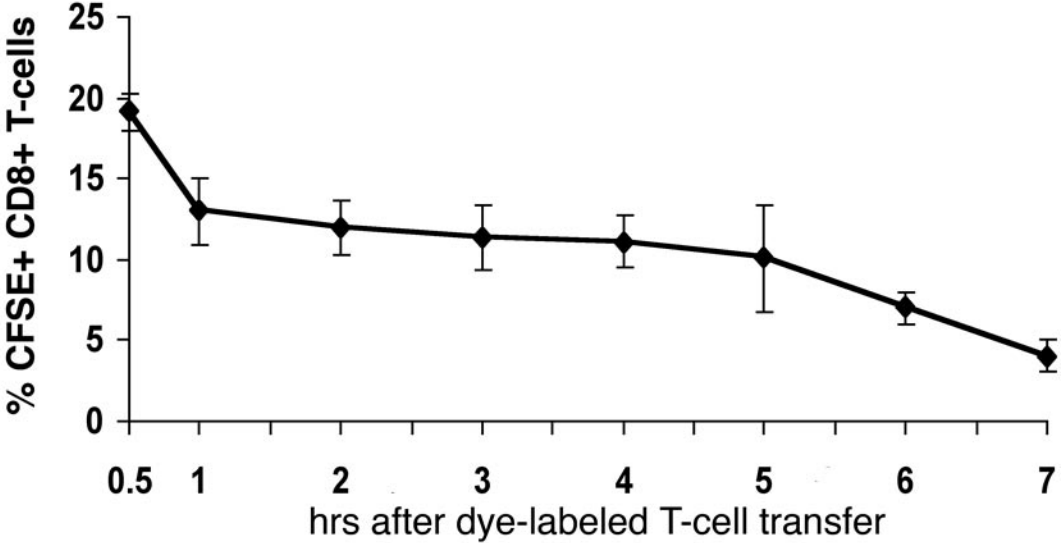
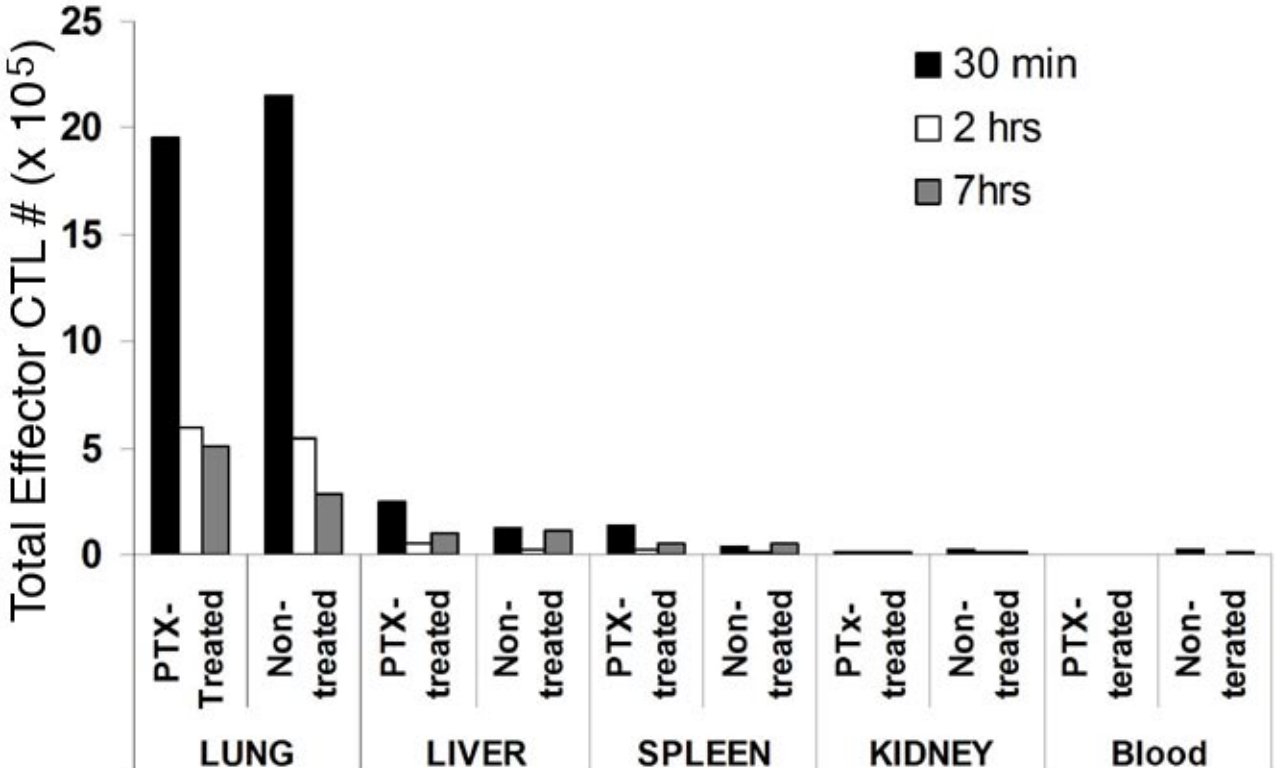
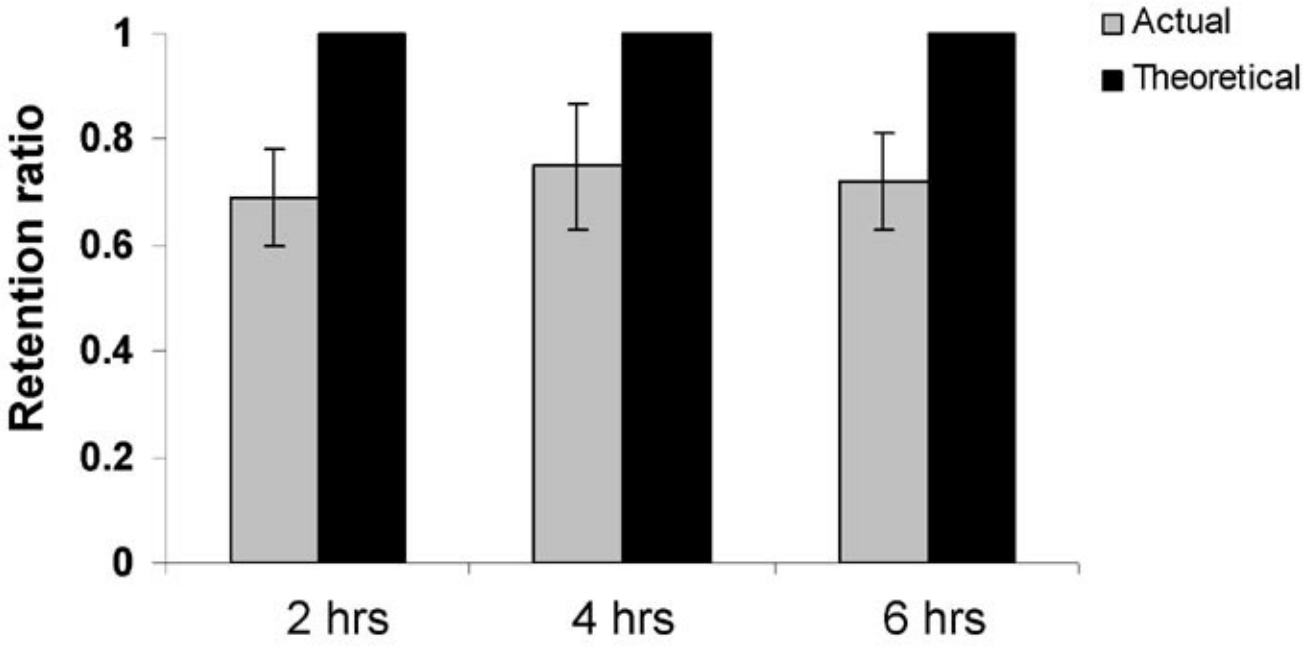
Supplemental Figure S1.



Supplemental Figure S2.

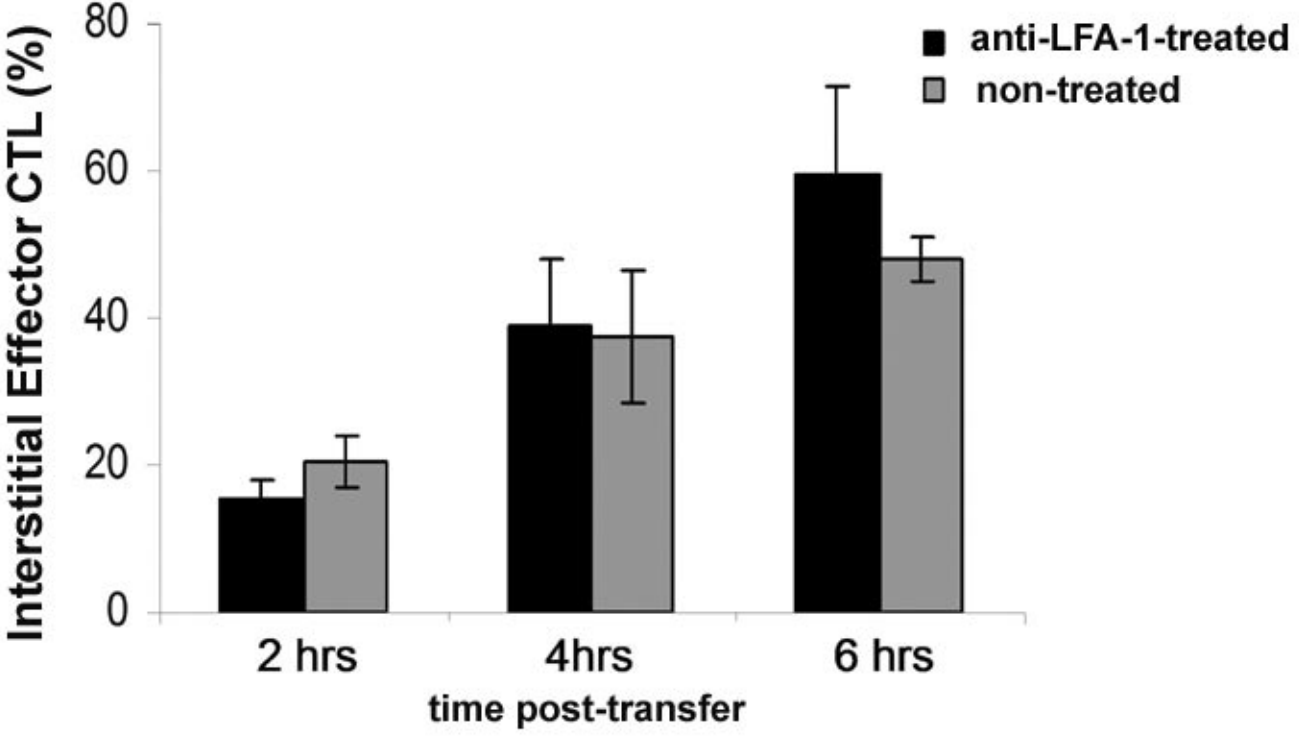


Supplemental Figure S3.

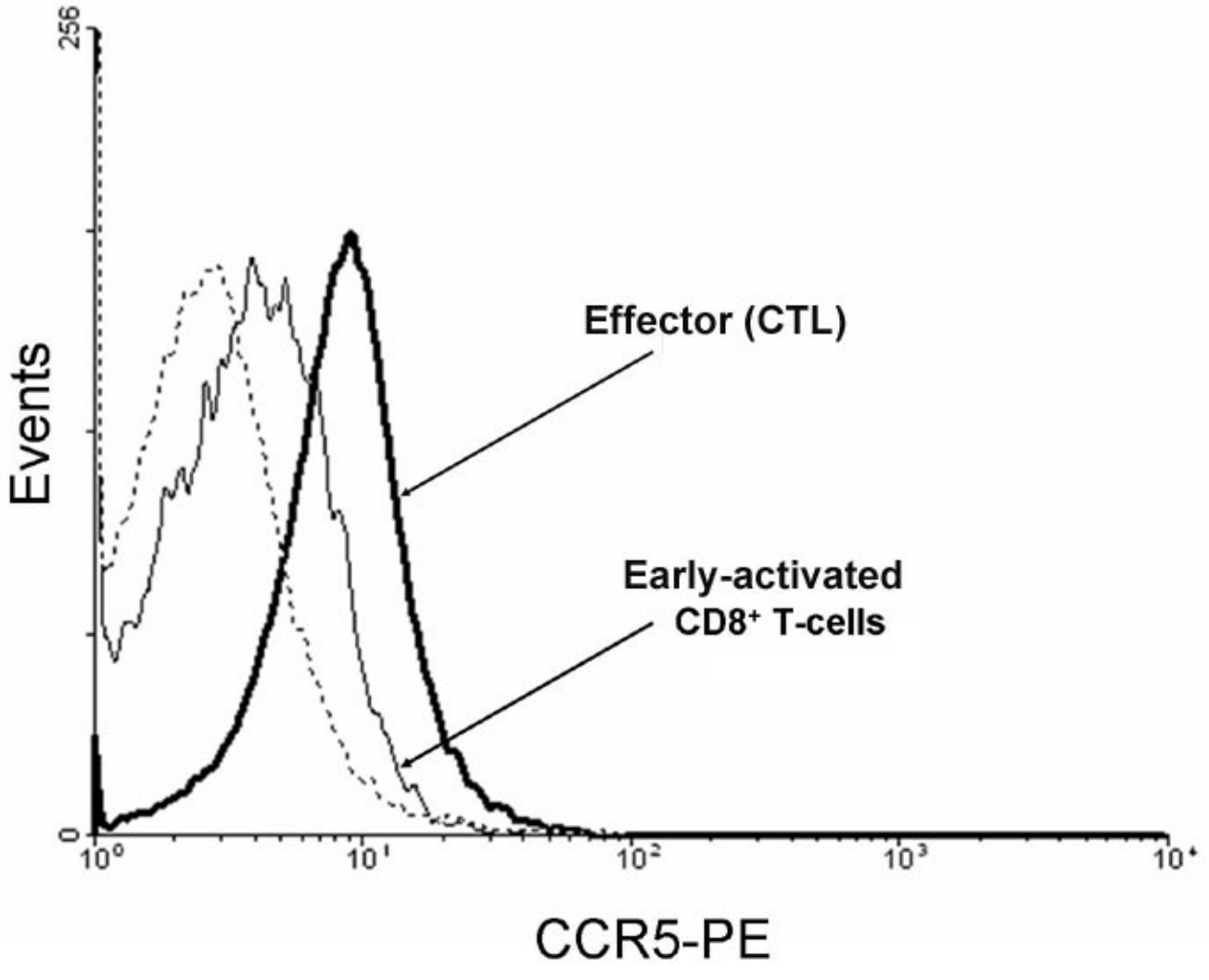


Retention Ratio		
0.69 ± 0.1*	0.75 ± 0.1*	0.73 ± 0.1*

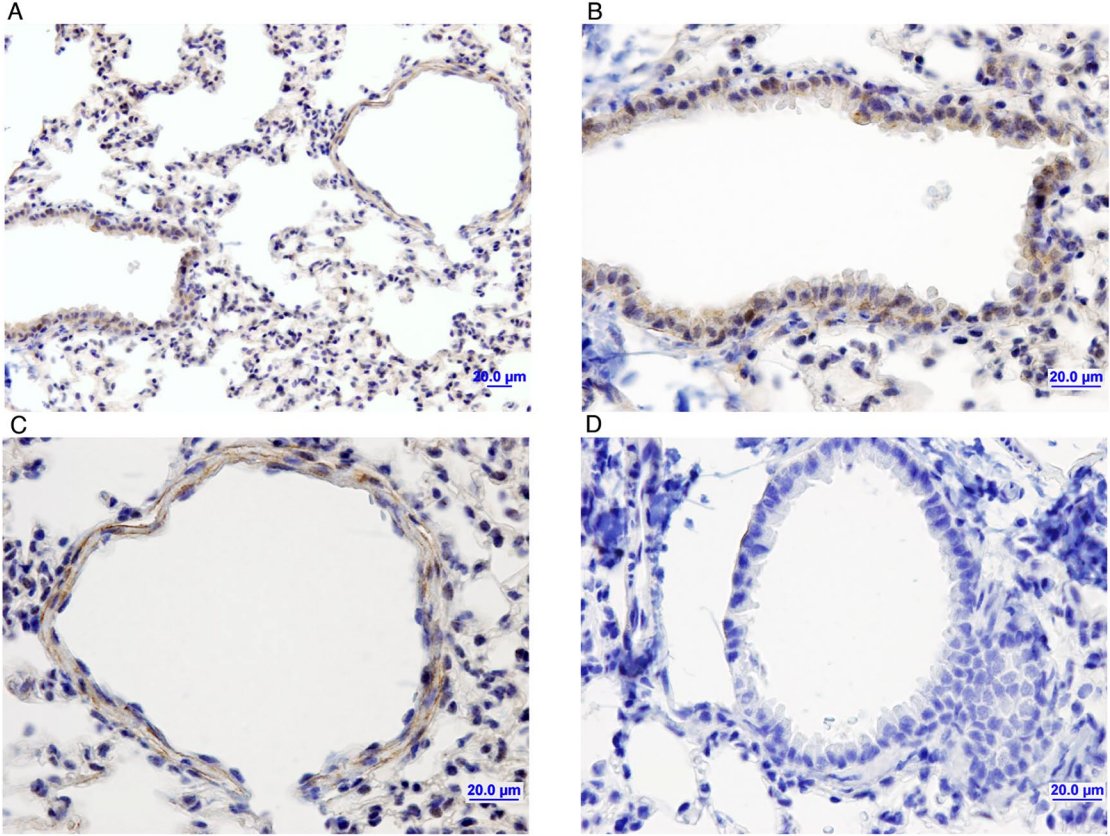
Supplemental Figure S4.



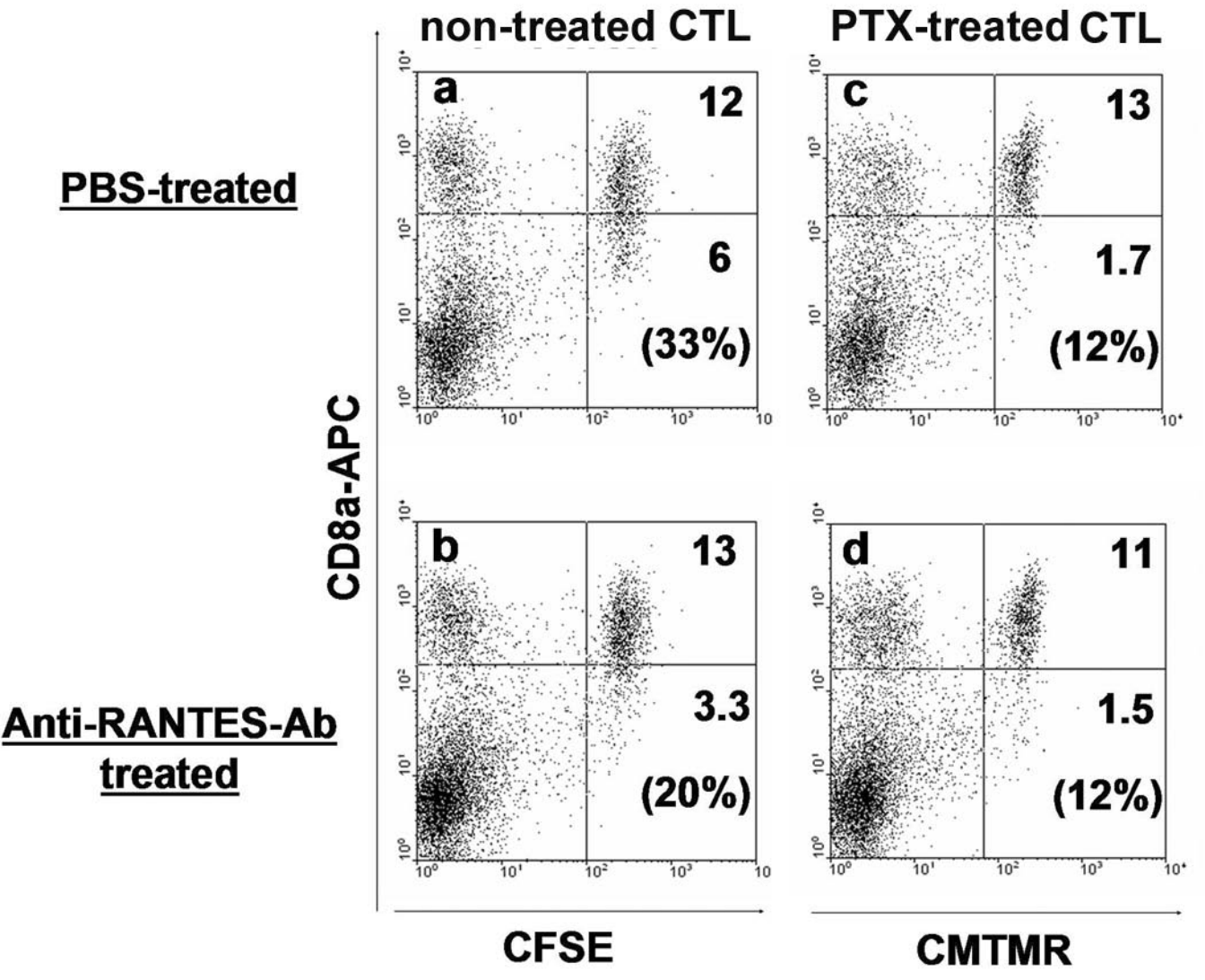
Supplemental Figure S5.



Supplemental Figure S6.



Supplemental Figure S7.



Supplemental materials

Supplemental Table I.

Expression of adhesion molecules, activation markers and cytolytic activity of naïve, early–activated and effector CD8$^+$ T-cells

Schematic Table indicates the patterns of expression of CD62L, LFA-1, VLA-4, CD44, and CD69 by naïve, early-activated and effector CTL (data is summarized from flow cytometry results), and cytolytic activity of these populations obtained in vivo and in vitro conditions.

Supplemental Figure S1.

Kinetics of CD8$^+$ T-cell retention within pulmonary compartment after adoptive transfer

Effector CTL were labeled with CFSE and injected i.v. into recipient mice. Lungs were harvested at different time points, and the percentages of CFSE-labeled cells remaining within the lungs from individual recipient were determined by flow cytometry. Results represent the mean $\pm$ SEM from 3 to 12 recipient mice.

Supplemental Figure S2.

Recruitment of adoptively transfer effector CD8$^+$ T-cells to different tissues of normal/non-inflamed recipient mice

PTX-treated or non-treated effector CD8$^+$ T-cells were labeled with CFSE or CMTMR, mixed equally and injected i.v. into recipient mice. At indicated time points,

lungs, spleen, liver, kidney, bone marrow, blood were collected and analyzed for the presence of labeled cells in each organ. The total number of PTX-treated or non-treated effector $CD8^+$ T-cells is shown. Results are representative from 3 recipient mice for each time point.

Supplemental Figure S3 and S4.

Effect of anti-LFA-1 Ab treatment on the retention of effector $CD8^+$ T-cells within the lungs and transmigration into the interstitium

Effector CTL were incubated with anti-LFA-1 mAb (or left untreated), then the cells were labeled with CFSE and CMTMR, respectively, mixed equally and injected i.v. into recipient mice. Anti CD8α-APC mAb was injected at different time points and the lungs were harvested 10 min later. (S3) The ratio of anti-LFA-1-treated activated $CD8^+$ T-cells to non-treated $CD8^+$ T-cells is shown as retention ratio (grey bars, $*p<0.05$, n=6). A ratio of 1 indicates equal homing (black bars). (S4) Interstitial $CD8^+$ T-cells pretreated with anti-LFA-1 Ab (black bars) and non-treated effector CTL (grey bars) are shown as a percentage of all CLT in the lung (mean ± SEM, n=6).

Supplemental Figure S5.

CCR5 expression on early-activated $CD8^+$ T-cells and effector CTL

Early-activated $CD8^+$ T-cells and effector CTL were stained with anti-CD8 mAb and PE-conjugated Ab against CCR5 or isotype controls. Chemokine expression levels on gated effector CTL (bold line), early-activated activated $CD8^+$ T-cells (thin line), and isotype control staining (dot line) are shown below.

Supplemental Figure S6.

RANTES expression within the normal/non-inflamed lungs

Lungs from normal/non-inflamed C57BL/6 mice were perfused by cardiac puncture with 40ml phosphate-buffer saline, containing 2% heparin and then fixed with 4% PFA. Paraffin-embedded sections were cut (5μm) and tissues were stained with anti-RANTES (a-c) or isotype control antibodies (d) with avidin-biotin technology. RANTES was found to be expressed by epithelial cells (a, b) and displayed at a low level on vascular endothelium (a, c) in the non-inflamed pulmonary tissues.

Supplemental Figure S7.

Effect of anti-RANTES antibodies treatment on the ability of activated effector $CD8^+$ T-cells to transmigrate into the pulmonary interstitium

Recipient mice were pretreated with polyclonal goat anti-RANTES Ab or PBS 1 hr prior adoptive transfer. PTX-treated and non-treated effector CTL were labeled with CMTMR and CSFE, respectively, and then injected into recipient mice. After 4 hrs, anti-$CD8^+$-APC Ab was injected i.v. and 10 min later lungs were harvested. The percentages of emigrated T-cells into the vascular ($CFSE^+$/CD8-APC^+, $CMTMR^+$/CD8-APC^+) and into the interstitial ($CFSE^+$/CD8-APC^-, $CMTMR^+$/CD8-APC^-) compartments from individual mouse are shown. The percentage of emigrated interstitial labeled cells is shown in parentheses.