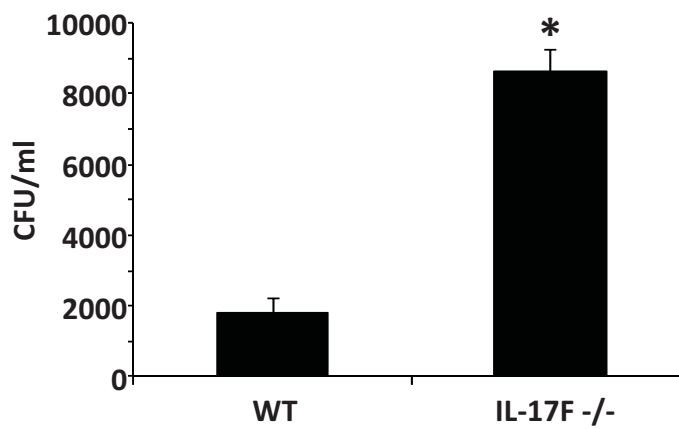
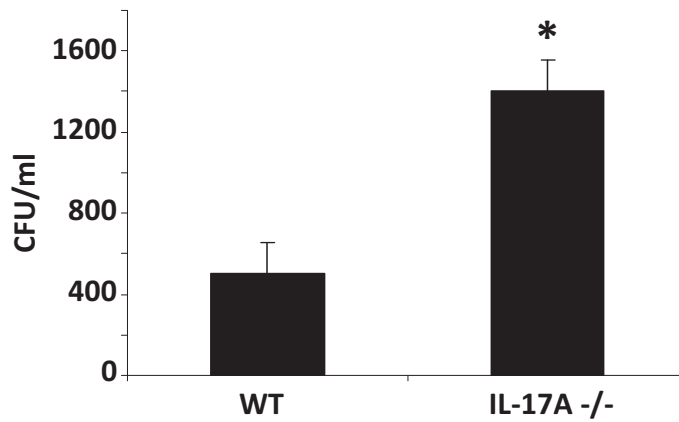
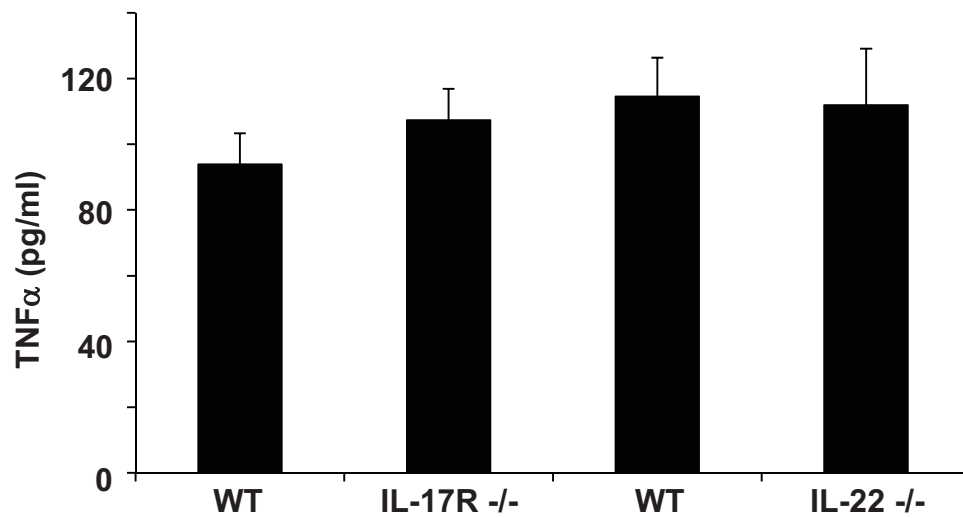


Supplemental Figure 1 – Impact of T_H17 cytokine deletion on *S. aureus* pneumonia. C57BL/6 (WT), IL-17R^{-/-}, or IL-22^{-/-} mice were challenged with 10⁸ cfu *S. aureus* for 24 (A,D) or 48 (B,C,E,F) hours. A,D - Data represent bacterial colony counts in the cranial lobe of the right lung (n=6,4 respectively). B,E – lavage cell differential cell counts (n=4). C,F – T_H17 induced cytokines in lung homogenate (n=4). All experiments were repeated once, representative data are presented. * p < 0.05, ** p < 0.10 versus WT

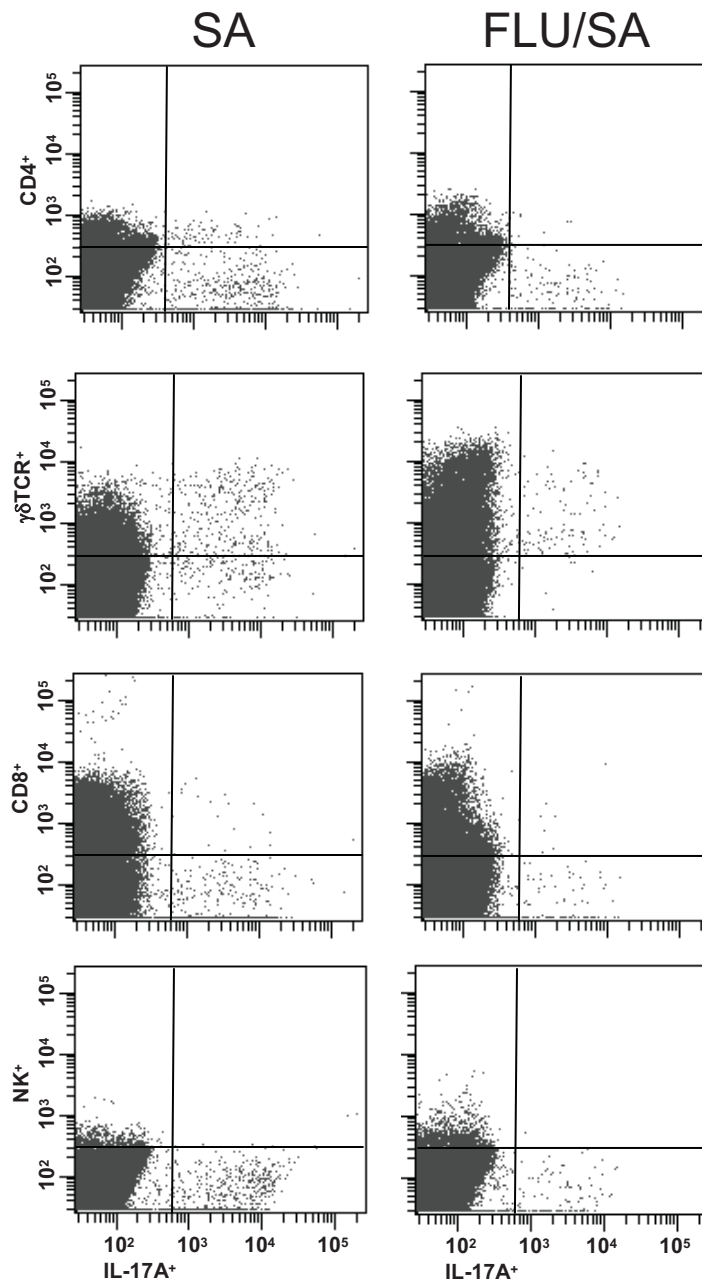


Supplemental Figure 2 - IL-17 is required for efficient clearance of *S. aureus* pneumonia. C57BL/6 (WT), IL-17A -/-, or IL-17F -/- mice were challenged with 10^8 cfu *S. aureus* for 48 hours (n=4), all experiments were repeated once, representative data are presented. Data reflect bacterial colony counts in the cranial lobe of the right lung. * p < 0.05 versus WT



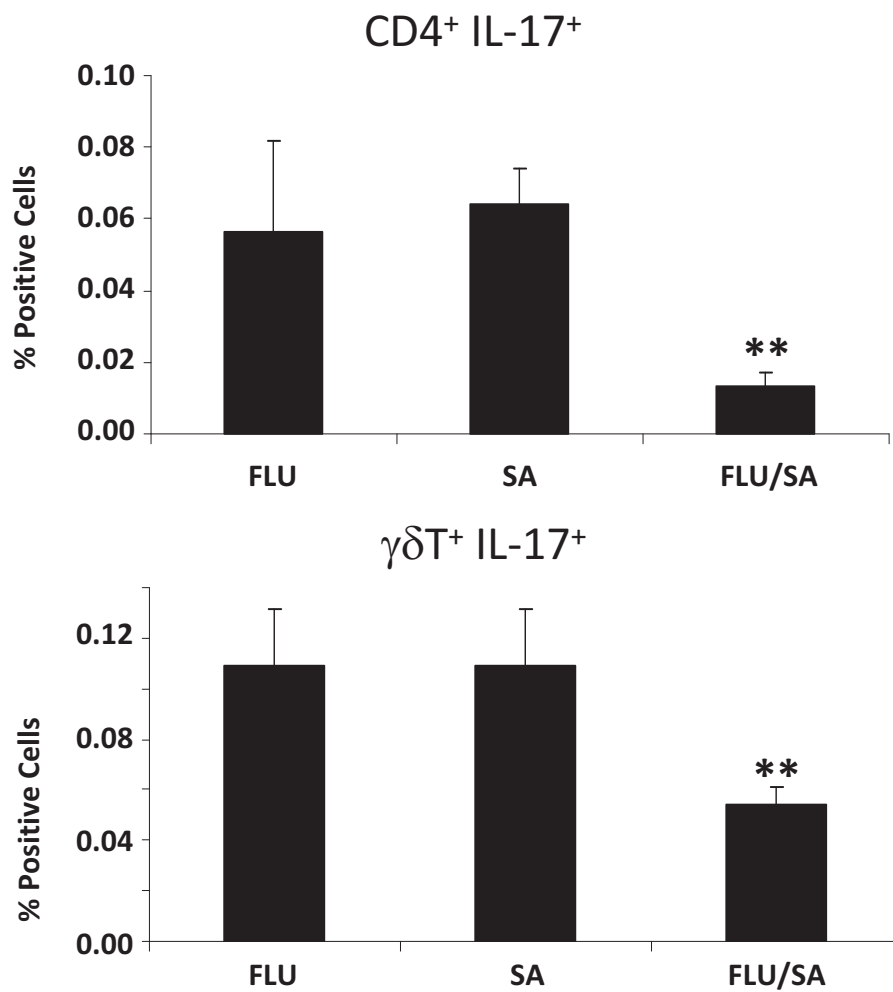
Supplemental Figure 3 - *S. aureus* induced TNF α production is unaltered in IL-17R -/- or IL-22 -/- mice. C57BL/6 (WT), IL-17R -/-, or IL-22 -/- mice were challenged with 10^8 cfu *S. aureus* for 24 hours (n=6 IL-17R -/-, 4 IL-22 -/-), all experiments were repeated once, representative data are presented. Data depict TNF α protein levels in whole lung homogenate.

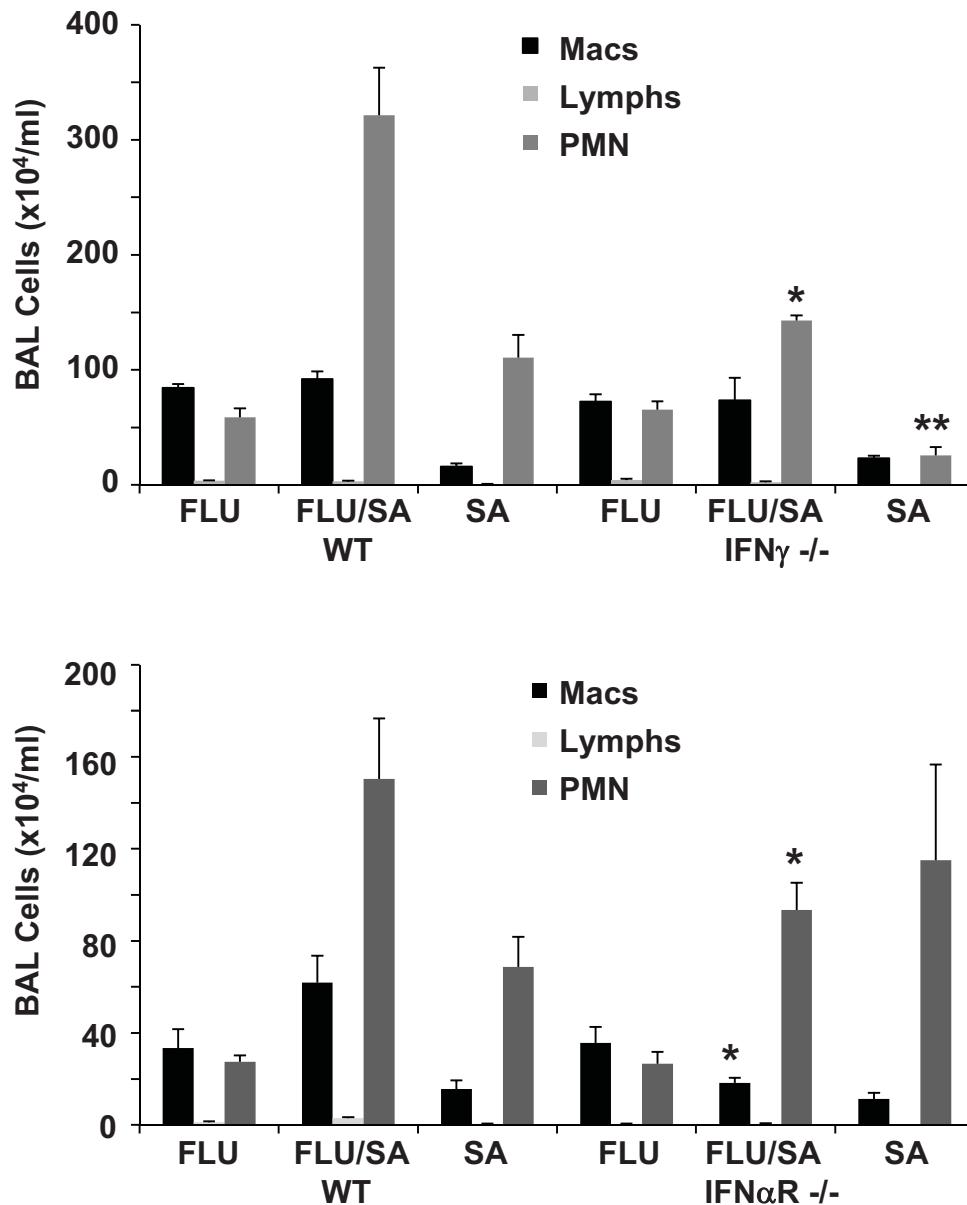
A



Supplemental Figure 4 – Influenza A infection inhibits CD4+ and $\gamma\delta$ T cell expression of IL-17A. C57BL/6 mice were infected with 100 pfu of Influenza A PR/8/34 or vehicle for 6 days, mice were then challenged with 10^8 cfu *S. aureus* for 24 hours (n=4), all experiments were repeated once, representative data are presented. A – flow cytometry plot for T cell surface marker staining and IL-17A intracellular staining. Cells in the upper right quadrant are double positive cells. B – quantification of the percent double positive cells. ** p < 0.10 versus SA

B





Supplemental Figure 5 – Attenuation of type I or II interferon signaling inhibits Influenza, *S. aureus* induced inflammation. C57BL/6, IFN α R^{-/-}, or IFN γ ^{-/-} mice were infected with 100 pfu of Influenza A PR/8/34 or vehicle for 6 days, mice were then challenged with 10⁸ cfu *S. aureus* for 24 hours (n=4), all experiments were repeated once, representative data are presented. Data represent total lavage cell counts. * p < 0.05 versus WT FLU/SA, ** p < 0.05 versus WT SA