

Figure S1. Inhibition of TAK1 with 5z-7 promotes TNF α -induced cell death. **A.** Cell death assessed by propidium iodide (PI) staining of TAK1^{+/+} and TAK1^{-/-} MEFs treated with vehicle control, TNF α , or 5z-7 plus TNF α , with or without Nec-1. *P < 0.05 vs Con; #P < 0.05 vs TAK1^{+/+} 5z-7+TNF; §P < 0.05 vs TAK1^{-/-} 5z-7+TNF. n.s., non-significant. **B.** Western blots for the indicated proteins from TAK1^{+/+} and TAK1^{-/-} MEFs.

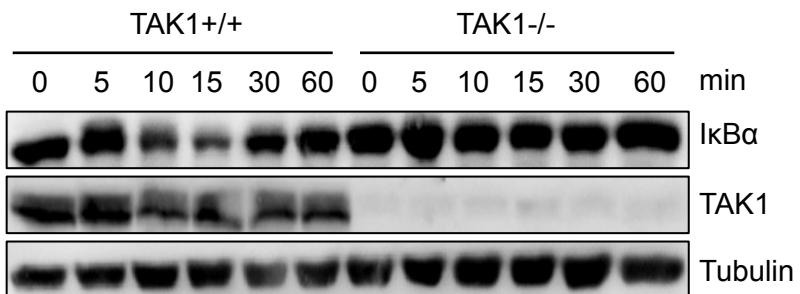
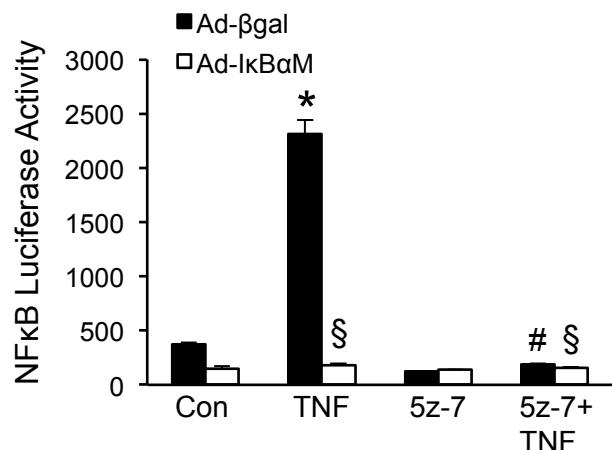
A**B**

Figure S2. TAK1 is essential for TNF α -induced NF κ B activation. **A.** Western blotting with the indicated antibodies from cellular extracts of TAK1^{+/+} and TAK1^{-/-} MEFs stimulated with 10 ng/ml TNF α for the indicated time periods. **B.** Relative NF κ B-luciferase activity from H9c2 myocytes infected with Ad-βgal or Ad-IκBαM (IκBα S32/36A mutant) along with an adenovirus encoding the NF κ B-luciferase reporter for 24 h, followed by treatment with vehicle control, TNF α , 5z-7, or 5z-7 plus TNF α for 12 h. *P < 0.01 vs Con; #P < 0.05 vs TNF. §P < 0.05 vs Ad-βgal TNF.

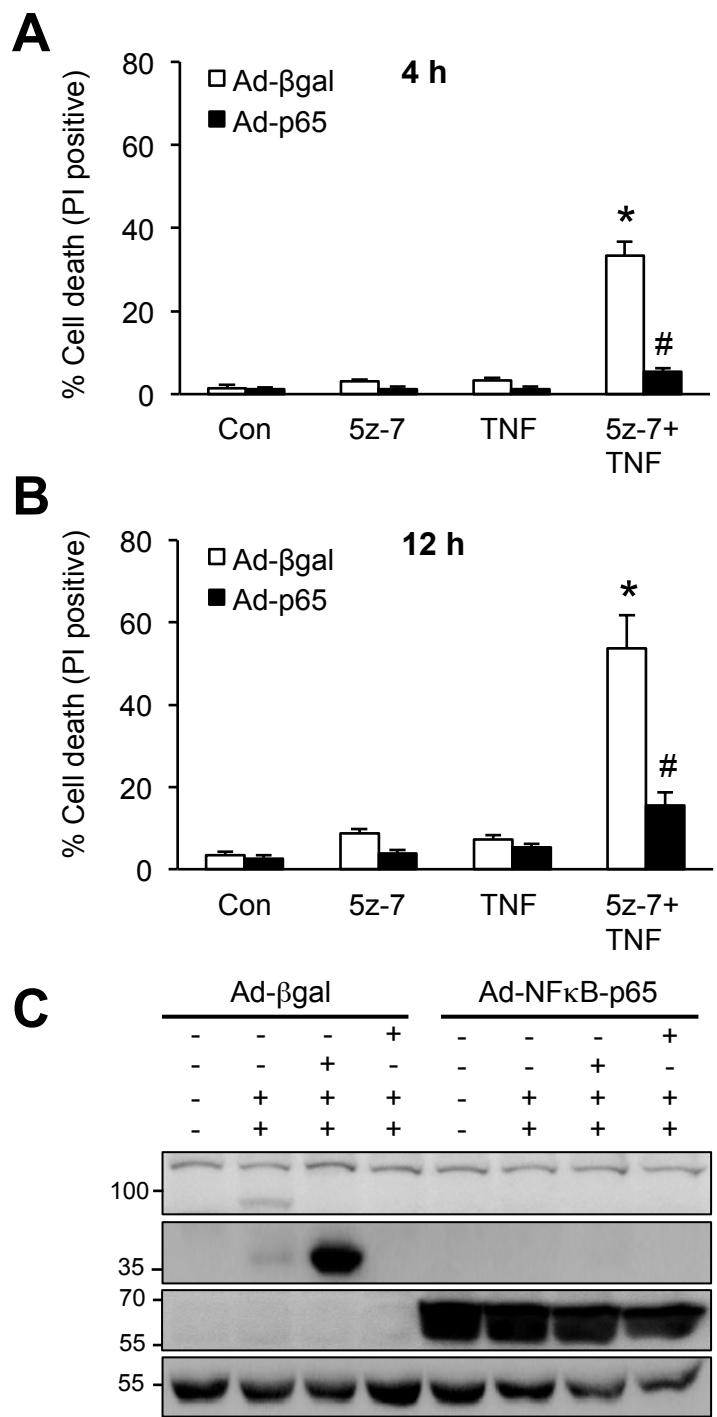


Fig S3. NFκB-p65 inhibits necroptotic cell death triggered by TAK1 inhibition. **A.** Quantification of cell death in H9c2 myocytes infected with β-gal or NFκB-p65 adenoviruses for 24 h, followed by stimulation with vehicle control, TNFα, 5z-7 for 4 h. *P < 0.05 vs Con. #P < 0.05 vs Ad-βgal 5z-7+TNF. **B.** Quantification of cell death in cells treated as in A for 12 h. *P < 0.05 vs Con; #P < 0.05 vs Ad-βgal 5z-7+TNF. **C.** Western blots for the indicated proteins from H9c2 myocytes infected with β-gal or NFκB-p65 adenoviruses for 24 h, followed by treatment with vehicle control or TNFα for 4 h, in the presence or absence of 5z-7 or Nec-1.

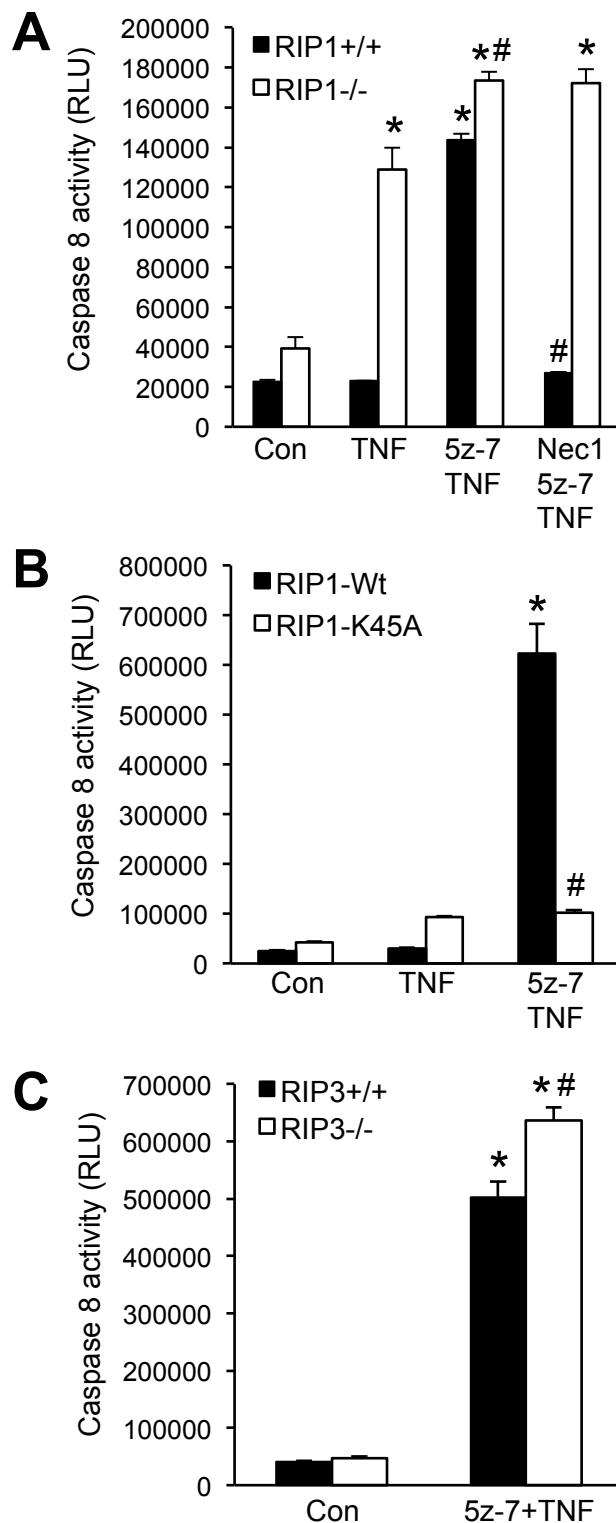


Figure S4. Role of RIP1 and RIP3 in $\text{TNF}\alpha$ -induced caspase 8 activity in the setting of TAK inhibition. **A.** Caspase 8 activity in RIP1 $^{+/+}$ and RIP1 $^{-/-}$ MEFs treated as indicated for 4 h. * $P < 0.01$ vs Con; # $P < 0.05$ vs RIP1 $^{+/+}$ 5z-7 plus TNF. **B.** Caspase 8 activity in RIP1 $^{-/-}$ MEFs reconstituted with wild-type (Wt) or K45A mutant of RIP, treated as indicated for 4 h. * $P < 0.05$ vs Con; # $P < 0.05$ vs RIP1-Wt. **C.** Caspase 8 activity in RIP3 $^{+/+}$ and RIP3 $^{-/-}$ MEFs treated with vehicle control or 5z-7 plus $\text{TNF}\alpha$ for 4 h. * $P < 0.05$ vs Con; # $P < 0.05$ vs RIP3 $^{+/+}$.