Supplemental Figure 1 - C57BL/6 and ASC/-/- 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 of MSSA for 24 hrs. Gene expression of Type 17 immunity-related antimicrobial peptides determined by RT-PCR (n=8).

Supplemental Figure 2 - IL-1β concentrations in lung homogenate from naïve mice, as measured by ELISA (n=3). * p < 0.05 by unpaired t-test. Data points reflect individual values +/- SEM.

Supplemental Figures 3 and 4 – C57BL/6 and ASC/-/- 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 of MSSA for 24 hrs. Western Blots for caspase-1 shown. Note that replicate samples from two experiments have been run on parallel gels.

Supplemental Figure 5 - C57BL/6 mice were infected with Influenza A PR/8/34 for 6 days, received 200 μg of IL-18 inhibitor or IgG control, were then challenged with 10^8 CFU of MSSA 4 hours later and harvested at 24 hrs. Gene expression of IL-36 measured by RT-PCR (n=6). * p < 0.05 by unpaired t-test. Data points reflect individual values +/- SEM.

Supplemental Figure 6 - C57BL/6 mice were infected with 100 PFU of Influenza A PR/8/34 for 6 days, mice were then challenged with 108 CFU of MSSA for 24 hrs. Mice received MCC950 5mg/kg IT or PBS control on days 1, 3, and 5 post-influenza. Bacterial colony counts in lung homogenate (n=4). * p < 0.05 by unpaired t-test. Data points reflect individual values +/- SEM.