

Supplemental Figure Legends

Supplemental Figure 1. Balb/c lung allografts demonstrate little inflammation with low ISHLT A grade one week after transplantation into CSB-treated B6 μ Ig^{-/-} mice deficient in B cells. ISHLT A grade was compared by Mantel-Haenszel Chi-Square test to costimulatory blockade-treated Balb/c→B6 transplants described in Figure 2A ($p=.365$). Histology (H+E staining) represents 200X magnification.

Supplemental Figure 2. No differences in proportion of CD4⁺ T cells expressing Foxp3 are evident in the spleens of transplant recipients (comparison performed by unpaired t-test).

Supplemental Figure 3. IFN γ ^{-/-} B6 mice do not accept Balb/c lung allografts despite costimulatory blockade. ISHLT A grade was compared by Mantel-Haenszel Chi-Square test to costimulatory blockade-treated Balb/c→B6 transplants described in Figure 2A with $p=.0006$. Histology (H+E staining) represents 200X magnification.

Supplemental Figure 4. Proliferating CD8⁺CD62L^{hi}CD44^{hi} central memory T cells, as determined by diminution of CFSE of adoptively transferred CD45.1⁺ congenic T cells, are detectable in lung allografts of costimulatory blockade-treated graft recipients. Increased proliferation of this cell population, however, is detectable in the absence of costimulatory blockade. Little proliferation is evident in either the spleen or draining mediastinal lymph nodes in immunosuppressed or non-immunosuppressed lung graft recipients. Data representative of three separate experiments analyzed by flow cytometry five days after adoptive transfer.

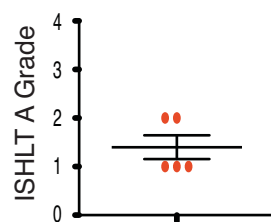
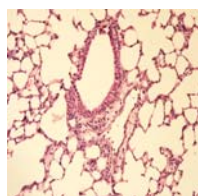
Supplemental Figure 5. Despite the differences in lung allograft infiltration similar numbers of *in vitro* generated B6 CD45.1⁺ anti-Balb/c and anti-CBA CD8⁺ central memory T cells localize to the spleen after adoptive transfer (p=.92 by unpaired t-test).

Supplemental Figure 6. B6 CCR7-deficient recipients reject Balb/c lung allografts despite costimulatory blockade. Arrow points to perivascular inflammation. ISHLT A grade was compared by Mantel-Haenszel Chi-Square test to costimulatory blockade-treated Balb/c→B6 transplants described in Figure 2A with p=.00054. Histology (H+E staining) represents 200X magnification.

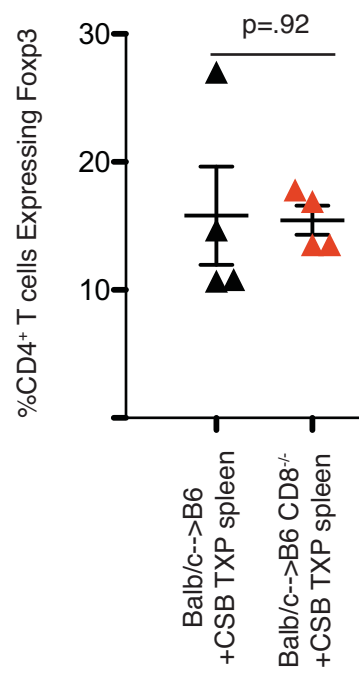
Supplemental Video 1. Time lapse two-photon intravital imaging of CSB-treated Balb/c → B6 CD11c-EYFP lung allograft four days after transplantation. Cyan fluorescent protein-expressing (CFP) wild-type CD8⁺ T cell is seen adhering to a CD11c⁺ cell with dendritic cell morphology for the duration of the imaging period. Several CMTMR-labeled CCR7^{-/-} CD8⁺ T cells are motile and do not establish durable contact with CD11c⁺ cells.

Supplemental Figure 1

Balb/c-->B6mu Ig^{-/-}

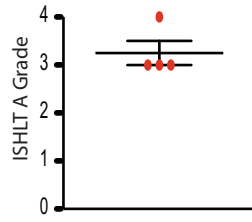
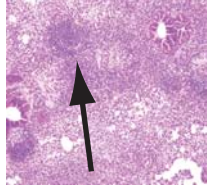
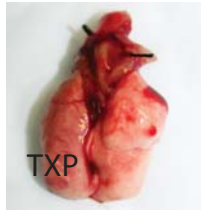


Supplemental Figure 2

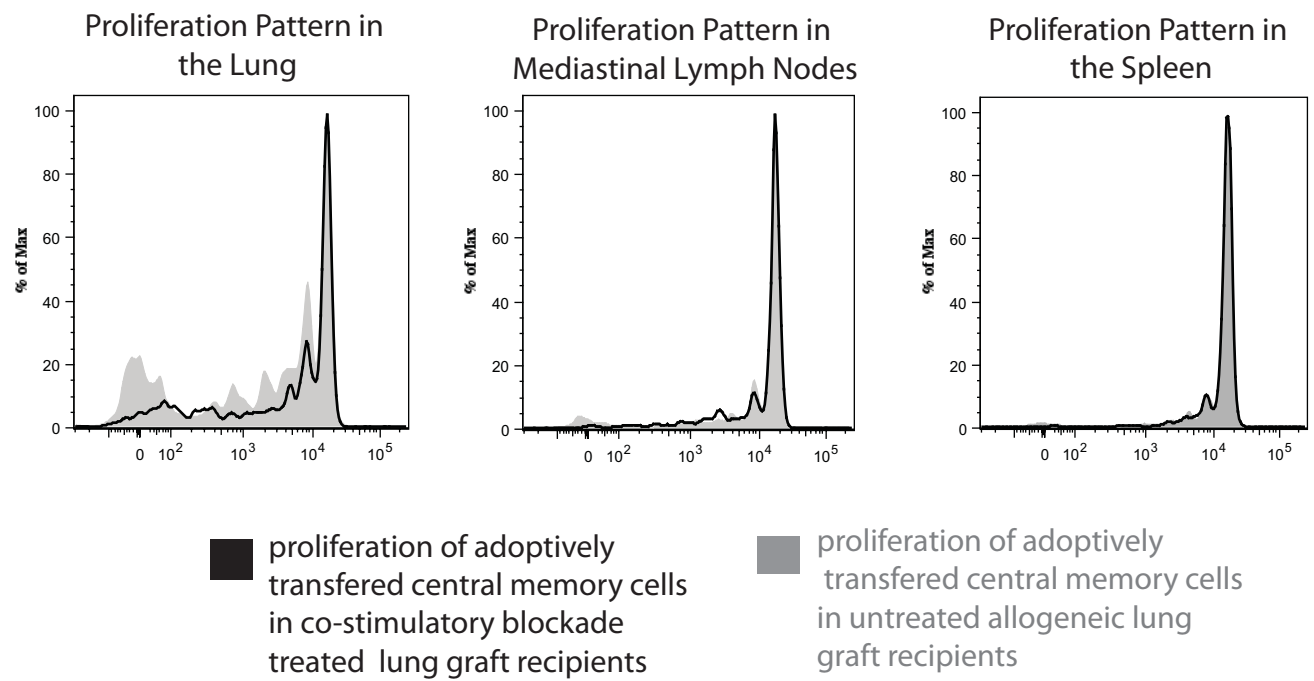


Supplemental Figure 3

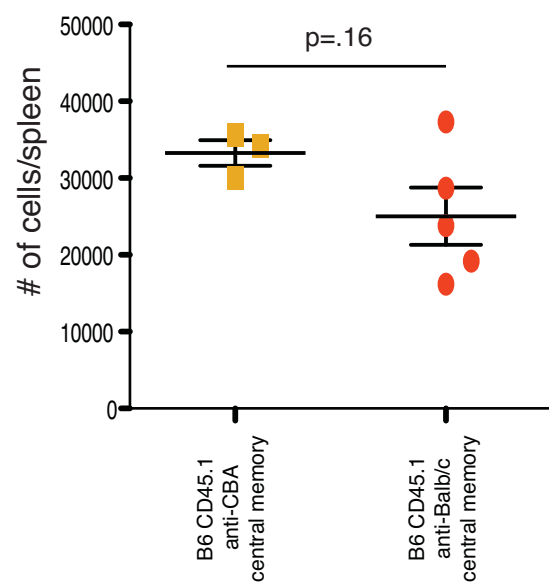
Balb/c-->B6^{IFN- γ -/-}
+CSB



Supplemental Figure 4



Supplemental Figure 5



Supplemental Figure 6

Balb/c-->B6 CCR7^{-/-}
+CSB

