Supplementary Figure Legends

Suppl. Figure 1 Adoptive transfer of CD8 effectors brings about a reduction in viral titer, a decrease in lung damage, and an increase in lung function. B6 mice were injected with 8 x10^6 *in vitro* generated Tc1 or Tc17 OT-1 effectors or left uninjected and challenged one day later with approximately 0.2LD_{50} PR8-OVA_I. Some mice were sacrificed at day 3 and 7 and the lungs assayed for viral titer (panel A), others were sacrificed at the time indicated, the BAL harvested and assayed for albumin (panel B) or Lactate dehydrogenase (LDH) (panel C). Yet other mice were placed in a Buxco Plethysmograph to measure the minute volume (panel D) and the respiratory rate (panel E). Similar results were seen in two experiments.

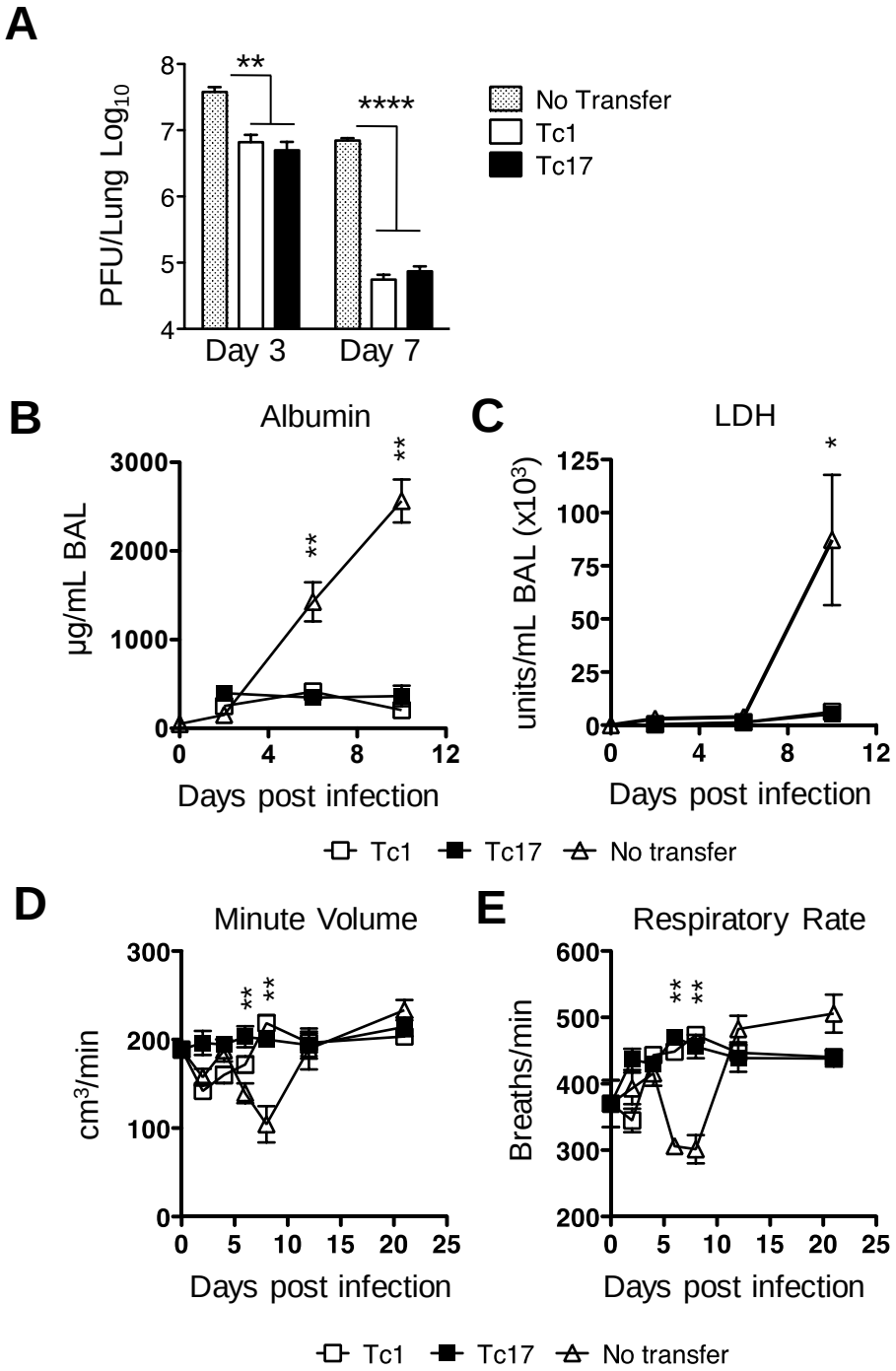
Suppl. Figure 2 Tc17 effectors lack FasL or TRAIL expression *in vitro*. Tc1, Tc2 and Tc17 effectors were prepared and RNA message levels for FasL and TRAIL (product of *tnfsf10*) determined as described in the Materials and Methods. Similar results were seen in two experiments.

Suppl. Figure 3 Adoptive transfer of Tc17 effectors enhances the development of B cell clusters in lung following viral challenge. 8 x10^6 *in vitro* generated Tc17 OT-1 effectors were injected into groups of 5 naïve B6 recipients which were challenged with 2LD_{50} PR8-OVA_I. Mice were sacrificed at day 4 and day 7. Lungs were perfused with 4% PFA and embedded in paraffin. 5 μm thick, formalin-fixed, paraffin lung sections were probed with antibodies against CD3 and B220. $CD3^+$ cells are stained in red and B220 lymphocytes in green (panel A). A combination of antibodies against proliferating cell nuclear antigen (PCNA) and B220 was used to detect proliferating lymphocytes ($PCNA^+B220^-$) and B cells ($PCNA^+B220^+$). Nuclear red stain labels proliferating cells and green membrane stain identifies B cells (panel B). Representative pictures from a single experiment are shown, 200x magnification.

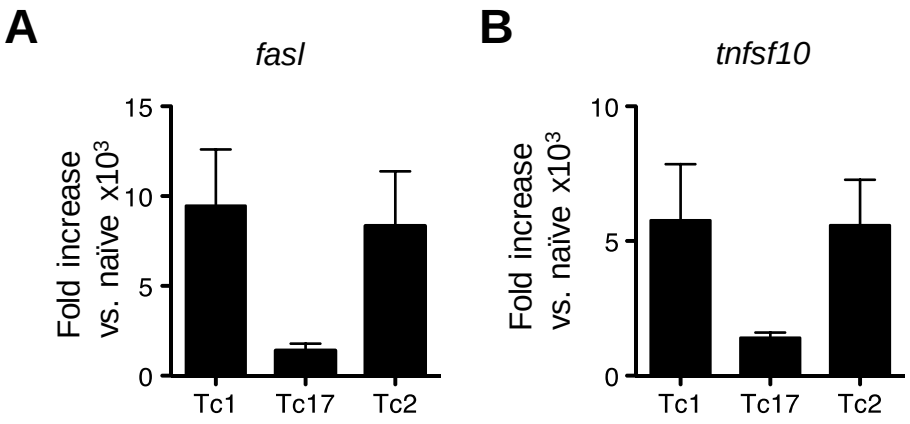
Suppl. Figure 4. Bystander protection is not accompanied by a lowering of viral load at either day 3 or 7.

As in Figure 8, 8 x10^6 *in vitro* generated Tc1 (panel A) or Tc17 OT-1 (panel B) effectors were each injected into three groups of mice. One was challenged with $1LD_{50}$ A/PR8 a second with $1LD_{50}$ PR8-OVA_I and the third with both viruses (n=4). In panel C, the third group of mice was injected with Tc1 effectors and challenged i.n. with 100 μg LPS free ova instead of A/PR8-OVA_I (n=5). Mice from each group were sacrificed at days 3 and 7 and the lungs removed for the assay of viral titer by RT-PCR.

Sup Figure 1

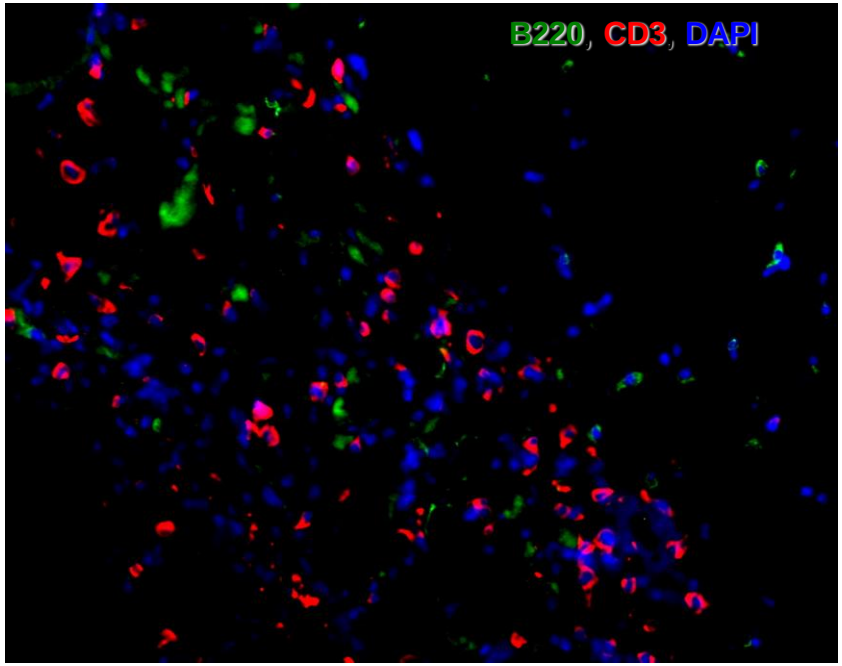

A
PFU/Lung Log10
No Transfer
Tc1
Tc17
Day 3
Day 7
B
Albumin
µg/mL BAL
Days post infection
C
LDH
units/mL BAL (x10³)
Days post infection
Tc1
Tc17
No transfer
D
Minute Volume
cm³/min
Days post infection
E
Respiratory Rate
Breaths/min
Days post infection
Tc1
Tc17
No transfer

Sup Figure 2


A
fasl
Fold increase vs. naïve x10³
15
10
5
0
Tc1
Tc17
Tc2
B
tnfsf10
Fold increase vs. naïve x10³
10
5
0
Tc1
Tc17
Tc2

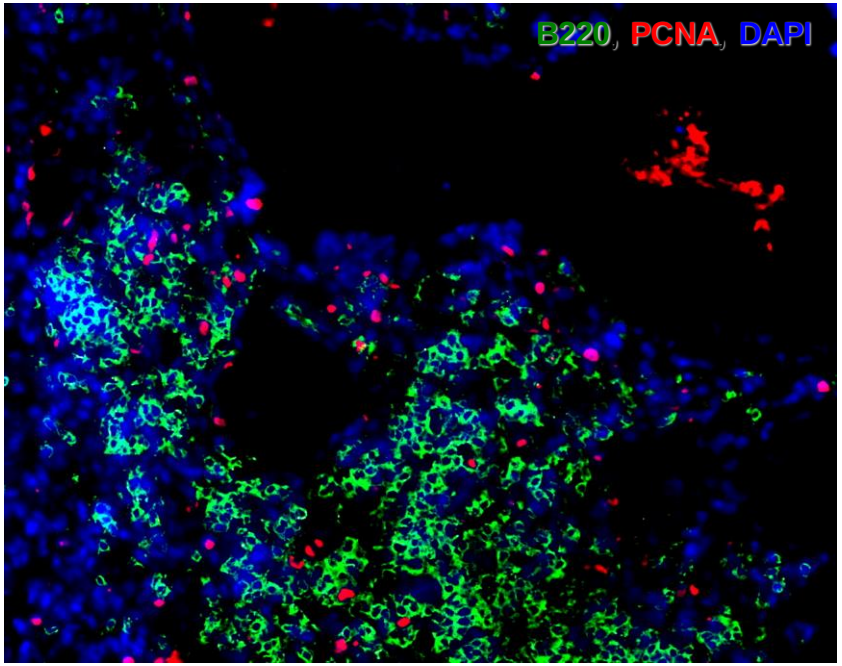
Sup Figure 3

A



Day 4 post Tc17 transfer and infection

B



Day 8 post Tc17 transfer and infection