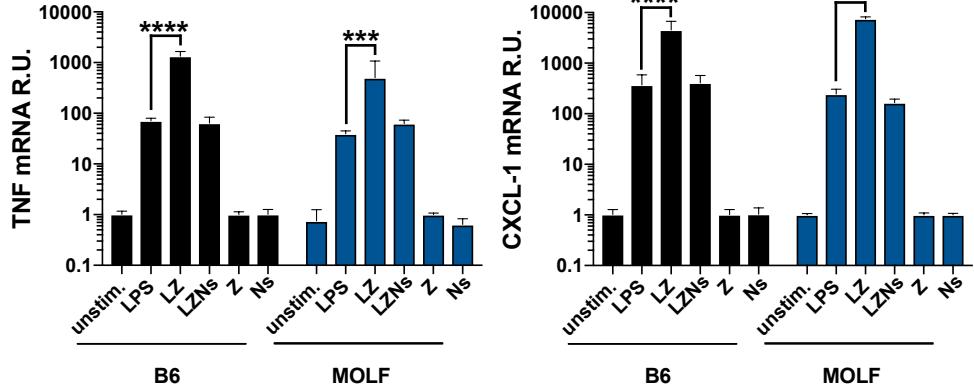
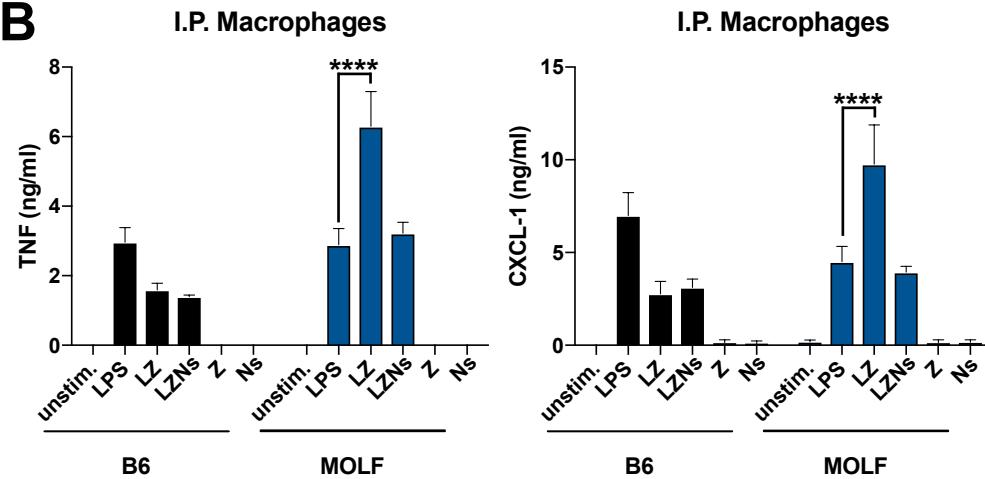


Supplemental Information

**Constitutive Interferon Attenuates
RIPK1/3-Mediated Cytokine Translation**

Hayley I. Muendlein, Joseph Sarhan, Beiyun C. Liu, Wilson M. Connolly, Stephen A. Schworer, Irina Smirnova, Amy Y. Tang, Vladimir Ilyukha, Jodie Pietruska, Soroush Tahmasebi, Nahum Sonenberg, Alexei Degterev, and Alexander Poltorak

A**B****Figure S1, Related to Figure 1.**

(A,B) TNF- α and CXCL-1 mRNA (**A**) and protein (**B**) levels in unstimulated, LPS, LPS/zVAD (LZ), LPS/zVAD/Nec-1s (LZNs), zVAD (Z), and Nec-1s (Ns) stimulated B6 and MOLF peritoneal macrophages. ELISA and qPCR data are shown as +/- SD from three independent experiments compared using a Two-way ANOVA: ***p<0.001, ****p<0.0001.

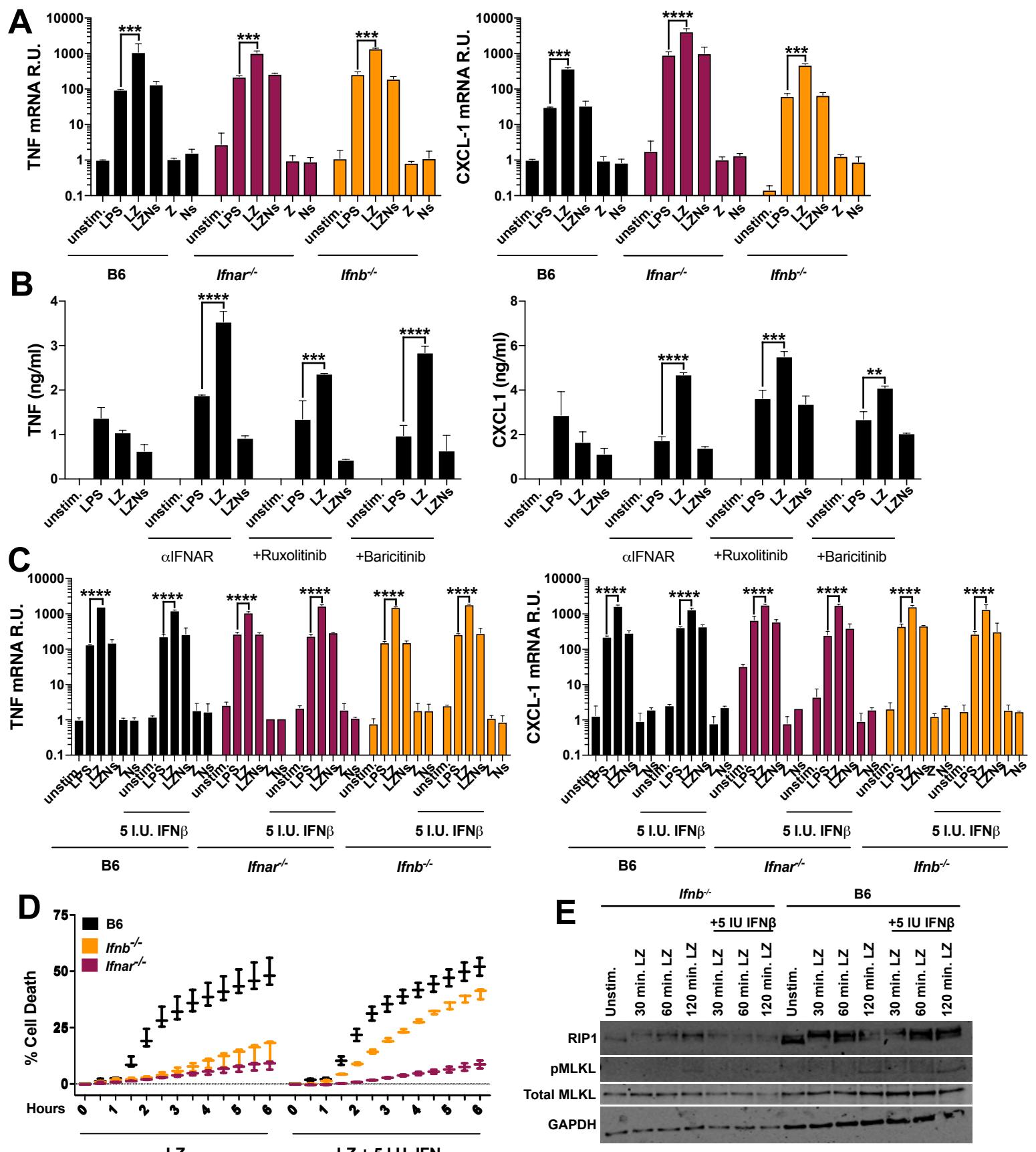


Figure S2, Related to Figure 2

(A) TNF- α and CXCL-1 mRNA levels after indicated stimulations of B6, *Ifnar^{-/-}* and *Ifnb^{-/-}* BMDMs. (B) TNF- α and CXCL-1 protein levels in B6 BMDMs after indicated stimulations +/- overnight treatment with IFNAR blocking antibody (α IFNAR), Ruxolitinib, or Baricitinib. (C) TNF- α and CXCL-1 mRNA levels after indicated stimulations +/- 5 I.U. IFN β overnight priming in B6, *Ifnar^{-/-}* and *Ifnb^{-/-}* BMDMs. (D) Cell death as measured by propidium iodide incorporation over 6 hours in B6, *Ifnb^{-/-}*, and *Ifnar^{-/-}* BMDMs stimulated with LZ +/- 5 I.U. IFN β priming overnight. (E) RIP1, Total and phospho-MLKL levels in B6 and *Ifnb^{-/-}* BMDMs stimulated as indicated with LZ+/- 5 I.U. IFN β priming overnight. In all panels, BMDMs were stimulated with LPS, LPS/zVAD (LZ), LPS/zVAD/Nec-1s (LZNs), zVAD (Z) or Nec-1s (Ns). ELISA and qPCR data are shown as +/- SD from three independent experiments compared using Two-way ANOVA: **p<0.01, ***p<0.001, ****p<0.0001. Kinetic cell death and western blot experiments are representative of three or more independent experiments.

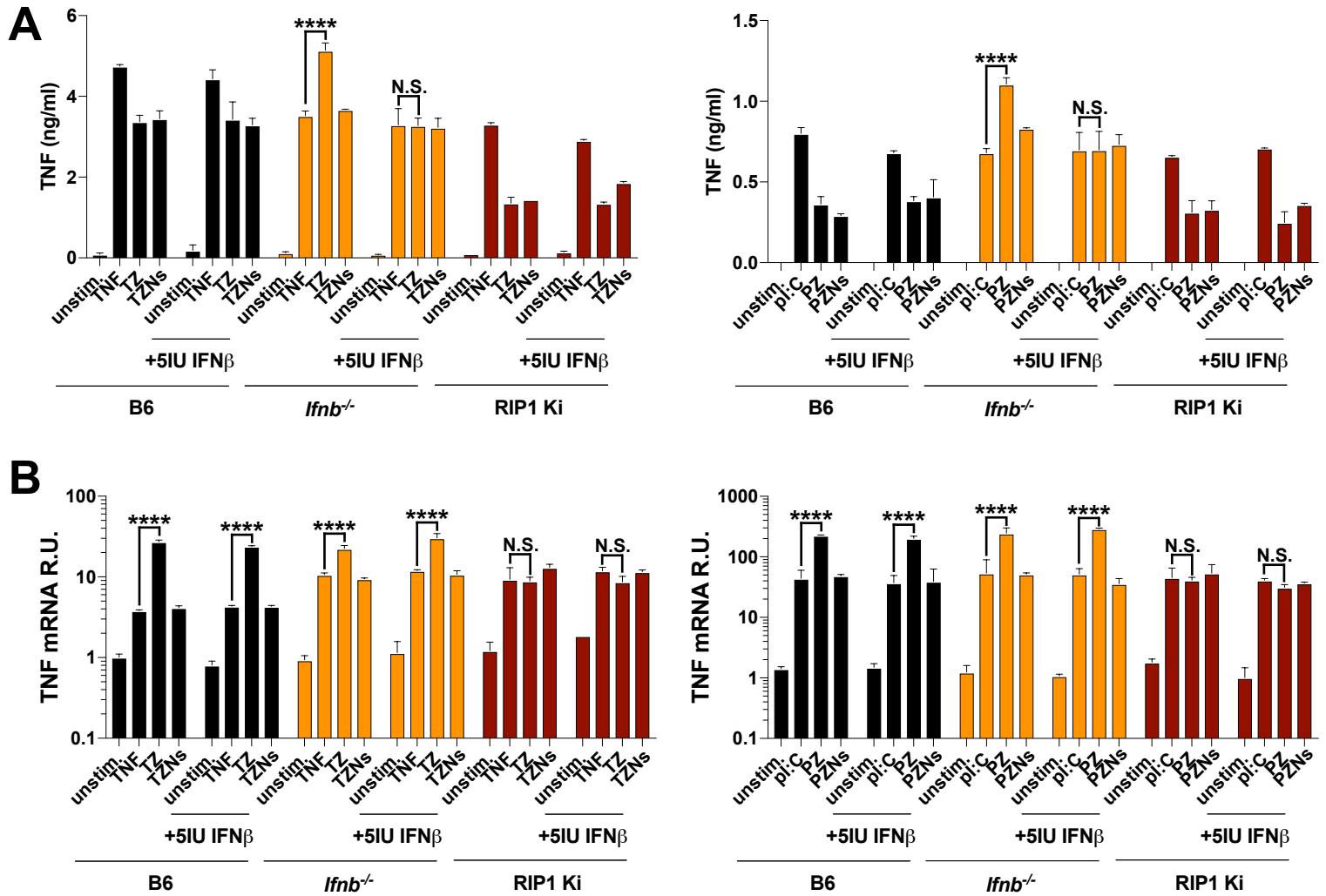


Figure S3, Related to Figure 2

(A,B) TNF- α and CXCL-1 protein (A) and mRNA (B) levels in unstimulated, TNF, TNF/zVAD (TZ), TNF/zVAD/Nec-1s (TZNs), or pI:C, pI:C/zVAD (PZ), pI:C/zVAD/Nec-1s (PZNs) stimulated B6, Ifnb^{-/-} and RIP1 Ki BMDMs. ELISA and qPCR data are shown as +/- SD from three independent experiments compared using a Two-way ANOVA: n.s. (p>0.05), ****p<0.0001.

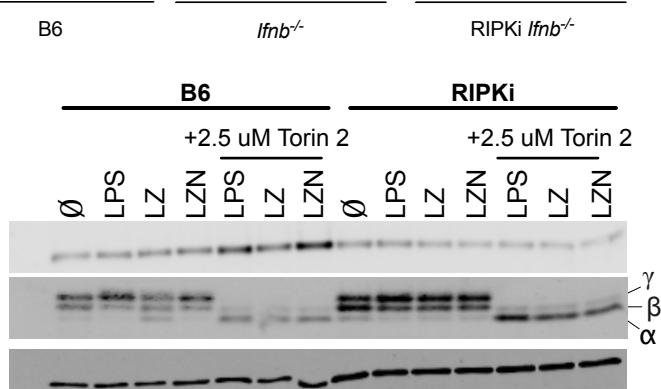
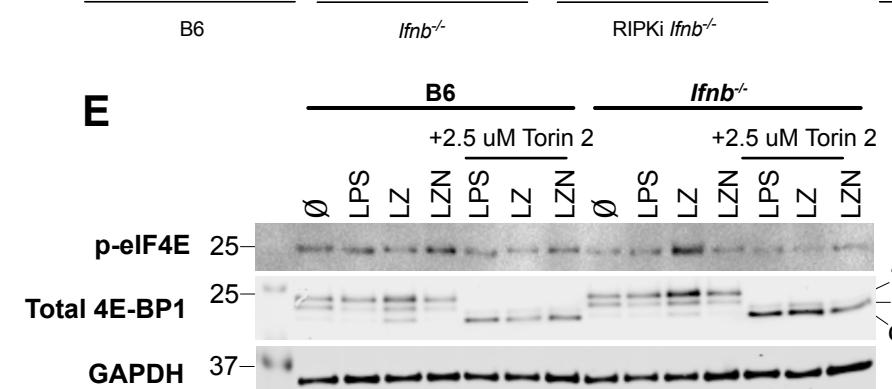
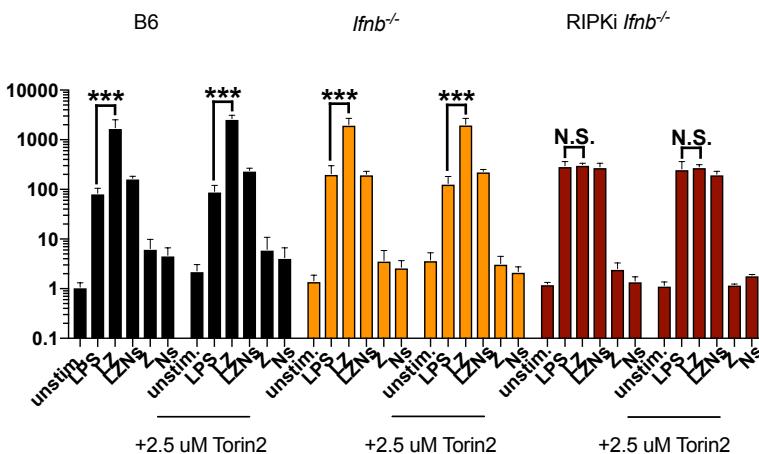
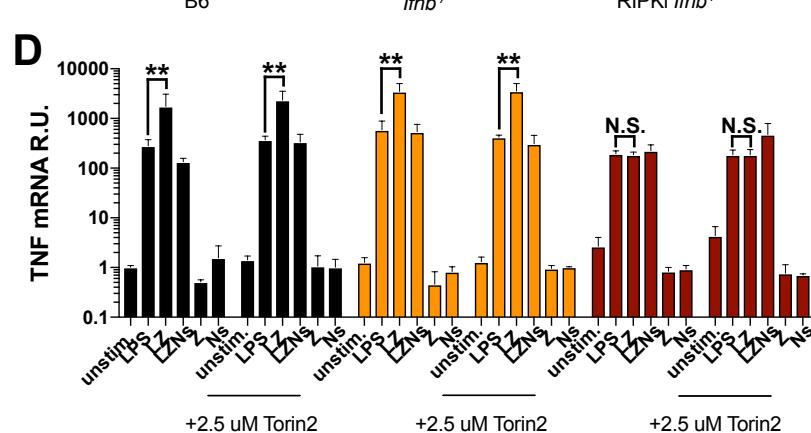
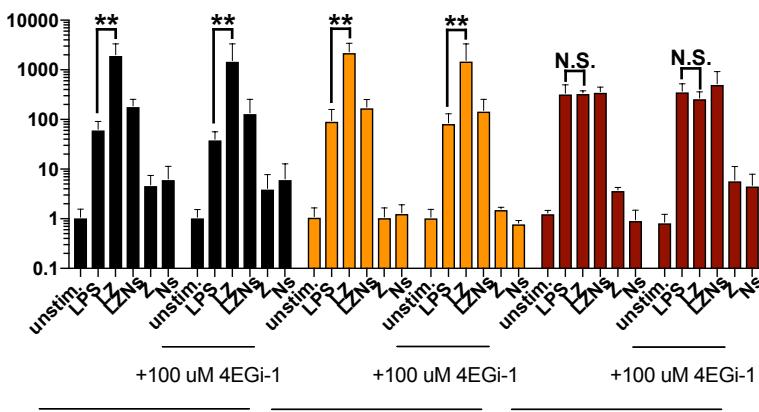
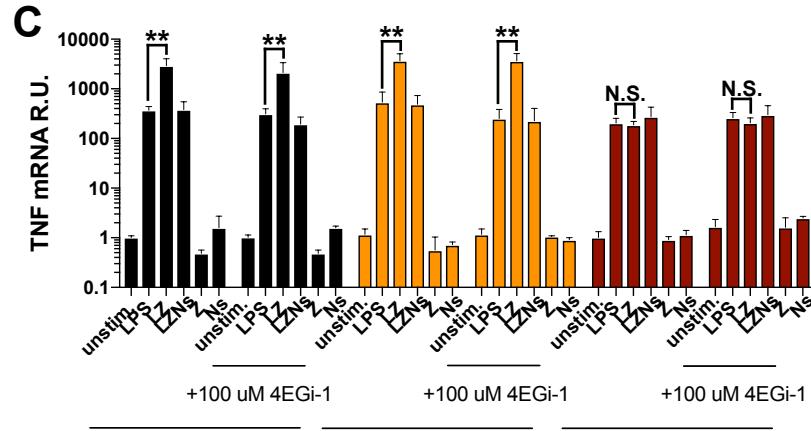
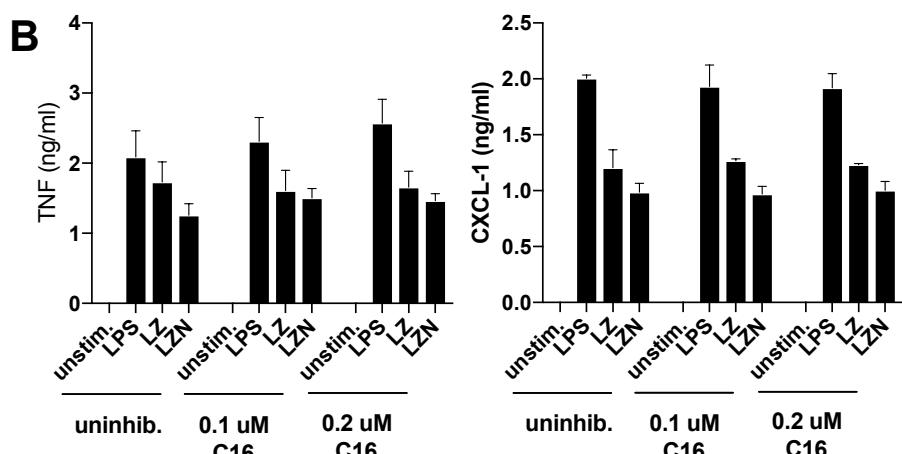
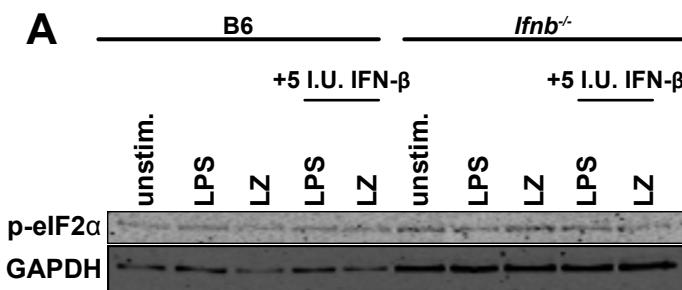


Figure S4, Related to Figure 4

(A) p-eIF2α levels in B6, and *Ifnb^{-/-}* BMDMs stimulated as indicated +/- 5 I.U. IFNβ priming overnight. (B) TNF-α and CXCL-1 protein levels after indicated stimulations +/- treatment with PKR inhibitor C16 in B6 BMDMs. (C, D) TNF-α and CXCL-1 mRNA levels after indicated stimulations +/- treatment with 4EGi-1 (C) or Torin 2 (D) in B6, *Ifnb^{-/-}*, and RIP1 Ki *Ifnb^{-/-}* BMDMs. (E) p-eIF4E and Total 4E-BP levels in B6, *Ifnb^{-/-}* and RIP1 Ki BMDMs stimulated as indicated +/- Torin 2. In all panels, BMDMs were stimulated with LPS, LPS/zVAD (LZ), LPS/zVAD/Nec-1s (LZNs), zVAD (Z), Nec-1s (Ns), or LPS/zVAD/Nec-1 (LZN) as indicated. ELISA and qPCR data are shown as +/- SD from three independent experiments compared using a Two-way ANOVA: n.s. ($p>0.05$), ** $p<0.01$, *** $p<0.001$. Western blot and kinetic cell death experiments are representative of three or more independent experiments.

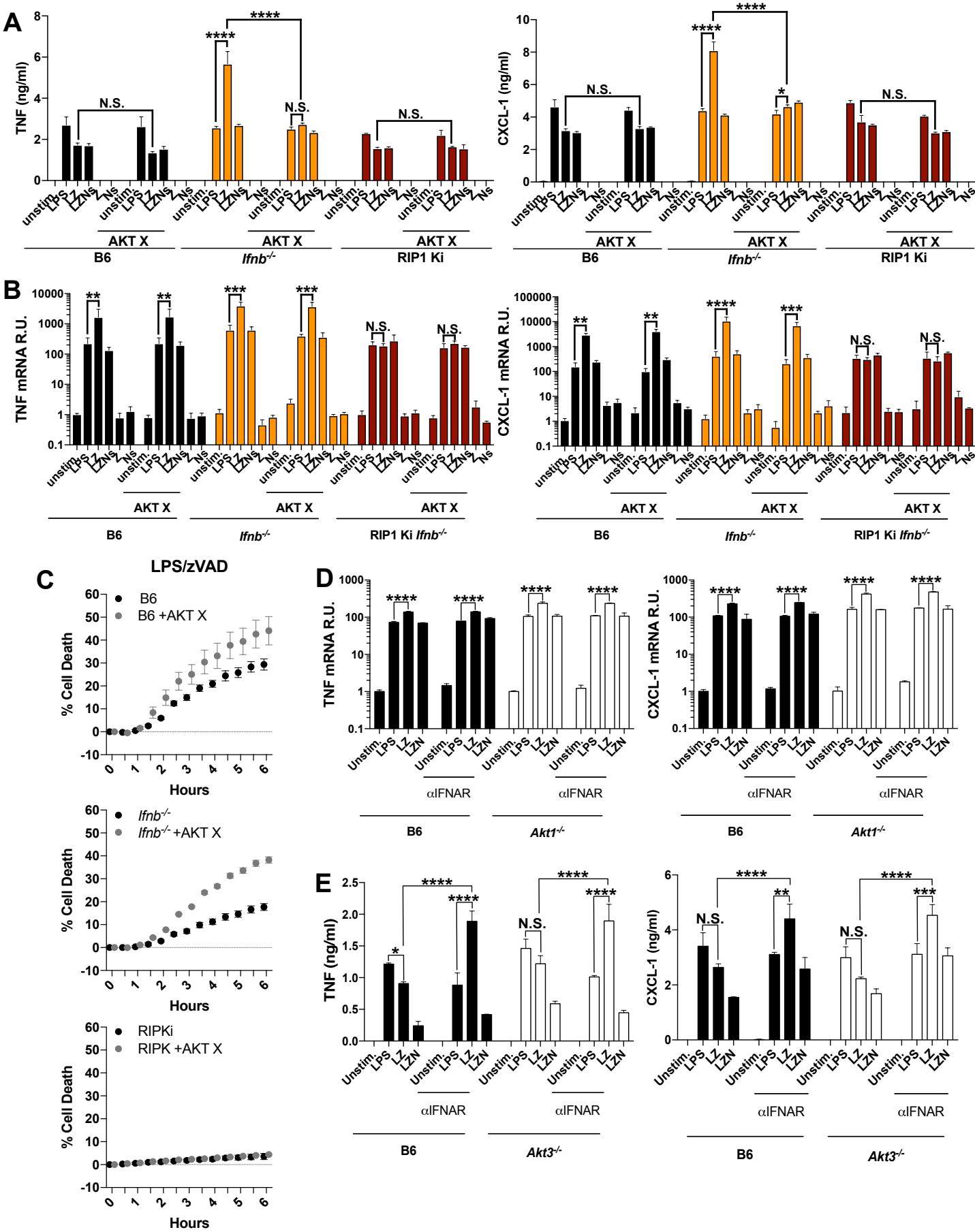


Figure S5, Related to Figure 4

(A,B) TNF- α and CXCL-1 protein (A) and mRNA (B) levels in B6, *Ifnb*^{-/-}, and RIP1 Ki *Ifnb*^{-/-} BMDMs stimulated as indicated +/- treatment with AKT X. (C) Cell death as measured by propidium iodide incorporation over 6 hours in B6, *Ifnb*^{-/-}, and RIP1 Ki *Ifnb*^{-/-} BMDMs stimulated with LZ +/- treatment with AKT X. (D) TNF- α and CXCL-1 mRNA levels in B6 and *Akt1*^{-/-} BMDMs stimulated as indicated +/- α IFNAR antibody. (E) TNF- α and CXCL-1 protein levels in B6 and *Akt3*^{-/-} BMDMs stimulated as indicated +/- α IFNAR antibody. In all panels, BMDMs were stimulated with LPS, LPS/zVAD (LZ), LPS/zVAD/Nec-1s (LZNs), zVAD (Z), Nec-1s (Ns), or LPS/zVAD/Nec-1 (LZN) as indicated. ELISA and qPCR data are shown as +/- SD from three independent experiments compared using a Two-way ANOVA: n.s. ($p>0.05$), * $p<0.05$, ** $p<0.01$, *** $p<0.001$, **** $p<0.0001$. Kinetic cell death experiments are representative of three or more independent experiments.