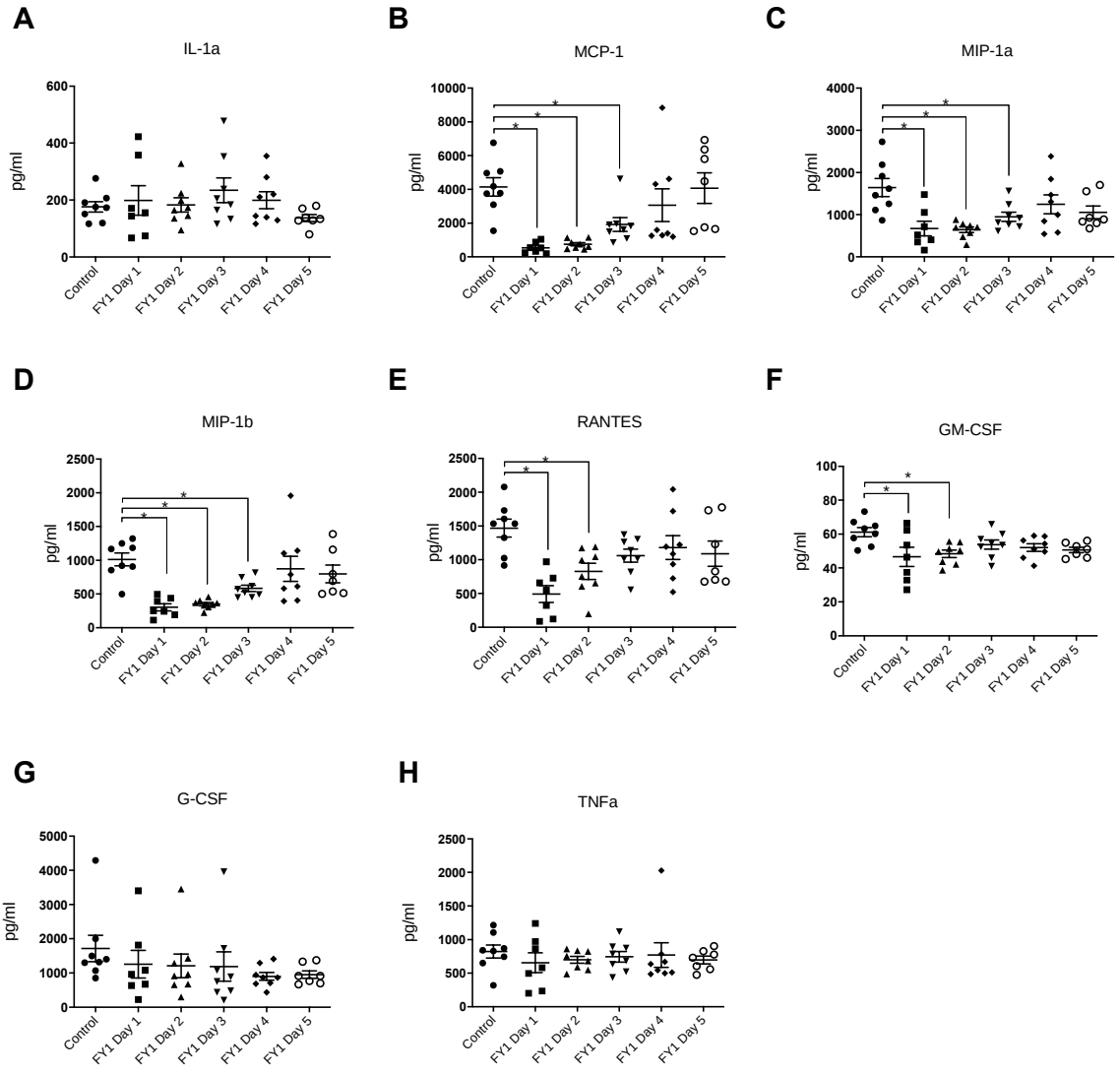
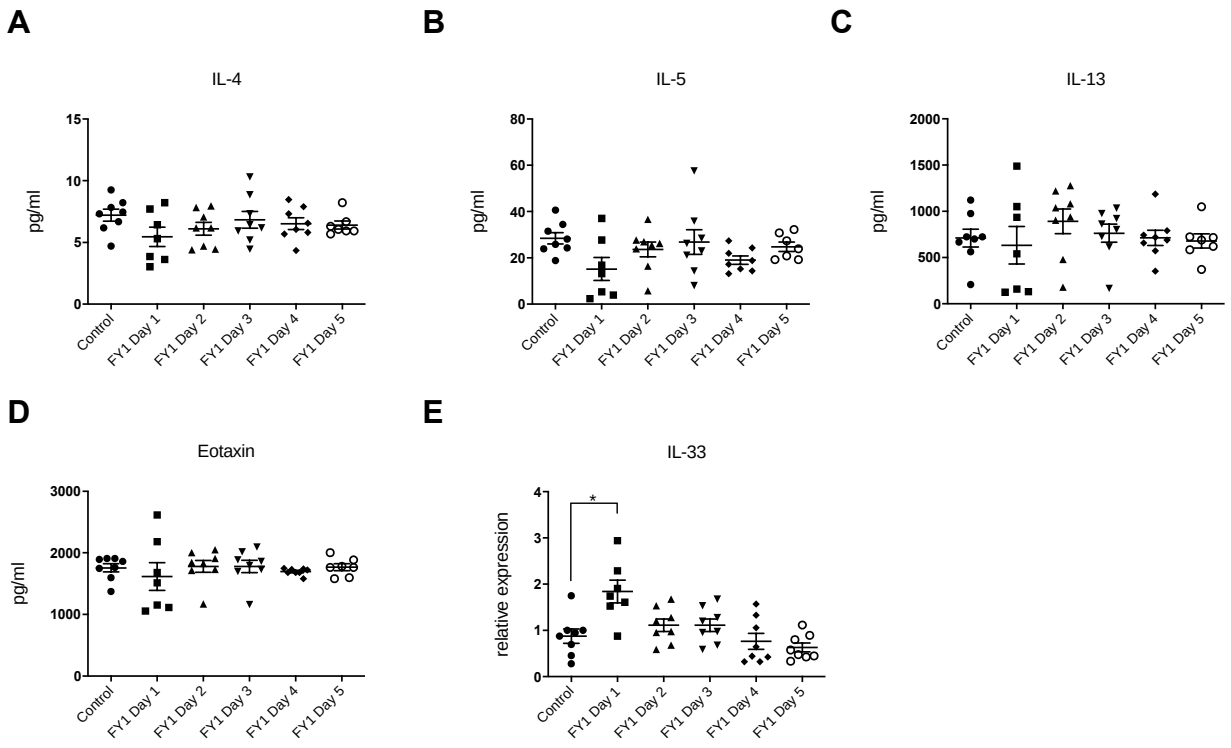
Supplemental Figure 1



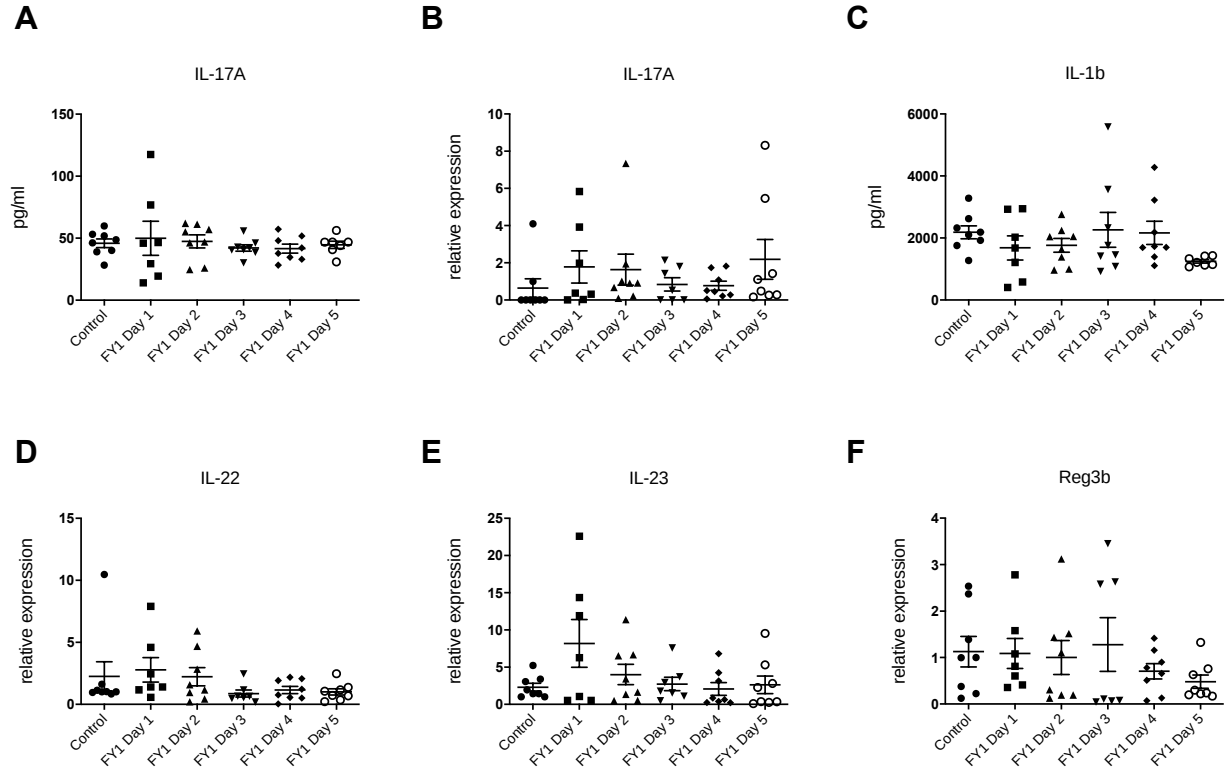
Supplemental Figure 1. **Influenza HA targeting monoclonal antibody suppresses both inflammatory and anti-inflammatory cytokines in the lung during influenza-associated bacterial pneumonia**. C57BL/6 mice infected with 100 PFU of influenza A PR/8/34 and receiving a single dose of FY1 or IgG control on Days 1-5 post-influenza infection. Mice received secondary infection with $5x10^7$ CFU of MRSA on Day 6 post-influenza and samples were harvested 24 hours following bacterial infection. A-F, Cytokine and chemokine concentrations in lung tissue measured by Lincoplex (n=8). Significance was tested by one-way ANOVA using Dunnett's multiple comparison test. Data represent mean +/- SEM.

Supplemental Figure 2



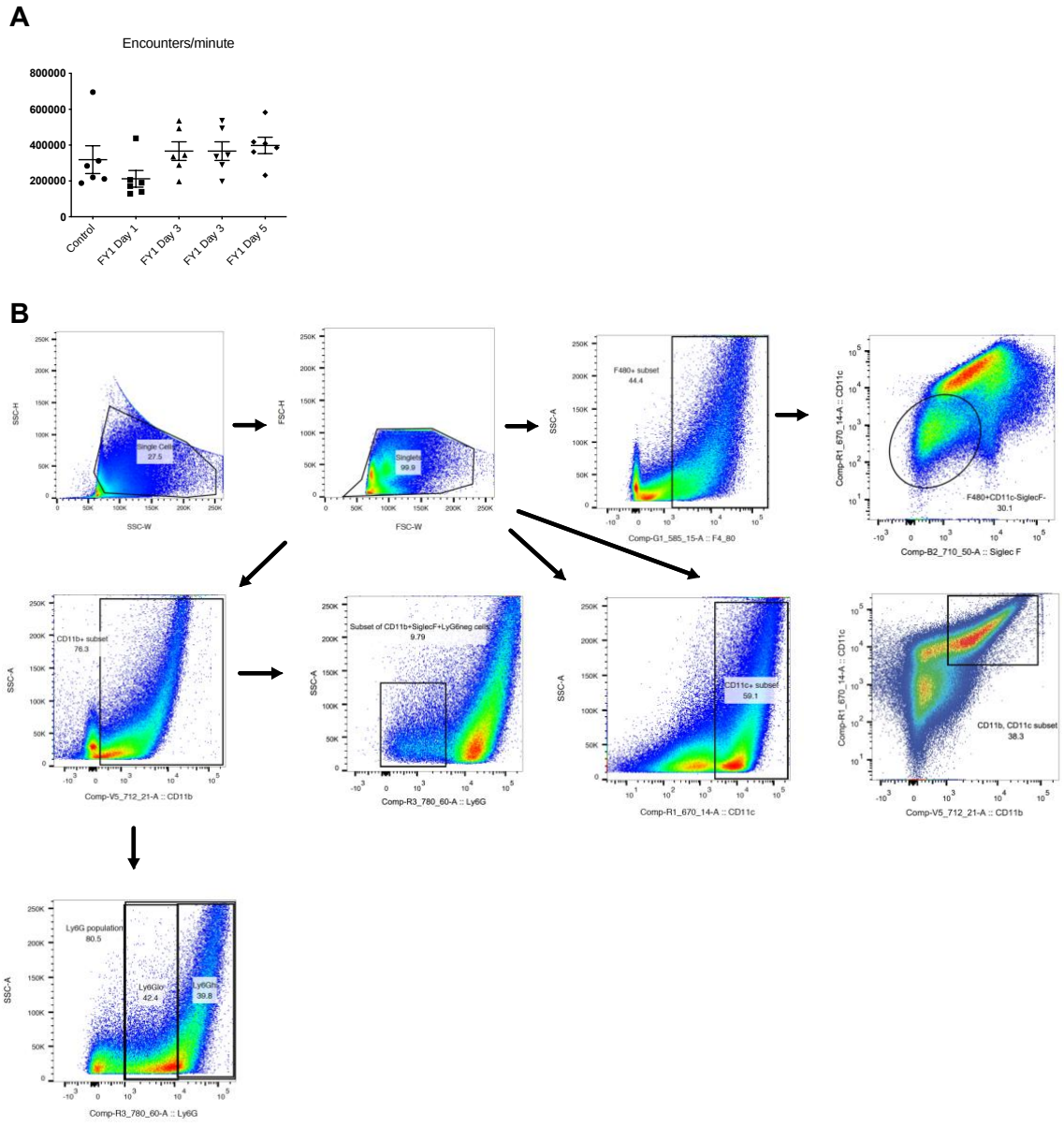
Supplemental Figure 2. **Influenza HA targeting monoclonal antibody inhibits IL-33 in the lung during influenza-associated bacterial pneumonia**. C57BL/6 mice infected with 100 PFU of influenza A PR/8/34 and receiving a single dose of FY1 or IgG control on Days 1-5 post-influenza infection. Mice received secondary infection with $5x10^7$ CFU of MRSA on Day 6 post-influenza and samples were harvested 24 hours following bacterial infection. A-D, Protein concentrations in lung tissue measured by Lincoplex (n=8). E, IL-33 gene expression in lung tissue measured by RT-PCR (n=8). Significance was tested by one-way ANOVA using Dunnett's multiple comparison test. Data represent mean +/- SEM.

Supplemental Figure 3



Supplemental Figure 3. **Influenza HA targeting monoclonal antibody does not alter Type 17 immunity in the lung during influenza-associated bacterial pneumonia**. C57BL/6 mice infected with 100 PFU of influenza A PR/8/34 and receiving a single dose of FY1 or IgG control on Days 1-5 post-influenza infection. Mice received secondary infection with $5x10^7$ CFU of MRSA on Day 6 post-influenza and samples were harvested 24 hours following bacterial infection. A-F, Type 17 immunity protein concentrations in lung tissue measured by Lincoplex and gene expression in lung tissue measured by RT-PCR (n=8). Significance was tested by one-way ANOVA using Dunnett's multiple comparison test. Data represent mean +/- SEM.

Supplemental Figure 4



Supplemental Figure 4. **Flow cytometry gating of cell populations in the lung.** C57BL/6 mice infected with 100 PFU of influenza A PR/8/34 and received a single dose of FY1 on Days 1, 3, or 5 post-influenza infection. Mice received secondary infection with $5x10^7$ CFU of MRSA on Day 6 post-influenza and samples were harvested 24 hours following bacterial infection (n=6). A, Flow cytometry encounters per minute using the BD FACSAria machine. B, Flow cytometry cell gating schematic.