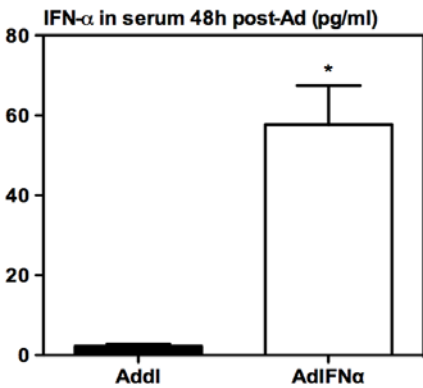
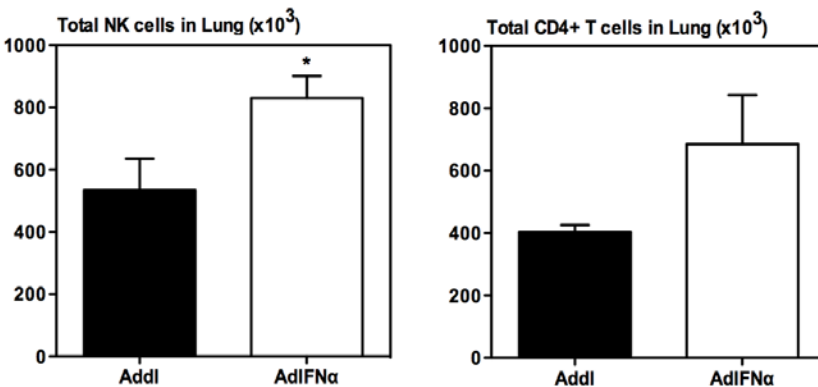


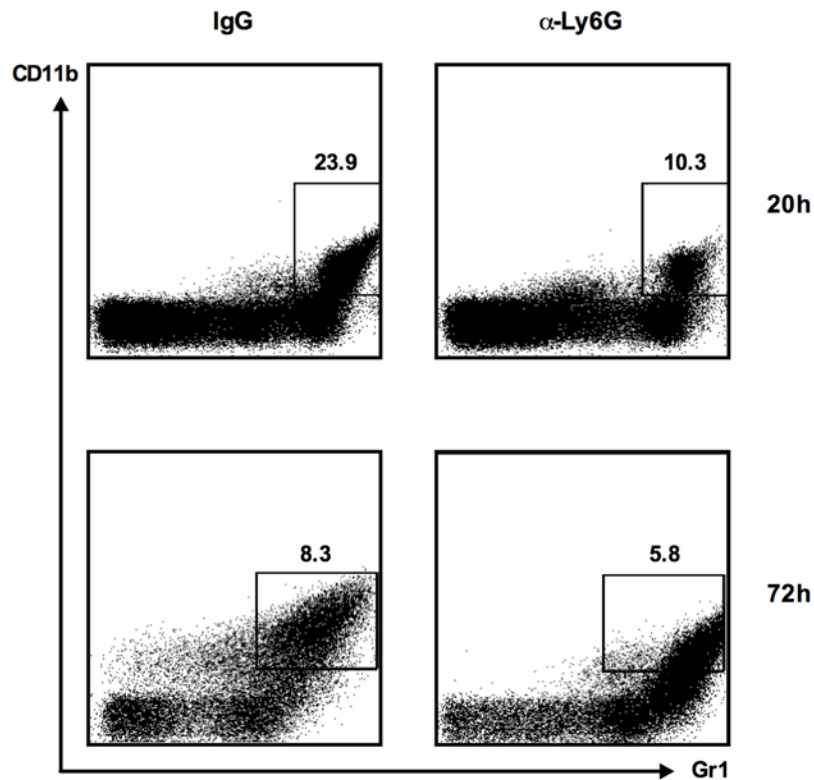
## Supplemental Figures



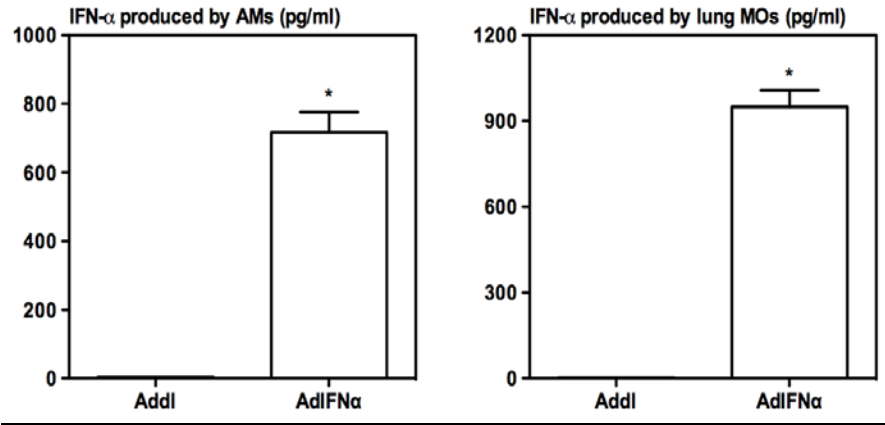
**Figure S1.** Level of IFN- $\alpha$  in the serum following AdIFN- $\alpha$  pre-treatment. Mice were infected with  $10^7$  pfu of AdIFN- $\alpha$  or Add1, and IFN- $\alpha$  was measured in the serum at 48h. Results are from one experiment, n=3/group. Data are expressed as Mean  $\pm$  SEM. \*, p < 0.05.



**Figure S2.** Transgenic expression of IFN- $\alpha$  leads to rapid cellular infiltration in the lungs of *S. pneumoniae* infected mice by 20h post-*Strep* infection. NK cell and CD4+ T cell numbers in the lung were assessed by flow cytometry in AdIFN- $\alpha$  or Add1 treated mice at 20h post-*Strep* infection. Results are from one experiment, n=5/group. \*, p < 0.05.



**Figure S3.** Neutrophil depletion during transgenic expression of IFN- $\alpha$  and pneumococcal infection. Female C57BL/6 mice were infected with  $10^7$  pfu AdIFN- $\alpha$  and 48h later with  $10^4$  cfu of *S. pneumoniae*. At 4h before *Strep.* infection 50  $\mu$ g of  $\alpha$ -Ly6G depleting antibody or IgG control were administered intranasally. FACS analysis was performed to determine the number of neutrophils in the lungs at 20h and 72h post-*Strep.* The dot plots show representative populations from the lung. Results are from one experiment, n=3/group.



**Figure S4.** Levels of IFN- $\alpha$  following *in vitro* infection of macrophages by AdIFN- $\alpha$ . Alveolar macrophages and purified lung macrophages (pooled CD11c+ and CD11b+) were infected with AdIFN- $\alpha$  or Addl for 3h, and the following day *S. pneumoniae* was added to the cells. Phagocytosis was allowed to occur for 1h and then bacterial killing was allowed for another 1h. IFN- $\alpha$  was measured in these supernatants. Data are expressed as Mean  $\pm$  SEM of triplicate wells/group, representative of three independent experiments. \*,  $p < 0.05$ .