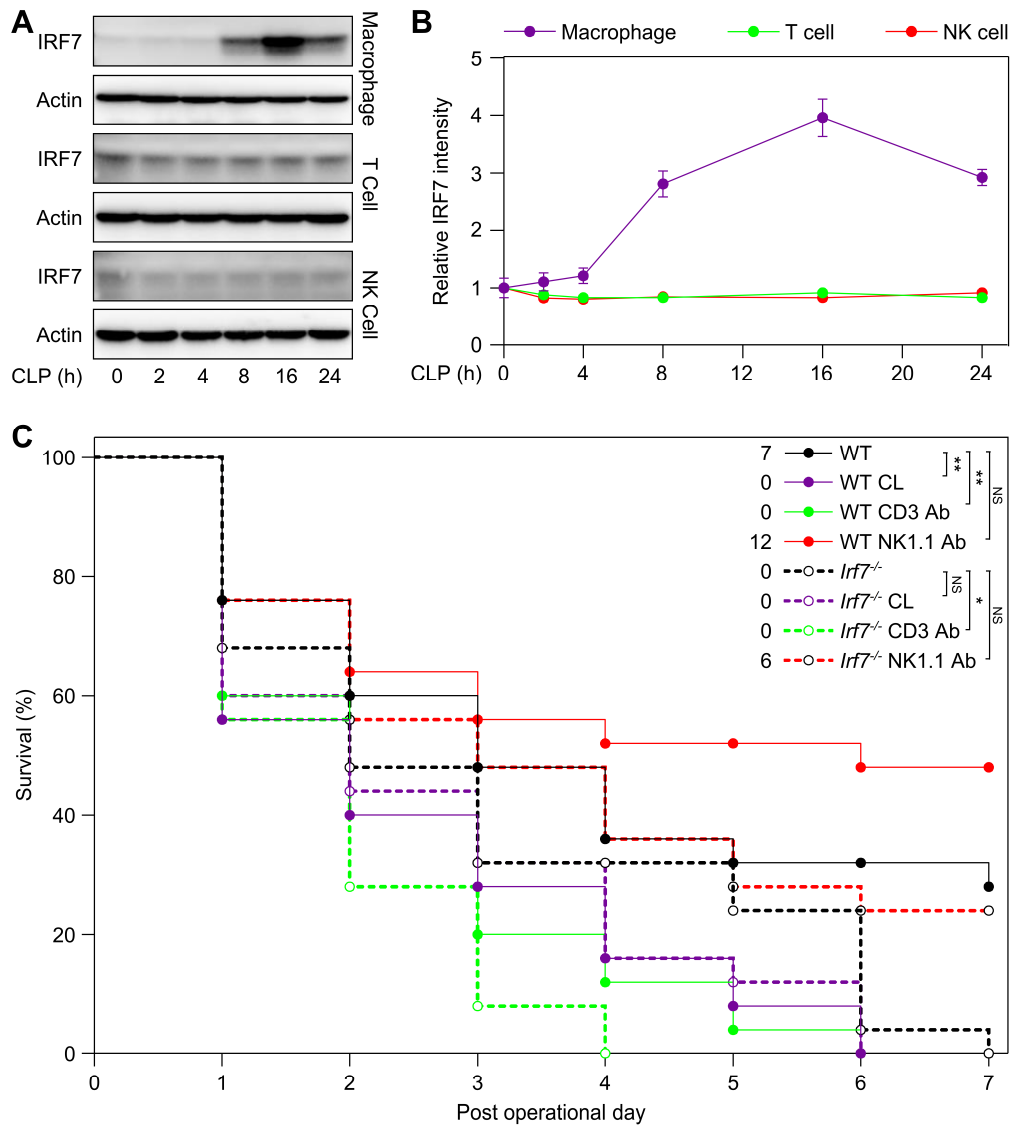
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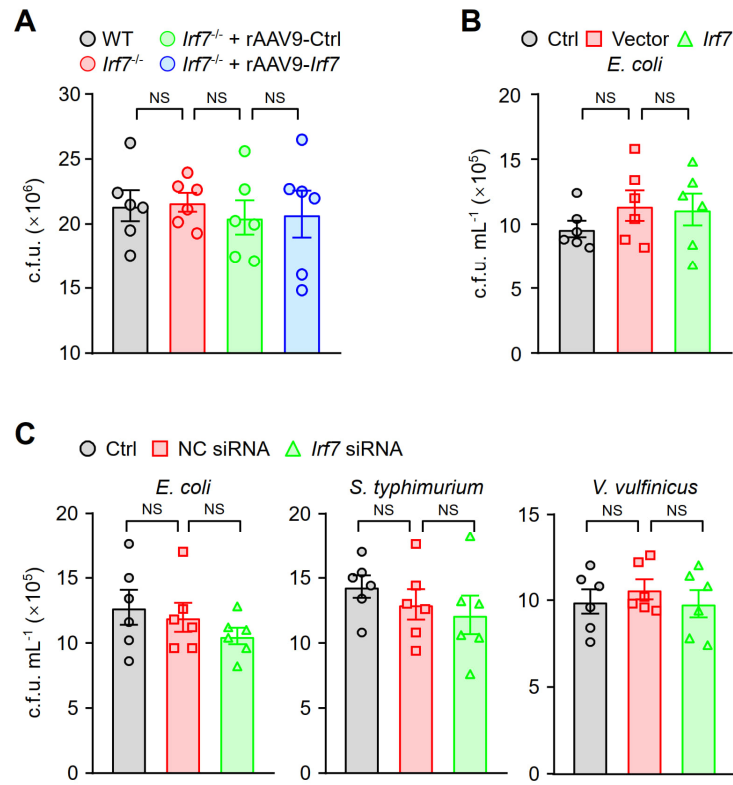
**Supplemental Figure 1. IRF7 was stimulated on the late stage of polymicrobial sepsis. (A)** Representative immunoblots detecting IRF1, IRF2, IRF3, IRF4, IRF5, IRF6, IRF7, IRF8 and IRF9 in blood or peritoneal macrophages isolated from septic mice. **(B)** Line chart of the corresponding intensity of **A**.



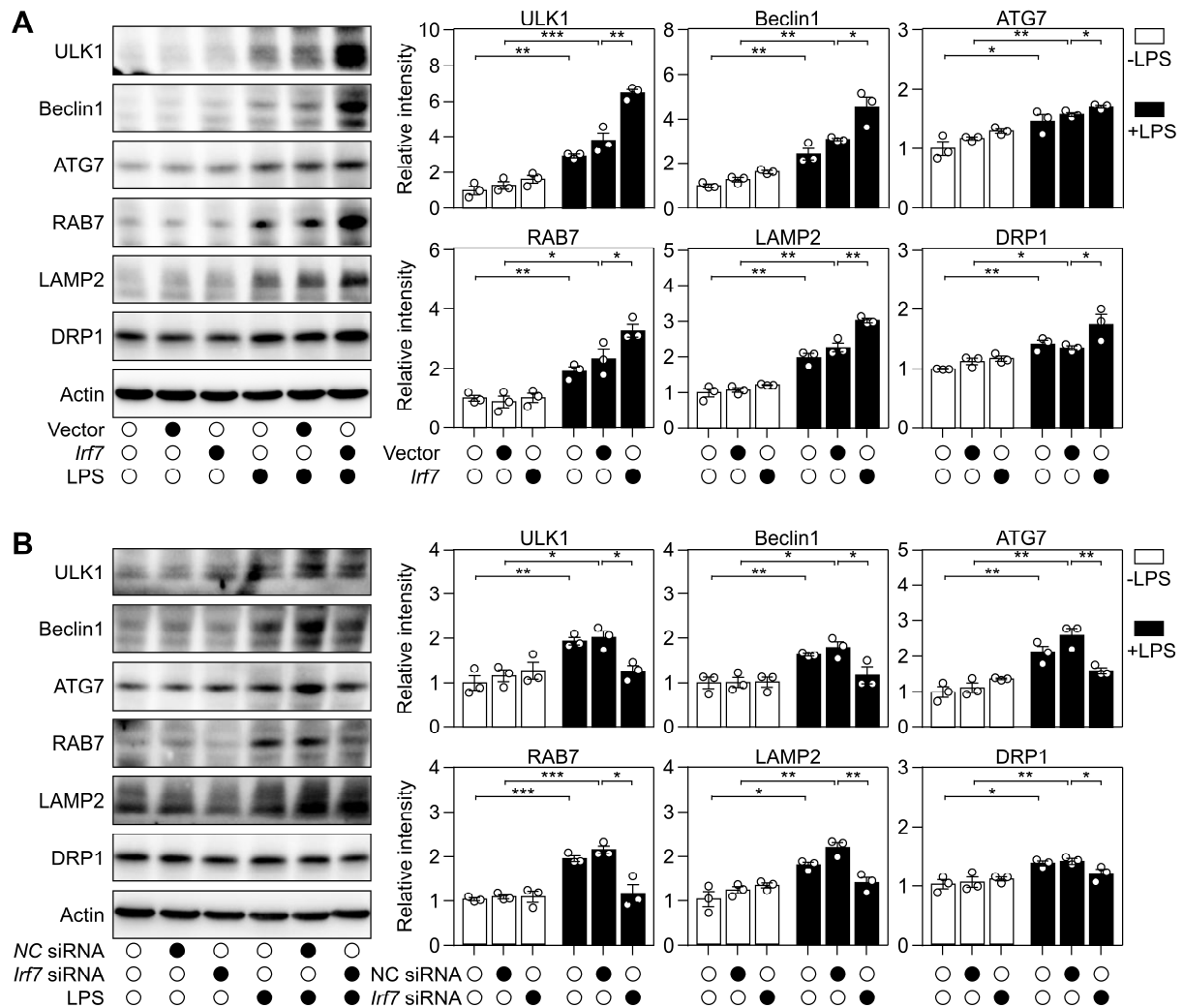
**Supplemental Figure 2. *lrf7* deficiency enhanced the inflammatory response on the late phase of polymicrobial sepsis. (A)** Pro-inflammatory cytokines, including TNF $\alpha$ , IL-1 $\beta$ , IL-6, IL-12 and IFN $\gamma$  in the serum from septic mice were determined by ELISA assay. Data represent the mean  $\pm$  SEM. \*  $P < 0.05$  (vs. WT), \*\*  $P < 0.01$  (vs. WT), \*\*\*  $P < 0.001$  (vs. WT); #  $P < 0.05$  (vs. *lrf7*<sup>-/-</sup>+rAAV9-*lrf7*), ##  $P < 0.01$  (vs. *lrf7*<sup>-/-</sup>+rAAV9-*lrf7*), ###  $P < 0.001$  (vs. *lrf7*<sup>-/-</sup>+rAAV9-*lrf7*). One-way ANOVA.



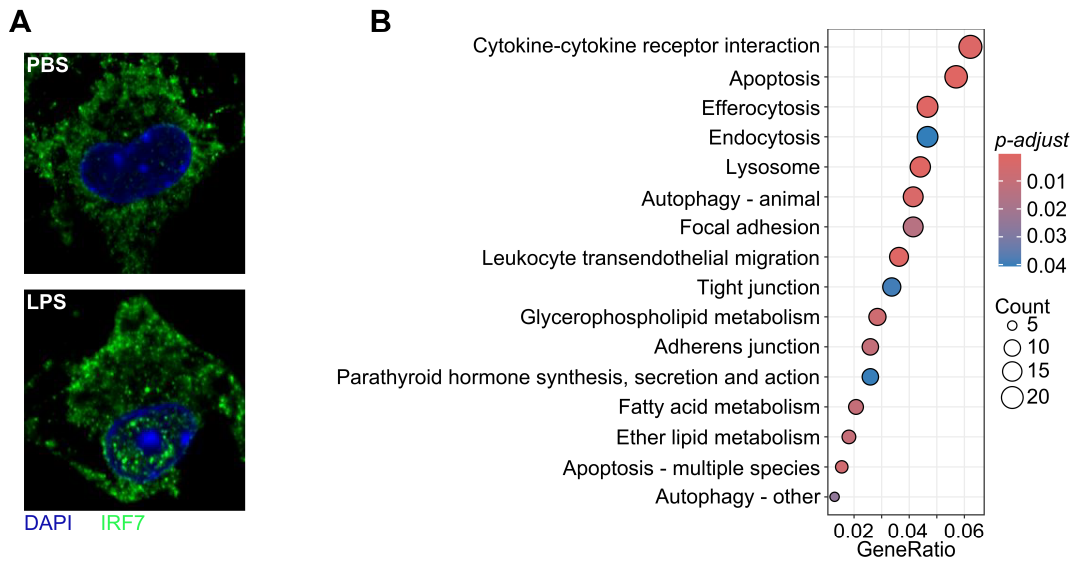
**Supplemental Figure 3. IRF7 drove macrophages, but not T cells or NK cells to modulate sepsis development.** (A) Representative immunoblot detecting IRF7 in macrophages, T cells and NK cells isolated from septic mice. (B) Line chart of the corresponding protein intensity of A. (C) Macrophages, T cells or NK cells in mice were depleted by using clodronate liposomes (CL), anti-CD3 antibodies (CD3 Ab) or anti-NK1.1 antibodies (NK1.1 Ab), respectively. Survival rates of mice were determined until 7 days after CLP ( $n = 25$ , log rank test). The left-side numbers in group labels represent surviving mouse counts at the 7-day endpoint post-surgery. NS (not significant)  $P \geq 0.05$ , \*  $P < 0.05$ , \*\*  $P < 0.01$ .



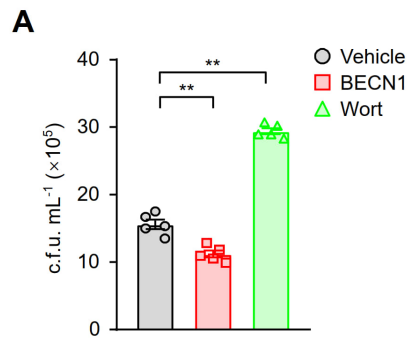
**Supplemental Figure 4. IRF7 had no effect on taking up bacteria by macrophages. (A)** Total fecal bacteria from ligated cecum. Data represent the mean  $\pm$  SEM. NS  $P \geq 0.05$ , one-way ANOVA. **(B, C)** Total intracellular bacteria in macrophages infected with bacteria for 45 min. Data represent the mean  $\pm$  SEM. NS  $P \geq 0.05$ , one-way ANOVA.



**Supplemental Figure 5. IRF7 promoted the ATGs expression. (A, B)** Representative immunoblots detecting ULK1, Beclin1, ATG7, RAB7, LAMP2 and DRP1 in cellular lysates isolated from BMDMs transfected with (A) either empty vector or *If7* gene, (B) either NC siRNA or *If7* siRNA. Data represent the mean  $\pm$  SEM. \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$ , one-way ANOVA.

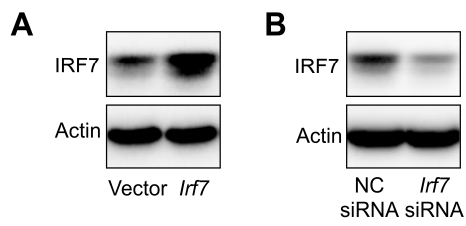


**Supplemental Figure 6. IRF7 translocated into nucleus to direct transcription after LPS treatment.** (A) IRF7 translocated into nucleus. BMDMs were treated with either PBS or 100 ng/mL LPS for 16 hours. Cells were stained with anti-IRF7 antibody and DAPI. (B) IRF7-binding Genes were subjected to Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway enrichment analysis.

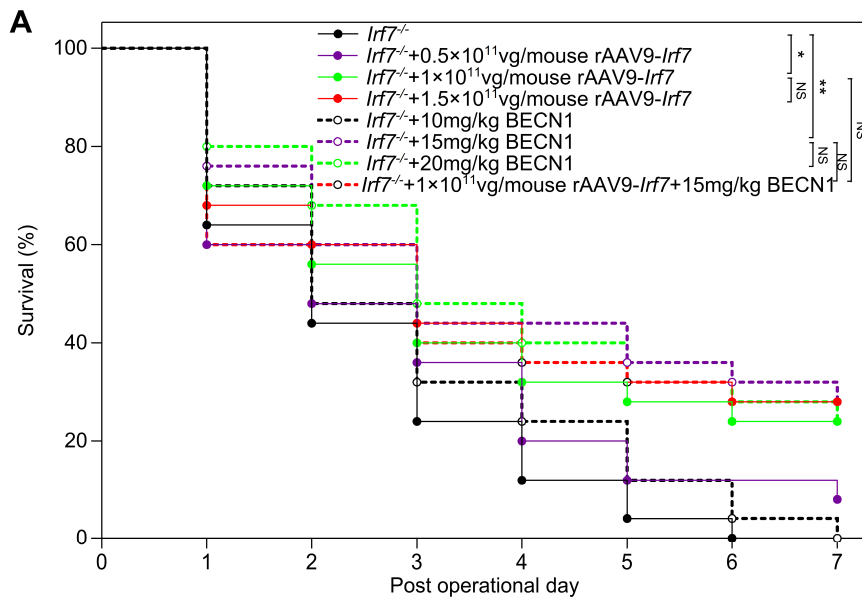


**Supplemental Figure 7. Autophagy was involved in eliminating pathogens during sepsis.**

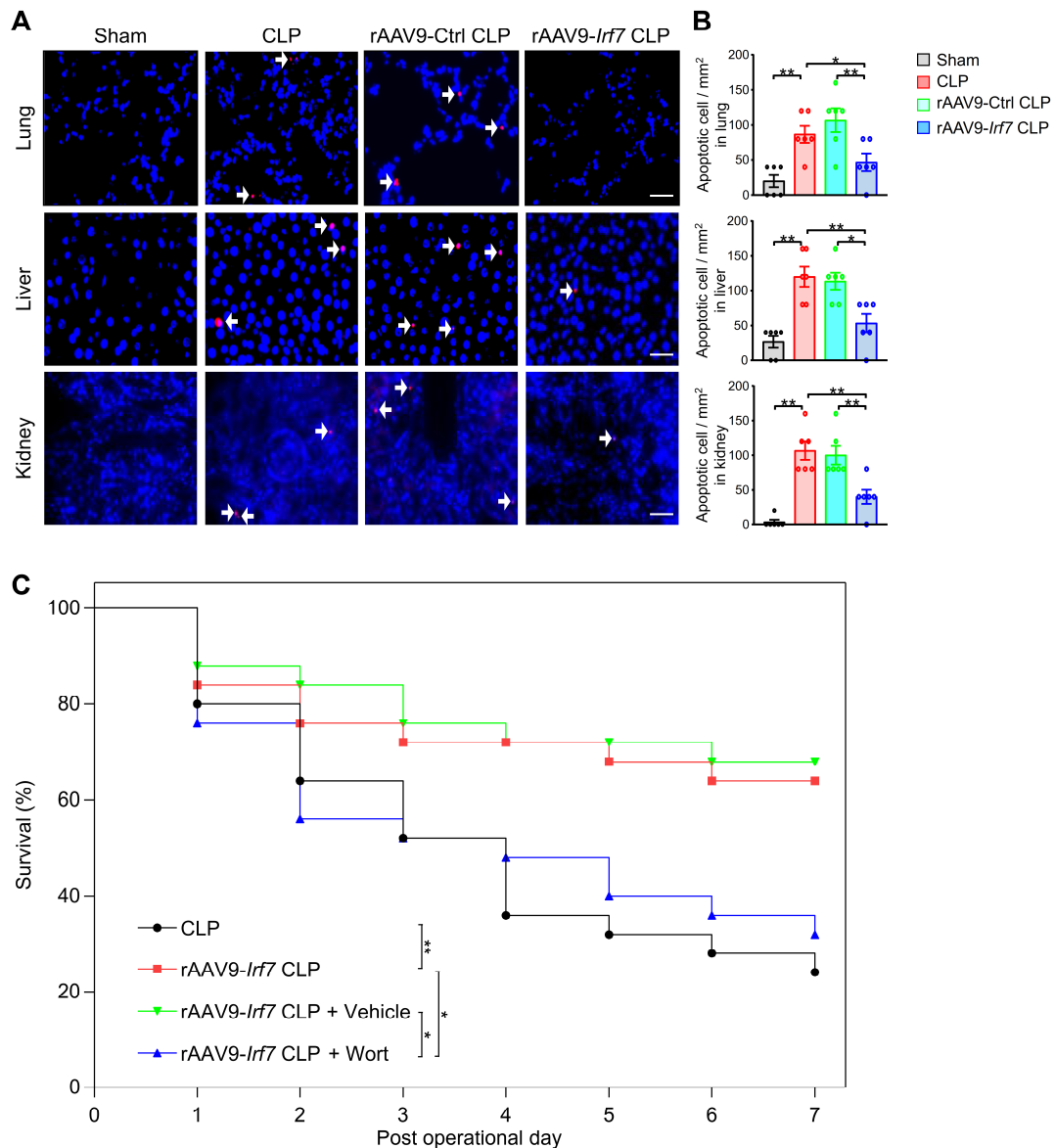
**(A)** Bacterial loads in peritoneal cavity of WT septic mice. WT mice were underwent CLP and administrated with either Tat-Beclin1 (BECN1) or Wortmannin (Wort). After 16 hours, bacteria were collected from peritoneal cavity, and the counts were determined by colony forming unit assay. Data represent the mean  $\pm$  SEM. \*\*  $P < 0.01$ , one-way ANOVA.



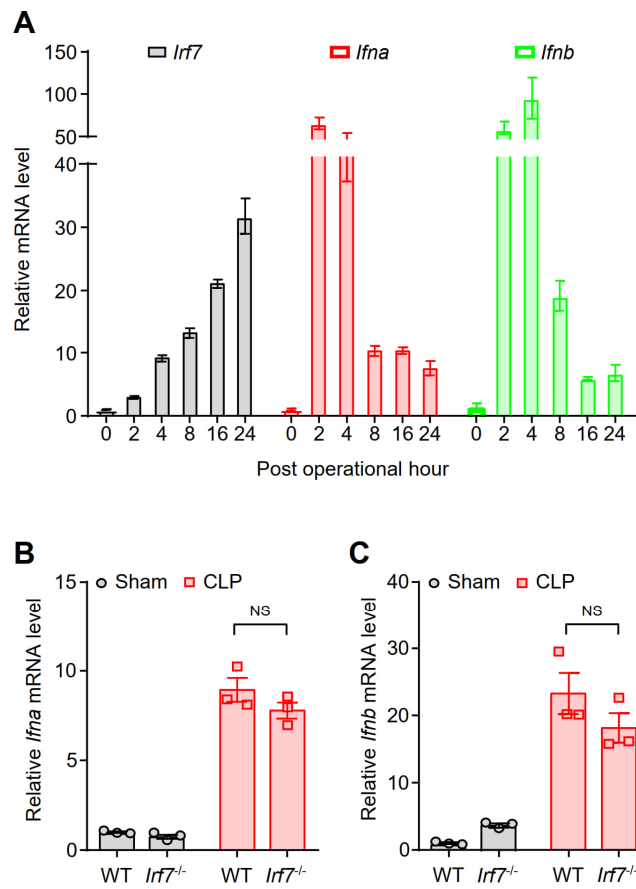
**Supplemental Figure 8. Manipulating IRF7 expression in BMDMs.** (A) Western blot results showed that IRF7 were overexpressed in BMDMs after transfected with *lrf7* gene. (B) Western blot results showed that IRF7 were knocked down in BMDMs after transfected with *lrf7* siRNA.



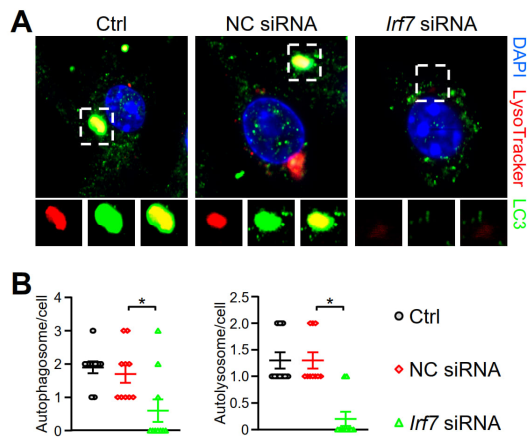
**Supplemental Figure 9. Recombinant AAV9-*Lrf7* protected septic mice via autophagy. (A)** Within a certain dose range, increasing rAAV9-*Lrf7* or BECN1 did not improve the survival rate of septic mice. Survival rates of mice were determined until 7 days after CLP ( $n = 25$ , log rank test). NS (not significant)  $P \geq 0.05$ , \*  $P < 0.05$ , \*\*  $P < 0.01$ .



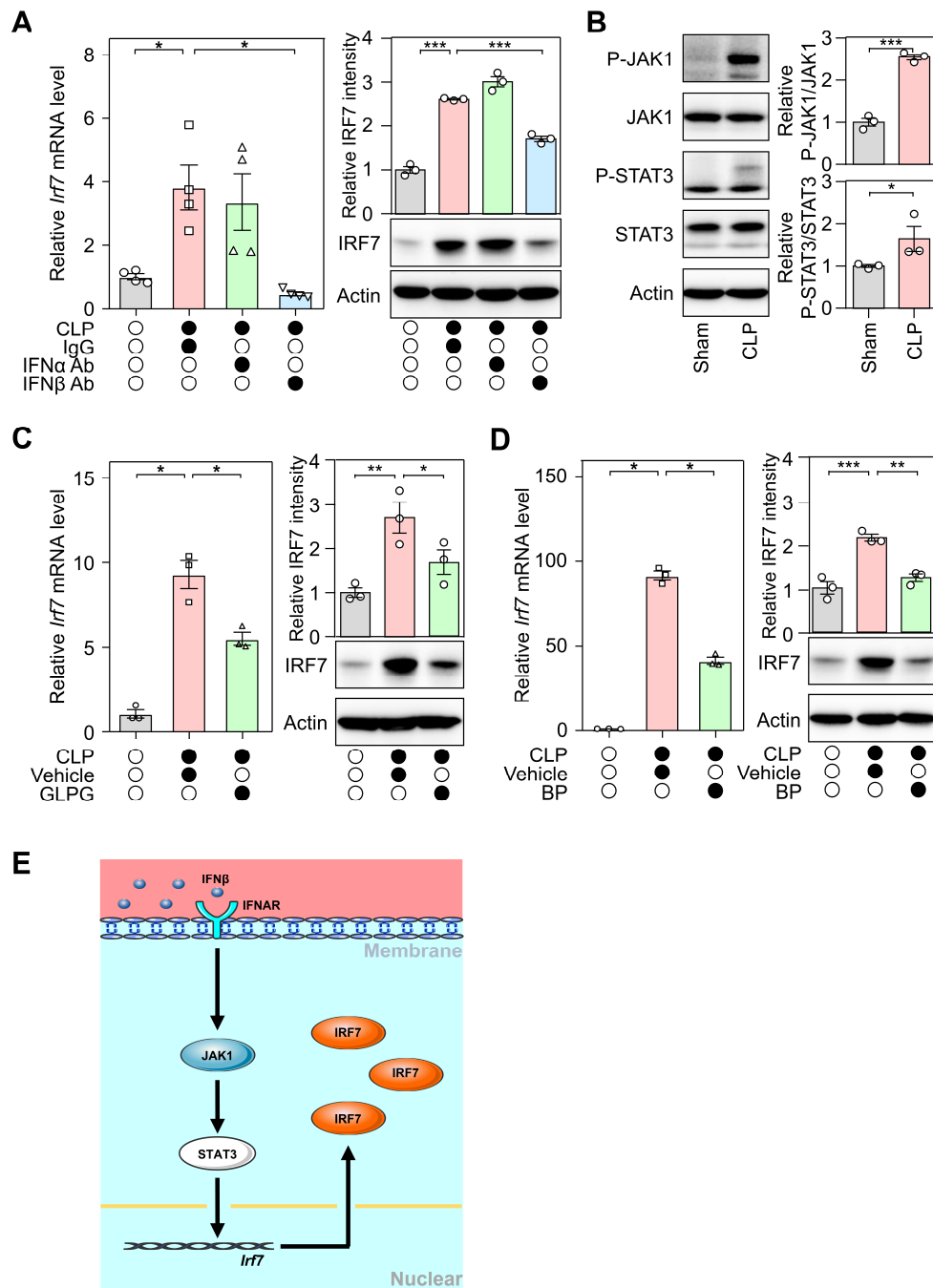
**Supplemental Figure 10. Recombinant AAV9-Irf7 protected WT mice subjected to CLP via autophagy.** (A, B) Recombinant AAV9-Irf7 decreased the number of apoptotic cells in the organs of WT mice subjected to CLP. The representative pictures of TUNEL staining (A), and the corresponding apoptotic cell quantification (B) in lung, liver and kidney. White arrow, TUNEL-positive cells. Scare bar, 25  $\mu$ m. Error bars,  $\pm$ SEM. One-way ANOVA with Bonferroni's correction. (C) Wort, an autophagy inhibitor, inhibited the protective effect of rAAV9-Irf7 on WT mice underwent CLP. Survival rates of mice were determined until 7 days after CLP ( $n = 25$ , log rank test). \*  $P < 0.05$ , \*\*  $P < 0.01$ .



**Supplemental Figure 11. IRF7 was not required for the expression of *Ifna* or *Ifnb* during polymicrobial sepsis.** (A) Relative mRNA level of *Irf7*, *Ifna* and *Ifnb* in peritoneal cells isolated from WT mice underwent CLP for different time. n = 3. Relative mRNA level of (B) *Ifna* and (C) *Ifnb* in peritoneal cells from WT or *Irf7*<sup>-/-</sup> mice underwent CLP for 16 hours. Data represent the mean ± SEM. NS,  $P \geq 0.05$ , one-way ANOVA.

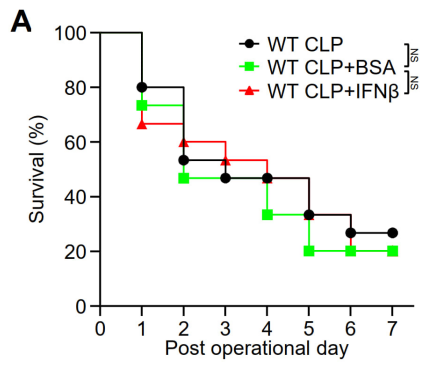


**Supplemental Figure 12. *Irf7* knockdown inhibited autophagosome formation and autolysosome maturation.** (A, B) BMDMs treated with LPS were loaded with LysoTracker, and further stained with LC3 and DAPI. (A) Representative fluorescent micrograph. (B) Autophagosome (LC3 positive puncta) number per cell with SEM (left panel), and autolysosome (LC3 and LysoTracker dual-positive puncta) number per cell with SEM (middle panel). Data represent the mean  $\pm$  SEM. \*  $P < 0.05$ , one-way ANOVA.



**Supplemental Figure 13. IRF7 might be triggered by the IFN $\beta$ -JAK1-STAT3 pathway. (A)** IFN $\beta$  neutralizing antibody (IFN $\beta$  Ab) inhibited IRF7 expression. *Irf7* mRNA (left panel) or IRF7 protein (right panel) levels in peritoneal cells were determined by RT-qPCR or Western blot assay. **(B)** JAK1-STAT3 pathway were activated after CLP. **(C)** GLPG0634 (GLPG), a selective JAK1 inhibitor, inhibited IRF7 expression in peritoneal cells. **(D)** BP-1-102 (BP), a selective STAT3 inhibitor, inhibited IRF7 expression in peritoneal cells. **(E)** The potential mechanism that controlled IRF7 expression during sepsis. Data represent the mean  $\pm$  SEM. \*  $P < 0.05$ , \*\*  $P <$

0.01, \*\*\*  $P < 0.001$ , one-way ANOVA.



**Supplemental Figure 14. IFN $\beta$  could not augment survival rates of septic mice. (A)** Survival rates of mice were determined until 7 days after CLP.  $n = 15$ . NS,  $P \geq 0.05$ , log rank test.

**Supplemental Table 1. Primer sequences for qPCR.**

Gene name	Primer	Sequence
<i>Irf7</i>	Forward primer	5'-CAGGGGATCCAGTTGATCC-3'
	Reverse primer	5'-GAGCATTGCTGAGGCTCAC-3'
<i>Ifna</i>	Forward primer	5'-CCTGTGTGATGCAGGAACC-3'
	Reverse primer	5'-TCACCTCCCAGGCACTGA-3'
<i>Ifnβ</i>	Forward primer	5'-ATGAGTGGTGGTTGCAGGC-3'
	Reverse primer	5'-TGACCTTTCAAATGCAGTAGATTCA-3'
<i>Atg10</i>	Forward primer	5'-TTCTGAAGTGACGAGACCTGC-3'
	Reverse primer	5'-GCCTCGGCTTATAGCACTCA-3'
<i>Atg3</i>	Forward primer	5'-GATGGTGATGGGGGATGGGTA-3'
	Reverse primer	5'-TTCCTCGTCTTCTTCATCACAC-3'
<i>Lc3b</i>	Forward primer	5'-CCCACCAAGATCCCAGTGATT-3'
	Reverse primer	5'-CTGCAAGCGCCGTCTGATTA-3'
<i>Atg9a</i>	Forward primer	5'-GTGCCAGGATTCAGGAAAATGG-3'
	Reverse primer	5'-GCAGTATGGAAGGGCAGACA-3'
<i>Rab7</i>	Forward primer	5'-TGGTGGACGACAGACTTGTT-3'
	Reverse primer	5'-TGAAAGTGTTGGGGGCAGTC-3'
<i>Rab8a</i>	Forward primer	5'-GTAGGGAAGACCTGTGTCCTG-3'
	Reverse primer	5'-CGTGATTGTCCGAAACCGC-3'
<i>Lamp2</i>	Forward primer	5' CATCGTGCTTTCCTACAACACT-3'
	Reverse primer	5' TCTGAACGACAGGAGTCAGGT-3'
<i>Ctsl</i>	Forward primer	5'-TCGGTGACATGACCAATGAGG-3'
	Reverse primer	5'-CACTGGCCCTGGTTCTTCAC-3'
<i>Ctsb</i>	Forward primer	5'-GGAAGGGTTGCGTTCGGTG-3'
	Reverse primer	5'-CACTGCCCAAATGCCCAAC-3'
<i>Ctse</i>	Forward primer	5'-GACATCAGTCCCTTCGGAAGA-3'
	Reverse primer	5'-AGGGGTTTCATTGACACTCGAATA-3'
<i>Ctsd</i>	Forward primer	5'-TCAAAAACCTACCTGGATGCCCA-3'
	Reverse primer	5'-ACCCAGCAGGCTATGTCAAG-3'
<i>Atg7</i>	Forward primer	5'-GCTTTTGACATGAGTGCCTCC-3'
	Reverse primer	5'-CCAGATCTCATTTGCTGACTGC-3'
<i>Actin</i>	Forward primer	5'-GGCTGTATTCCCCTCCATCG-3'
	Reverse primer	5'-CCAGTTGGTAACAATGCCATGT-3'
16S rDNA	Forward primer	5'-GTGSTGCAYGGYTGTCTGCA-3'
	Reverse primer	5'-ACGTCRTCCMCACCTTCCTC-3'

**Supplemental Table 2. IRF7-binding genes.**

Gene ID	Symbol	Gene ID	Symbol
ENSMUSG0000000167	<i>Pih1d2</i>	ENSMUSG00000008496	<i>Pou2f2</i>
ENSMUSG0000000253	<i>Gmpr</i>	ENSMUSG00000008683	<i>Rps15a</i>
ENSMUSG0000000489	<i>Pdgfb</i>	ENSMUSG00000008855	<i>Hdac5</i>
ENSMUSG0000000579	<i>Dynl1c</i>	ENSMUSG00000010406	<i>Mrpl52</i>
ENSMUSG0000000682	<i>Cd52</i>	ENSMUSG00000011114	<i>Tbrg1</i>
ENSMUSG0000000791	<i>Il12rb1</i>	ENSMUSG00000011267	<i>Zfp296</i>
ENSMUSG0000000982	<i>Ccl3</i>	ENSMUSG00000013236	<i>Ptprs</i>
ENSMUSG0000001053	<i>N4bp3</i>	ENSMUSG00000013662	<i>Atad1</i>
ENSMUSG0000001054	<i>Rmnd5b</i>	ENSMUSG00000013974	<i>Mcemp1</i>
ENSMUSG0000001089	<i>Luzp1</i>	ENSMUSG00000014164	<i>Klhl3</i>
ENSMUSG0000001313	<i>Rnd2</i>	ENSMUSG00000014353	<i>Tmem87b</i>
ENSMUSG0000001473	<i>Tubb6</i>	ENSMUSG00000014606	<i>Slc25a11</i>
ENSMUSG0000001627	<i>Ifrd1</i>	ENSMUSG00000014778	<i>Fhod1</i>
ENSMUSG0000001847	<i>Rac1</i>	ENSMUSG00000015112	<i>Slc25a13</i>
ENSMUSG0000002083	<i>Bbc3</i>	ENSMUSG00000015312	<i>Gadd45b</i>
ENSMUSG0000002147	<i>Stat6</i>	ENSMUSG00000015468	<i>Notch4</i>
ENSMUSG0000002222	<i>Rmnd5a</i>	ENSMUSG00000015656	<i>Hspa8</i>
ENSMUSG0000002228	<i>Ppm1j</i>	ENSMUSG00000015837	<i>Sqstm1</i>
ENSMUSG0000002847	<i>Pla1a</i>	ENSMUSG00000015932	<i>Dstn</i>
ENSMUSG0000002997	<i>Prkar2b</i>	ENSMUSG00000016087	<i>Fli1</i>
ENSMUSG0000003206	<i>Ebi3</i>	ENSMUSG00000016256	<i>Ctsz</i>
ENSMUSG0000003283	<i>Hck</i>	ENSMUSG00000016495	<i>Plgrkt</i>
ENSMUSG0000003363	<i>Pld3</i>	ENSMUSG00000016520	<i>Lnx2</i>
ENSMUSG0000003541	<i>Ier3</i>	ENSMUSG00000017002	<i>Slpi</i>
ENSMUSG0000003549	<i>Ercc1</i>	ENSMUSG00000017009	<i>Sdc4</i>
ENSMUSG0000003721	<i>Insig2</i>	ENSMUSG00000017057	<i>Il13ra1</i>
ENSMUSG0000004151	<i>Etv1</i>	ENSMUSG00000017386	<i>Traf4</i>
ENSMUSG0000004285	<i>Atp6v1f</i>	ENSMUSG00000017774	<i>Myo1c</i>
ENSMUSG0000004371	<i>Il11</i>	ENSMUSG00000017776	<i>Crk</i>
ENSMUSG0000004451	<i>Ralb</i>	ENSMUSG00000018347	<i>Zkscan6</i>
ENSMUSG0000004552	<i>Ctse</i>	ENSMUSG00000018476	<i>Kdm6b</i>
ENSMUSG0000004562	<i>Arhgef40</i>	ENSMUSG00000018570	<i>2810408A11Rik</i>
ENSMUSG0000004609	<i>Cd33</i>	ENSMUSG00000018648	<i>Dusp14</i>
ENSMUSG0000004798	<i>Ulk2</i>	ENSMUSG00000018736	<i>Ndel1</i>
ENSMUSG0000004864	<i>Mapk13</i>	ENSMUSG00000018740	<i>Slc25a35</i>
ENSMUSG0000004880	<i>Lbr</i>	ENSMUSG00000018899	<i>Irf1</i>
ENSMUSG0000004936	<i>Map2k1</i>	ENSMUSG00000018930	<i>Ccl4</i>
ENSMUSG0000005125	<i>Ndrp1</i>	ENSMUSG00000019054	<i>Fis1</i>
ENSMUSG0000005198	<i>Polr2a</i>	ENSMUSG00000019055	<i>Plod1</i>
ENSMUSG0000005225	<i>Plekha8</i>	ENSMUSG00000019373	<i>Cops3</i>
ENSMUSG0000005299	<i>Letm1</i>	ENSMUSG00000019564	<i>Arid3a</i>
ENSMUSG0000005514	<i>Por</i>	ENSMUSG00000019731	<i>Slc35e1</i>
ENSMUSG0000005824	<i>Tnfrsf14</i>	ENSMUSG00000019810	<i>Fuca2</i>
ENSMUSG0000005873	<i>Reep5</i>	ENSMUSG00000019852	<i>Arfgef3</i>
ENSMUSG0000005936	<i>Kctd20</i>	ENSMUSG00000020009	<i>Irfnq1</i>
ENSMUSG0000005986	<i>Ankrd13d</i>	ENSMUSG00000020057	<i>Dram1</i>
ENSMUSG0000006221	<i>Hspb7</i>	ENSMUSG00000020120	<i>Plek</i>
ENSMUSG0000006310	<i>Zbtb32</i>	ENSMUSG00000020143	<i>Dock2</i>
ENSMUSG0000006362	<i>Cbfa2t3</i>	ENSMUSG00000020246	<i>Hcfc2</i>
ENSMUSG0000006445	<i>Epha2</i>	ENSMUSG00000020275	<i>Rel</i>
ENSMUSG0000006731	<i>B4galnt1</i>	ENSMUSG00000020303	<i>Stc2</i>
ENSMUSG0000006740	<i>Kif5b</i>	ENSMUSG00000020400	<i>Tnip1</i>
ENSMUSG0000006818	<i>Sod2</i>	ENSMUSG00000020422	<i>Tns3</i>
ENSMUSG0000006920	<i>Ezh1</i>	ENSMUSG00000020458	<i>Rtn4</i>
ENSMUSG0000006930	<i>Hap1</i>	ENSMUSG00000020463	<i>Ppp4r3b</i>
ENSMUSG0000007035	<i>Msh5</i>	ENSMUSG00000020477	<i>Mrps24</i>
ENSMUSG0000007659	<i>Bcl2l1</i>	ENSMUSG00000020485	<i>Supt4a</i>
ENSMUSG0000007817	<i>Zmiz1</i>	ENSMUSG00000020593	<i>Lpin1</i>
ENSMUSG0000007891	<i>Ctsd</i>	ENSMUSG00000020594	<i>Pum2</i>
ENSMUSG0000008129	<i>4930432K21Rik</i>	ENSMUSG00000020610	<i>Amz2</i>

**Supplemental Table 2 (continued). IRF7-binding genes.**

Gene ID	Symbol	Gene ID	Symbol
ENSMUSG00000020611	<i>Gna13</i>	ENSMUSG00000024180	<i>Tmem8</i>
ENSMUSG00000020651	<i>Slc26a4</i>	ENSMUSG00000024219	<i>Anks1</i>
ENSMUSG00000020669	<i>Sh3yl1</i>	ENSMUSG00000024228	<i>Nudt12</i>
ENSMUSG00000020715	<i>Ern1</i>	ENSMUSG00000024235	<i>Map3k8</i>
ENSMUSG00000020745	<i>Pafah1b1</i>	ENSMUSG00000024286	<i>Ccny</i>
ENSMUSG00000020901	<i>Pik3r5</i>	ENSMUSG00000024399	<i>Ltb</i>
ENSMUSG00000020941	<i>Map3k14</i>	ENSMUSG00000024401	<i>Tnf</i>
ENSMUSG00000021000	<i>Mia2</i>	ENSMUSG00000024451	<i>Arap3</i>
ENSMUSG00000021012	<i>Zc3h14</i>	ENSMUSG00000024483	<i>Ankhd1</i>
ENSMUSG00000021025	<i>Nfkbia</i>	ENSMUSG00000024507	<i>Hsd17b4</i>
ENSMUSG00000021051	<i>Ppp2r5e</i>	ENSMUSG00000024580	<i>Grpel2</i>
ENSMUSG00000021108	<i>Prkch</i>	ENSMUSG00000024621	<i>Csf1r</i>
ENSMUSG00000021127	<i>Zfp361l</i>	ENSMUSG00000024659	<i>Anxa1</i>
ENSMUSG00000021133	<i>Susd6</i>	ENSMUSG00000024661	<i>Fth1</i>
ENSMUSG00000021171	<i>Esy2</i>	ENSMUSG00000024669	<i>Cd5</i>
ENSMUSG00000021236	<i>Entpd5</i>	ENSMUSG00000024769	<i>Cdc42bpg</i>
ENSMUSG00000021240	<i>Abcd4</i>	ENSMUSG00000024789	<i>Jak2</i>
ENSMUSG00000021250	<i>Fos</i>	ENSMUSG00000024856	<i>Cdk2ap2</i>
ENSMUSG00000021281	<i>Tnfaip2</i>	ENSMUSG00000024900	<i>Cpt1a</i>
ENSMUSG00000021282	<i>Eif5</i>	ENSMUSG00000024912	<i>Fosl1</i>
ENSMUSG00000021384	<i>Susd3</i>	ENSMUSG00000024913	<i>Lrp5</i>
ENSMUSG00000021550	<i>2210016F16Rik</i>	ENSMUSG00000024968	<i>Rcor2</i>
ENSMUSG00000021591	<i>Glrx</i>	ENSMUSG00000024981	<i>Acsl5</i>
ENSMUSG00000021619	<i>Atg10</i>	ENSMUSG00000024986	<i>Hhex</i>
ENSMUSG00000021768	<i>Dusp13</i>	ENSMUSG00000025076	<i>Casp7</i>
ENSMUSG00000021785	<i>Ngly1</i>	ENSMUSG00000025077	<i>Dclre1a</i>
ENSMUSG00000021792	<i>Fam213a</i>	ENSMUSG00000025138	<i>Sirt7</i>
ENSMUSG00000021814	<i>Anxa7</i>	ENSMUSG00000025198	<i>Erlin1</i>
ENSMUSG00000021822	<i>Plau</i>	ENSMUSG00000025227	<i>Mfsd13a</i>
ENSMUSG00000021831	<i>Ero1l</i>	ENSMUSG00000025232	<i>Hexa</i>
ENSMUSG00000021939	<i>Ctsb</i>	ENSMUSG00000025383	<i>Il23a</i>
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ENSMUSG00000022102	<i>Dok2</i>	ENSMUSG00000025429	<i>Pstpip2</i>
ENSMUSG00000022270	<i>Retreg1</i>	ENSMUSG00000025534	<i>Gusb</i>
ENSMUSG00000022353	<i>Mtss1</i>	ENSMUSG00000025602	<i>Zfp202</i>
ENSMUSG00000022367	<i>Has2</i>	ENSMUSG00000025958	<i>Creb1</i>
ENSMUSG00000022426	<i>Josd1</i>	ENSMUSG00000025979	<i>Mob4</i>
ENSMUSG00000022436	<i>Sh3bp1</i>	ENSMUSG00000026003	<i>Acadl</i>
ENSMUSG00000022453	<i>Naga</i>	ENSMUSG00000026029	<i>Casp8</i>
ENSMUSG00000022507	<i>1810013L24Rik</i>	ENSMUSG00000026103	<i>Gls</i>
ENSMUSG00000022533	<i>Atp13a3</i>	ENSMUSG00000026107	<i>Nabp1</i>
ENSMUSG00000022602	<i>Arc</i>	ENSMUSG00000026177	<i>Slc11a1</i>
ENSMUSG00000022656	<i>Nectin3</i>	ENSMUSG00000026197	<i>Zfand2b</i>
ENSMUSG00000022822	<i>Abcc5</i>	ENSMUSG00000026199	<i>Ankzf1</i>
ENSMUSG00000022952	<i>Runx1</i>	ENSMUSG00000026203	<i>Dnajb2</i>
ENSMUSG00000022965	<i>Ifrngr2</i>	ENSMUSG00000026285	<i>Pdcd1</i>
ENSMUSG00000023021	<i>Cers5</i>	ENSMUSG00000026305	<i>Lrrfp1</i>
ENSMUSG00000023048	<i>Prr13</i>	ENSMUSG00000026317	<i>Cln8</i>
ENSMUSG00000023050	<i>Map3k12</i>	ENSMUSG00000026361	<i>Cdc73</i>
ENSMUSG00000023067	<i>Cdkn1a</i>	ENSMUSG00000026427	<i>Eif2d</i>
ENSMUSG00000023088	<i>Abcc1</i>	ENSMUSG00000026483	<i>Fam129a</i>
ENSMUSG00000023106	<i>Denr</i>	ENSMUSG00000026547	<i>Tagln2</i>
ENSMUSG00000023169	<i>Slc38a1</i>	ENSMUSG00000026563	<i>Tada1</i>
ENSMUSG00000023232	<i>Serinc2</i>	ENSMUSG00000026600	<i>Soat1</i>
ENSMUSG00000023944	<i>Hsp90ab1</i>	ENSMUSG00000026627	<i>Tmem206</i>
ENSMUSG00000023992	<i>Trem2</i>	ENSMUSG00000026628	<i>Atf3</i>
ENSMUSG00000024098	<i>Twsg1</i>	ENSMUSG00000026640	<i>Ptxna2</i>
ENSMUSG00000024142	<i>Mlst8</i>	ENSMUSG00000026656	<i>Fcgr2b</i>
ENSMUSG00000024143	<i>Rhoq</i>	ENSMUSG00000026688	<i>Mgst3</i>
ENSMUSG00000024164	<i>C3</i>	ENSMUSG00000026701	<i>Prdx6</i>

**Supplemental Table 2 (continued). IRF7-binding genes.**

Gene ID	Symbol	Gene ID	Symbol
ENSMUSG00000026718	<i>Stam</i>	ENSMUSG00000028967	<i>Errfi1</i>
ENSMUSG00000026822	<i>Lcn2</i>	ENSMUSG00000028982	<i>Slc25a33</i>
ENSMUSG00000026875	<i>Traf1</i>	ENSMUSG00000029063	<i>Nadk</i>
ENSMUSG00000026893	<i>Gca</i>	ENSMUSG00000029098	<i>Acox3</i>
ENSMUSG00000026922	<i>Agpat2</i>	ENSMUSG00000029135	<i>Fosl2</i>
ENSMUSG00000026939	<i>Tmem141</i>	ENSMUSG00000029178	<i>Klf3</i>
ENSMUSG00000026984	<i>Il1f6</i>	ENSMUSG00000029207	<i>Apbb2</i>
ENSMUSG00000026994	<i>Galnt3</i>	ENSMUSG00000029217	<i>Tec</i>
ENSMUSG00000027035	<i>Cers6</i>	ENSMUSG00000029313	<i>Aff1</i>
ENSMUSG00000027068	<i>Dhrs9</i>	ENSMUSG00000029314	<i>Gpat3</i>
ENSMUSG00000027099	<i>Mtx2</i>	ENSMUSG00000029330	<i>Cds1</i>
ENSMUSG00000027111	<i>Itga6</i>	ENSMUSG00000029344	<i>Tpst2</i>
ENSMUSG00000027171	<i>Prrg4</i>	ENSMUSG00000029384	<i>2010109A12Rik</i>
ENSMUSG00000027203	<i>Dut</i>	ENSMUSG00000029397	<i>Rchy1</i>
ENSMUSG00000027215	<i>Cd82</i>	ENSMUSG00000029403	<i>Cdkl2</i>
ENSMUSG00000027322	<i>Siglec1</i>	ENSMUSG00000029484	<i>Anxa3</i>
ENSMUSG00000027342	<i>Pcna</i>	ENSMUSG00000029534	<i>St7</i>
ENSMUSG00000027367	<i>Stard7</i>	ENSMUSG00000029552	<i>Tes</i>
ENSMUSG00000027368	<i>Dusp2</i>	ENSMUSG00000029580	<i>Actb</i>
ENSMUSG00000027381	<i>Bcl2l11</i>	ENSMUSG00000029642	<i>Polr1d</i>
ENSMUSG00000027387	<i>Zc3h8</i>	ENSMUSG00000029681	<i>Bcl7b</i>
ENSMUSG00000027430	<i>Dtd1</i>	ENSMUSG00000029708	<i>Gcc1</i>
ENSMUSG00000027465	<i>Tbc1d20</i>	ENSMUSG00000029720	<i>Gm20605</i>
ENSMUSG00000027487	<i>Cdk5rap1</i>	ENSMUSG00000029723	<i>Tsc22d4</i>
ENSMUSG00000027506	<i>Tpd52</i>	ENSMUSG00000029735	<i>Tpk1</i>
ENSMUSG00000027519	<i>Rab22a</i>	ENSMUSG00000029771	<i>Irf5</i>
ENSMUSG00000027544	<i>Nfatc2</i>	ENSMUSG00000029860	<i>Zyx</i>
ENSMUSG00000027639	<i>Samhd1</i>	ENSMUSG00000029920	<i>Smarcad1</i>
ENSMUSG00000027660	<i>Skil</i>	ENSMUSG00000030007	<i>Cct7</i>
ENSMUSG00000027737	<i>Slc7a11</i>	ENSMUSG00000030042	<i>Pole4</i>
ENSMUSG00000027843	<i>Ptpn22</i>	ENSMUSG00000030103	<i>Bhlhe40</i>
ENSMUSG00000027907	<i>S100a11</i>	ENSMUSG00000030122	<i>Ptms</i>
ENSMUSG00000027940	<i>Tpm3</i>	ENSMUSG00000030208	<i>Emp1</i>
ENSMUSG00000027947	<i>Il6ra</i>	ENSMUSG00000030232	<i>Aebp2</i>
ENSMUSG00000027995	<i>Tlr2</i>	ENSMUSG00000030314	<i>Atg7</i>
ENSMUSG00000028042	<i>Zbtb7b</i>	ENSMUSG00000030403	<i>Vasp</i>
ENSMUSG00000028064	<i>Sema4a</i>	ENSMUSG00000030409	<i>Dmpk</i>
ENSMUSG00000028080	<i>Lrba</i>	ENSMUSG00000030557	<i>Mef2a</i>
ENSMUSG00000028089	<i>Chd1l</i>	ENSMUSG00000030560	<i>Ctsc</i>
ENSMUSG00000028121	<i>Bcar3</i>	ENSMUSG00000030583	<i>Sipa1l3</i>
ENSMUSG00000028152	<i>Tspan5</i>	ENSMUSG00000030662	<i>Ipo5</i>
ENSMUSG00000028229	<i>Rmdn1</i>	ENSMUSG00000030707	<i>Coro1a</i>
ENSMUSG00000028249	<i>Sdcbp</i>	ENSMUSG00000030717	<i>Nupr1</i>
ENSMUSG00000028271	<i>Gtf2b</i>	ENSMUSG00000030789	<i>Itgax</i>
ENSMUSG00000028393	<i>Alad</i>	ENSMUSG00000030801	<i>Kat8</i>
ENSMUSG00000028417	<i>Tal2</i>	ENSMUSG00000030847	<i>Bag3</i>
ENSMUSG00000028454	<i>Pigo</i>	ENSMUSG00000031015	<i>Swap70</i>
ENSMUSG00000028458	<i>Tesk1</i>	ENSMUSG00000031097	<i>Tnni2</i>
ENSMUSG00000028552	<i>Eps15</i>	ENSMUSG00000031146	<i>Plp2</i>
ENSMUSG00000028581	<i>Laptm5</i>	ENSMUSG00000031536	<i>Polb</i>
ENSMUSG00000028617	<i>Lrrc42</i>	ENSMUSG00000031557	<i>Plekha2</i>
ENSMUSG00000028673	<i>Fuca1</i>	ENSMUSG00000031604	<i>Msmo1</i>
ENSMUSG00000028680	<i>Plk3</i>	ENSMUSG00000031628	<i>Casp3</i>
ENSMUSG00000028751	<i>Pla2g2e</i>	ENSMUSG00000031659	<i>Adcy7</i>
ENSMUSG00000028793	<i>Rnf19b</i>	ENSMUSG00000031662	<i>Snx20</i>
ENSMUSG00000028803	<i>Nipa13</i>	ENSMUSG00000031731	<i>Ap1g1</i>
ENSMUSG00000028841	<i>Cnksr1</i>	ENSMUSG00000031762	<i>Mt2</i>
ENSMUSG00000028842	<i>Ago3</i>	ENSMUSG00000031827	<i>Cott1</i>
ENSMUSG00000028874	<i>Fgr</i>	ENSMUSG00000031844	<i>Hsd17b2</i>
ENSMUSG00000028931	<i>Kcnab2</i>	ENSMUSG00000031904	<i>Slc7a6</i>

**Supplemental Table 2 (continued). IRF7-binding genes.**

Gene ID	Symbol	Gene ID	Symbol
ENSMUSG00000032046	<i>Abhd12</i>	ENSMUSG00000035293	<i>G2e3</i>
ENSMUSG00000032047	<i>Acat1</i>	ENSMUSG00000035325	<i>Sec31a</i>
ENSMUSG00000032066	<i>Bco2</i>	ENSMUSG00000035342	<i>Lzts2</i>
ENSMUSG00000032089	<i>Il10ra</i>	ENSMUSG00000035376	<i>Hacd2</i>
ENSMUSG00000032204	<i>Aqp9</i>	ENSMUSG00000035441	<i>Myo1d</i>
ENSMUSG00000032228	<i>Tcf12</i>	ENSMUSG00000035513	<i>Ntng2</i>
ENSMUSG00000032254	<i>Kif23</i>	ENSMUSG00000035621	<i>Midn</i>
ENSMUSG00000032294	<i>Pkm</i>	ENSMUSG00000035673	<i>Sbno2</i>
ENSMUSG00000032300	<i>1700017B05Rik</i>	ENSMUSG00000035828	<i>Pim3</i>
ENSMUSG00000032366	<i>Tpm1</i>	ENSMUSG00000035898	<i>Uba6</i>
ENSMUSG00000032370	<i>Lactb</i>	ENSMUSG00000035914	<i>Cd276</i>
ENSMUSG00000032401	<i>Lctf</i>	ENSMUSG00000036057	<i>Ptpn23</i>
ENSMUSG00000032407	<i>U2surp</i>	ENSMUSG00000036067	<i>Slc2a6</i>
ENSMUSG00000032412	<i>Atp1b3</i>	ENSMUSG00000036181	<i>Hist1h1c</i>
ENSMUSG00000032422	<i>Snx14</i>	ENSMUSG00000036323	<i>Srp72</i>
ENSMUSG00000032440	<i>Tgfb2</i>	ENSMUSG00000036452	<i>Arhgap26</i>
ENSMUSG00000032487	<i>Ptgs2</i>	ENSMUSG00000036480	<i>Prss56</i>
ENSMUSG00000032501	<i>Trib1</i>	ENSMUSG00000036526	<i>Card11</i>
ENSMUSG00000032578	<i>Cish</i>	ENSMUSG00000036533	<i>Cdc42ep3</i>
ENSMUSG00000032691	<i>Nlrp3</i>	ENSMUSG00000036620	<i>Mgat4b</i>
ENSMUSG00000032842	<i>Abcc10</i>	ENSMUSG00000037012	<i>Hk1</i>
ENSMUSG00000032855	<i>Pkd1</i>	ENSMUSG00000037295	<i>Ldlrap1</i>
ENSMUSG00000032870	<i>Smad2</i>	ENSMUSG00000037344	<i>Slc12a9</i>
ENSMUSG00000033004	<i>Mycbp2</i>	ENSMUSG00000037405	<i>Icam1</i>
ENSMUSG00000033014	<i>Trim33</i>	ENSMUSG00000037466	<i>Tedc1</i>
ENSMUSG00000033016	<i>Nfatc1</i>	ENSMUSG00000037573	<i>Tob1</i>
ENSMUSG00000033068	<i>Entpd6</i>	ENSMUSG00000037742	<i>Eef1a1</i>
ENSMUSG00000033124	<i>Atg9a</i>	ENSMUSG00000037815	<i>Ctnna1</i>
ENSMUSG00000033161	<i>Atp1a1</i>	ENSMUSG00000037868	<i>Egr2</i>
ENSMUSG00000033192	<i>Lpcat2</i>	ENSMUSG00000037966	<i>Ninj1</i>
ENSMUSG00000033220	<i>Rac2</i>	ENSMUSG00000037995	<i>Igsf9</i>
ENSMUSG00000033416	<i>Gucd1</i>	ENSMUSG00000038025	<i>Phf2</i>
ENSMUSG00000033629	<i>Hacd3</i>	ENSMUSG00000038037	<i>Socs1</i>
ENSMUSG00000033705	<i>Stard9</i>	ENSMUSG00000038067	<i>Csf3</i>
ENSMUSG00000033767	<i>Tmem131l</i>	ENSMUSG00000038151	<i>Prdm1</i>
ENSMUSG00000033863	<i>Kif9</i>	ENSMUSG00000038174	<i>Fam126b</i>
ENSMUSG00000033871	<i>Ppargc1b</i>	ENSMUSG00000038366	<i>Lasp1</i>
ENSMUSG00000034041	<i>Lyl1</i>	ENSMUSG00000038372	<i>Gmcs</i>
ENSMUSG00000034075	<i>Zdhhc5</i>	ENSMUSG00000038416	<i>Cdc16</i>
ENSMUSG00000034101	<i>Ctnnd1</i>	ENSMUSG00000038425	<i>Poli</i>
ENSMUSG00000034116	<i>Vav1</i>	ENSMUSG00000038437	<i>Mllt6</i>
ENSMUSG00000034118	<i>Tpst1</i>	ENSMUSG00000038517	<i>Tbkbp1</i>
ENSMUSG00000034247	<i>Plekha1</i>	ENSMUSG00000038563	<i>Efl1</i>
ENSMUSG00000034271	<i>Jdp2</i>	ENSMUSG00000038605	<i>Samd10</i>
ENSMUSG00000034320	<i>Slc26a2</i>	ENSMUSG00000038607	<i>Gng10</i>
ENSMUSG00000034557	<i>Zfyve9</i>	ENSMUSG00000038612	<i>Mcl1</i>
ENSMUSG00000034602	<i>Mon2</i>	ENSMUSG00000038650	<i>Rnh1</i>
ENSMUSG00000034652	<i>Cd300a</i>	ENSMUSG00000038732	<i>Mboat1</i>
ENSMUSG00000034706	<i>Dnaic2</i>	ENSMUSG00000038844	<i>Kif16b</i>
ENSMUSG00000034708	<i>Gm</i>	ENSMUSG00000038900	<i>Rpl12</i>
ENSMUSG00000034709	<i>Ppp1r21</i>	ENSMUSG00000038990	<i>Cables2</i>
ENSMUSG00000034801	<i>Sos2</i>	ENSMUSG00000039005	<i>Tlr4</i>
ENSMUSG00000034854	<i>Mfsd12</i>	ENSMUSG00000039048	<i>Foxred1</i>
ENSMUSG00000034858	<i>Fam214a</i>	ENSMUSG00000039157	<i>Fam102a</i>
ENSMUSG00000034917	<i>Tjp3</i>	ENSMUSG00000039191	<i>Rbpj</i>
ENSMUSG00000034947	<i>Tmem106a</i>	ENSMUSG00000039236	<i>Isg20</i>
ENSMUSG00000035139	<i>Secisbp2</i>	ENSMUSG00000039285	<i>Azi2</i>
ENSMUSG00000035158	<i>Mitf</i>	ENSMUSG00000039616	<i>Mocos</i>
ENSMUSG00000035161	<i>Ints6</i>	ENSMUSG00000039701	<i>Usp53</i>
ENSMUSG00000035164	<i>Zc3h12c</i>	ENSMUSG00000039747	<i>Orai2</i>

**Supplemental Table 2 (continued). IRF7-binding genes.**

Gene ID	Symbol	Gene ID	Symbol
ENSMUSG00000039810	<i>Zc3h10</i>	ENSMUSG00000045322	<i>Tlr9</i>
ENSMUSG00000039813	<i>Tbc1d2</i>	ENSMUSG00000045374	<i>Wdr81</i>
ENSMUSG00000039914	<i>Coq10a</i>	ENSMUSG00000045404	<i>Kcnk13</i>
ENSMUSG00000039942	<i>Ptger4</i>	ENSMUSG00000045482	<i>Trrap</i>
ENSMUSG00000040010	<i>Slc7a5</i>	ENSMUSG00000045795	<i>Whamm</i>
ENSMUSG00000040111	<i>Gramd1b</i>	ENSMUSG00000045867	<i>Cradd</i>
ENSMUSG00000040188	<i>Scamp2</i>	ENSMUSG00000045934	<i>Mtmr11</i>
ENSMUSG00000040272	<i>Accs</i>	ENSMUSG00000045973	<i>Slc25a51</i>
ENSMUSG00000040274	<i>Cdk6</i>	ENSMUSG00000046079	<i>Lrrc8d</i>
ENSMUSG00000040297	<i>Suco</i>	ENSMUSG00000046179	<i>E2f8</i>
ENSMUSG00000040389	<i>Wdr47</i>	ENSMUSG00000046223	<i>Plaur</i>
ENSMUSG00000040433	<i>Zbtb38</i>	ENSMUSG00000046410	<i>Kcnk6</i>
ENSMUSG00000040472	<i>Rabggta</i>	ENSMUSG00000046456	<i>Tmem150b</i>
ENSMUSG00000040552	<i>C3ar1</i>	ENSMUSG00000046546	<i>Fam43a</i>
ENSMUSG00000040701	<i>Ap1g2</i>	ENSMUSG00000046718	<i>Bst2</i>
ENSMUSG00000040713	<i>Creg1</i>	ENSMUSG00000046727	<i>Cystm1</i>
ENSMUSG00000040751	<i>Lat2</i>	ENSMUSG00000046731	<i>Kctd11</i>
ENSMUSG00000040848	<i>Sft2d2</i>	ENSMUSG00000046805	<i>Mpeg1</i>
ENSMUSG00000040964	<i>Arhgef10l</i>	ENSMUSG00000047034	<i>Ankrd33</i>
ENSMUSG00000041132	<i>N4bp2l1</i>	ENSMUSG00000047048	<i>Olfir432</i>
ENSMUSG00000041143	<i>Tmco4</i>	ENSMUSG00000047067	<i>Dusp28</i>
ENSMUSG00000041193	<i>Pla2g5</i>	ENSMUSG00000047126	<i>Cltc</i>
ENSMUSG00000041362	<i>Shtn1</i>	ENSMUSG00000047221	<i>Fam185a</i>
ENSMUSG00000041515	<i>Irf8</i>	ENSMUSG00000047250	<i>Ptgs1</i>
ENSMUSG00000041607	<i>Mbp</i>	ENSMUSG00000047412	<i>Zbtb44</i>
ENSMUSG00000041625	<i>Ggact</i>	ENSMUSG00000047547	<i>Cltb</i>
ENSMUSG00000041754	<i>Trem3</i>	ENSMUSG00000047671	<i>Tctex1d4</i>
ENSMUSG00000041763	<i>Tpp2</i>	ENSMUSG00000047767	<i>Atg16l2</i>
ENSMUSG00000041773	<i>Enc1</i>	ENSMUSG00000047798	<i>Cd300lf</i>
ENSMUSG00000041920	<i>Slc16a6</i>	ENSMUSG00000047804	<i>Akap10</i>
ENSMUSG00000041957	<i>Pkp2</i>	ENSMUSG00000047810	<i>Ccdc88b</i>
ENSMUSG00000041959	<i>S100a10</i>	ENSMUSG00000047898	<i>Ccr4</i>
ENSMUSG00000042303	<i>Sgsm3</i>	ENSMUSG00000048230	<i>Fbxo43</i>
ENSMUSG00000042363	<i>Lgalsl</i>	ENSMUSG00000048277	<i>Syngn2</i>
ENSMUSG00000042404	<i>Dennd4b</i>	ENSMUSG00000048661	<i>Lemd3</i>
ENSMUSG00000042410	<i>Agps</i>	ENSMUSG00000048701	<i>Ccdc6</i>
ENSMUSG00000042476	<i>Abcb4</i>	ENSMUSG00000048779	<i>P2ry6</i>
ENSMUSG00000042507	<i>Elmsan1</i>	ENSMUSG00000048807	<i>Slc35e4</i>
ENSMUSG00000042613	<i>Pbxip1</i>	ENSMUSG00000048832	<i>Vps37c</i>
ENSMUSG00000042626	<i>Shc1</i>	ENSMUSG00000048911	<i>Rnf24</i>
ENSMUSG00000042742	<i>Bmt2</i>	ENSMUSG00000049086	<i>Bmyc</i>
ENSMUSG00000042745	<i>Id1</i>	ENSMUSG00000049313	<i>Sorl1</i>
ENSMUSG00000042759	<i>Apobr</i>	ENSMUSG00000049411	<i>Tmem241</i>
ENSMUSG00000042826	<i>Fgf11</i>	ENSMUSG00000049562	<i>Ap5b1</i>
ENSMUSG00000043131	<i>Mob1a</i>	ENSMUSG00000049807	<i>Arhgap23</i>
ENSMUSG00000043157	<i>Arl11</i>	ENSMUSG00000049892	<i>Rasd1</i>
ENSMUSG00000043257	<i>Pigv</i>	ENSMUSG00000049932	<i>H2afx</i>
ENSMUSG00000043279	<i>Trim56</i>	ENSMUSG00000049988	<i>Lrrc25</i>
ENSMUSG00000043421	<i>Hilpda</i>	ENSMUSG00000050022	<i>Amz1</i>
ENSMUSG00000043895	<i>S1pr2</i>	ENSMUSG00000050335	<i>Lgals3</i>
ENSMUSG00000043953	<i>Ccri2</i>	ENSMUSG00000050468	<i>Astl</i>
ENSMUSG00000044092	<i>C130050O18Rik</i>	ENSMUSG00000050732	<i>Vamp8</i>
ENSMUSG00000044313	<i>Mab21l3</i>	ENSMUSG00000050821	<i>Fam131a</i>
ENSMUSG00000044456	<i>Rin3</i>	ENSMUSG00000051113	<i>Fam71e1</i>
ENSMUSG00000044641	<i>Pard6b</i>	ENSMUSG00000051335	<i>Gfod1</i>
ENSMUSG00000044701	<i>Ii27</i>	ENSMUSG00000051506	<i>Wdfy4</i>
ENSMUSG00000044709	<i>Gemin7</i>	ENSMUSG00000051627	<i>Hist1h1e</i>
ENSMUSG00000044864	<i>Ankrd50</i>	ENSMUSG00000051650	<i>B3gnt2</i>
ENSMUSG00000045027	<i>Prss22</i>	ENSMUSG00000051748	<i>Wfdc21</i>
ENSMUSG00000045193	<i>Cirbp</i>	ENSMUSG00000052298	<i>Cdc42se2</i>

**Supplemental Table 2 (continued). IRF7-binding genes.**

Gene ID	Symbol	Gene ID	Symbol
ENSMUSG00000052397	<i>Ezr</i>	ENSMUSG00000063506	<i>Arhgap22</i>
ENSMUSG00000052423	<i>B4galt3</i>	ENSMUSG00000063849	<i>Ppcdc</i>
ENSMUSG00000052435	<i>Cebpe</i>	ENSMUSG00000063851	<i>Rnf183</i>
ENSMUSG00000052560	<i>Cpne8</i>	ENSMUSG00000064090	<i>Vrk2</i>
ENSMUSG00000052688	<i>Rab7b</i>	ENSMUSG00000064288	<i>Hist1h4k</i>
ENSMUSG00000052749	<i>Trim30b</i>	ENSMUSG00000064289	<i>Tank</i>
ENSMUSG00000052837	<i>Junb</i>	ENSMUSG00000066026	<i>Dhrs3</i>
ENSMUSG00000053113	<i>Socs3</i>	ENSMUSG00000066306	<i>Numa1</i>
ENSMUSG00000053158	<i>Fes</i>	ENSMUSG00000066441	<i>Rdh11</i>
ENSMUSG00000053477	<i>Tcf4</i>	ENSMUSG00000066838	<i>Zfp772</i>
ENSMUSG00000053600	<i>Zfp472</i>	ENSMUSG00000067274	<i>Rplp0</i>
ENSMUSG00000053684	<i>BC048403</i>	ENSMUSG00000067455	<i>Hist1h4j</i>
ENSMUSG00000054027	<i>Nt5dc3</i>	ENSMUSG00000067787	<i>Bicap</i>
ENSMUSG00000054051	<i>Ercc6</i>	ENSMUSG00000067851	<i>Arfgef1</i>
ENSMUSG00000054065	<i>Pkp3</i>	ENSMUSG00000068206	<i>Pick1</i>
ENSMUSG00000054150	<i>Syne3</i>	ENSMUSG00000068699	<i>Flncl</i>
ENSMUSG00000054302	<i>Eapp</i>	ENSMUSG00000068798	<i>Rap1a</i>
ENSMUSG00000054428	<i>Atpif1</i>	ENSMUSG00000069266	<i>Hist1h4b</i>
ENSMUSG00000054619	<i>Mettl7a1</i>	ENSMUSG00000069273	<i>Hist1h3e</i>
ENSMUSG00000054702	<i>Ap1s3</i>	ENSMUSG00000069631	<i>Strada</i>
ENSMUSG00000054733	<i>Msra</i>	ENSMUSG00000069892	<i>9930111J21Rik2</i>
ENSMUSG00000054793	<i>Cadm4</i>	ENSMUSG00000070283	<i>Ndufaf3</i>
ENSMUSG00000054808	<i>Actn4</i>	ENSMUSG00000070327	<i>Rnf213</i>
ENSMUSG00000054894	<i>Atp5s</i>	ENSMUSG00000070462	<i>Tlnrd1</i>
ENSMUSG00000055447	<i>Cd47</i>	ENSMUSG00000070524	<i>Fcrlb</i>
ENSMUSG00000055805	<i>Fmnl1</i>	ENSMUSG00000070717	<i>Gm10300</i>
ENSMUSG00000055835	<i>Zfp1</i>	ENSMUSG00000071042	<i>Rasgrp3</i>
ENSMUSG00000055926	<i>Gm14137</i>	ENSMUSG00000071064	<i>Zfp827</i>
ENSMUSG00000055994	<i>Nod2</i>	ENSMUSG00000071076	<i>Jund</i>
ENSMUSG00000056267	<i>Cep70</i>	ENSMUSG00000071369	<i>Map3k5</i>
ENSMUSG00000056413	<i>Adap1</i>	ENSMUSG00000071516	<i>Hist1h2ai</i>
ENSMUSG00000056498	<i>Tmem154</i>	ENSMUSG00000071573	<i>Rnls</i>
ENSMUSG00000056501	<i>Cebpb</i>	ENSMUSG00000071637	<i>Cebpd</i>
ENSMUSG00000056515	<i>Rab31</i>	ENSMUSG00000071713	<i>Csf2rb</i>
ENSMUSG00000056749	<i>Nfil3</i>	ENSMUSG00000071715	<i>Ncf4</i>
ENSMUSG00000056888	<i>Glipr1</i>	ENSMUSG00000073412	<i>Lst1</i>
ENSMUSG00000056952	<i>Tatdn2</i>	ENSMUSG00000073631	<i>Gm10553</i>
ENSMUSG00000057649	<i>Brd9</i>	ENSMUSG00000074063	<i>Osgin1</i>
ENSMUSG00000057672	<i>Pkn1</i>	ENSMUSG00000074221	<i>Zfp568</i>
ENSMUSG00000058216	<i>Gstp3</i>	ENSMUSG00000074361	<i>C5ar2</i>
ENSMUSG00000058427	<i>Cxcl2</i>	ENSMUSG00000074403	<i>Hist2h3b</i>
ENSMUSG00000058755	<i>Osm</i>	ENSMUSG00000074417	<i>Gm14548</i>
ENSMUSG00000058773	<i>Hist1h1b</i>	ENSMUSG00000074623	<i>Gm826</i>
ENSMUSG00000059108	<i>Ifftm6</i>	ENSMUSG00000074802	<i>Gas2l3</i>
ENSMUSG00000059288	<i>Cdyl</i>	ENSMUSG00000074825	<i>Itipri1</i>
ENSMUSG00000059456	<i>Ptk2b</i>	ENSMUSG00000074862	<i>BC025920</i>
ENSMUSG00000059923	<i>Grb2</i>	ENSMUSG00000074886	<i>Grk6</i>
ENSMUSG00000060093	<i>Hist1h4a</i>	ENSMUSG00000075284	<i>Wipf1</i>
ENSMUSG00000060639	<i>Hist1h4i</i>	ENSMUSG00000075486	<i>Commd6</i>
ENSMUSG00000060950	<i>Trmt61a</i>	ENSMUSG00000075703	<i>Selenoi</i>
ENSMUSG00000061028	<i>Clasrp</i>	ENSMUSG00000076618	<i>Ighj4</i>
ENSMUSG00000061132	<i>Blnk</i>	ENSMUSG00000078249	<i>Hmga1b</i>
ENSMUSG00000061482	<i>Hist1h4d</i>	ENSMUSG00000078515	<i>Ddi2</i>
ENSMUSG00000061755	<i>Bod1l</i>	ENSMUSG00000079016	<i>Gm11034</i>
ENSMUSG00000062031	<i>Pgghg</i>	ENSMUSG00000079550	<i>Mpp4</i>
ENSMUSG00000062300	<i>Nectin2</i>	ENSMUSG00000079794	<i>AC125149.2</i>
ENSMUSG00000062743	<i>Zfp677</i>	ENSMUSG00000086962	<i>Gm12248</i>
ENSMUSG00000063015	<i>Ccni</i>	ENSMUSG00000087610	<i>Gm16253</i>
ENSMUSG00000063193	<i>Cd300lb</i>	ENSMUSG00000089669	<i>Tnfsf13</i>
ENSMUSG00000063234	<i>Gpr84</i>	ENSMUSG00000090115	<i>Usp49</i>

**Supplemental Table 2 (continued). IRF7-binding genes.**

Gene ID	Symbol
ENSMUSG00000091405	<i>Hist2h4</i>
ENSMUSG00000093938	<i>Evi2b</i>
ENSMUSG00000094018	<i>S100a2</i>
ENSMUSG00000094028	<i>Ighd4-1</i>
ENSMUSG00000094127	<i>G530012D18Rik</i>
ENSMUSG00000095041	<i>AC149090.1</i>
ENSMUSG00000095450	<i>AC132444.4</i>
ENSMUSG00000095787	<i>AC133103.6</i>
ENSMUSG00000095891	<i>Gm10717</i>
ENSMUSG00000096201	<i>Gm10715</i>
ENSMUSG00000096736	<i>Gm17535</i>
ENSMUSG00000096764	<i>Gm21985</i>
ENSMUSG00000098112	<i>Bin2</i>
ENSMUSG00000099655	<i>2310034G01Rik</i>
ENSMUSG00000100210	<i>Hist1h3f</i>
ENSMUSG00000101972	<i>Hist1h3i</i>
ENSMUSG00000105827	<i>Hist2h2bb</i>
ENSMUSG00000108596	<i>Gm49368</i>
ENSMUSG00000108900	<i>Ccdc194</i>