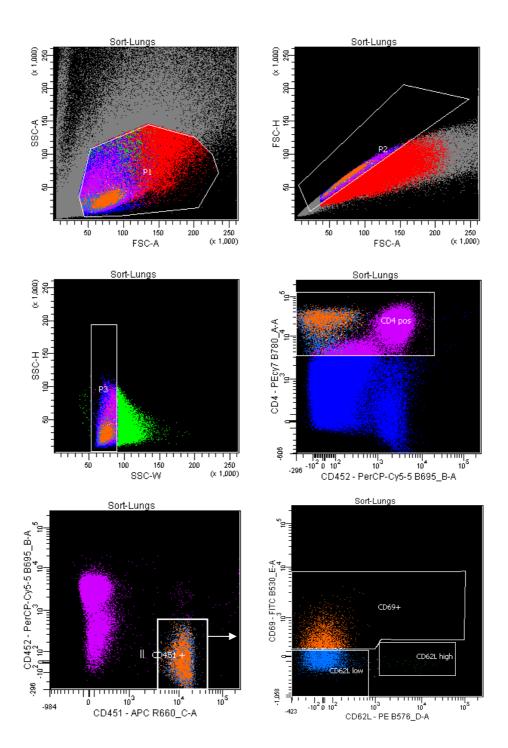
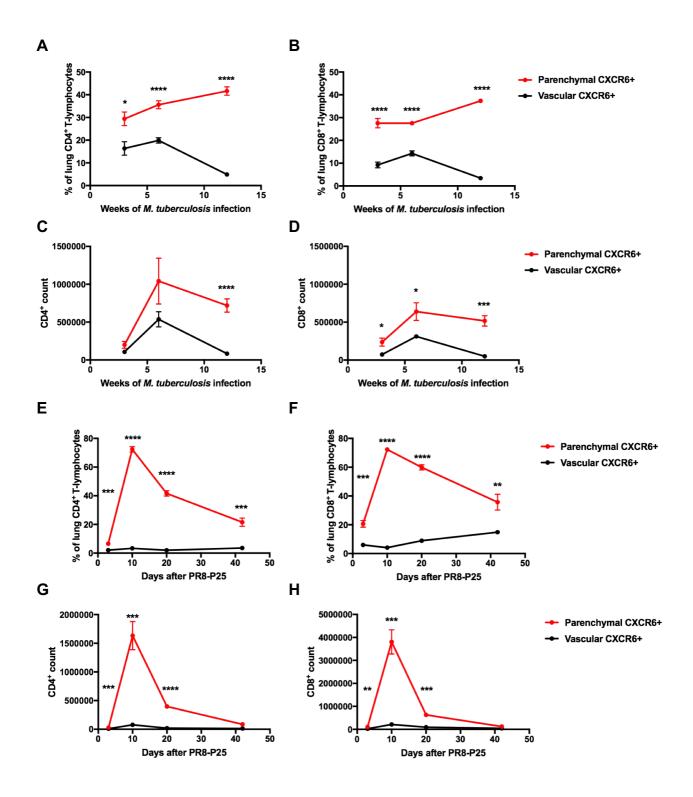


**Supplementary Figure 1. Gating strategy for sorting of memory P25-specific T-lymphocytes from the spleen.** 6 weeks following transfer of P25-specific CD45.1<sup>+</sup> CD4<sup>+</sup> T-lymphocytes (naïve) and intranasal infection with PR8-P25, transferred cells were purified from the spleens by sorting according to memory phenotype: spleen effector memory (S-EM, CD69-CD62L<sup>-</sup>) or spleen central memory (S-CM, CD69-CD62L<sup>+</sup>). Effector P25 cells (S-eff) were sorted at 11 days p.i (CD4<sup>+</sup> CD45.1<sup>+</sup>).



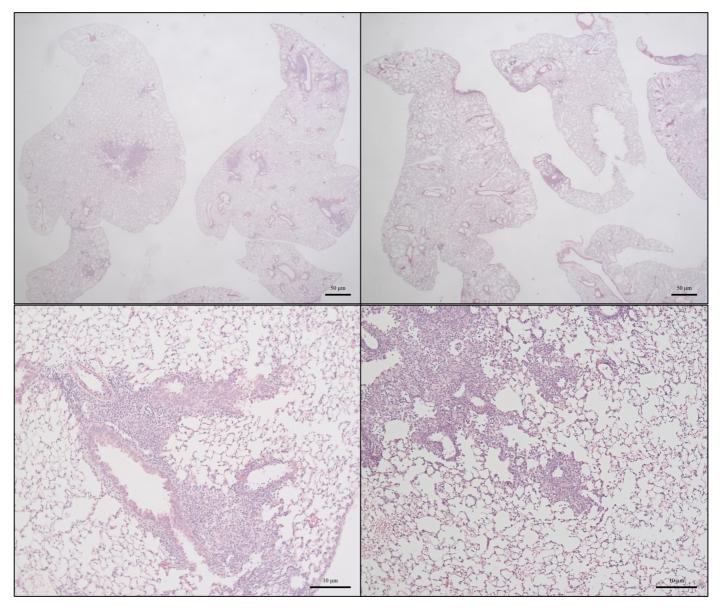
**Supplementary Figure 2.** Gating strategy for sorting of memory P25-specific T-lymphocytes from the lungs. 6 weeks following transfer of P25-specific CD45.1<sup>+</sup> CD4<sup>+</sup> T-lymphocytes (naïve) and intranasal infection with PR8-P25, transferred cells were purified from the lungs by sorting according to memory phenotype: lung effector memory (L-EM, CD69-CD62L-) or lung resident memory (L-RM, CD69+).



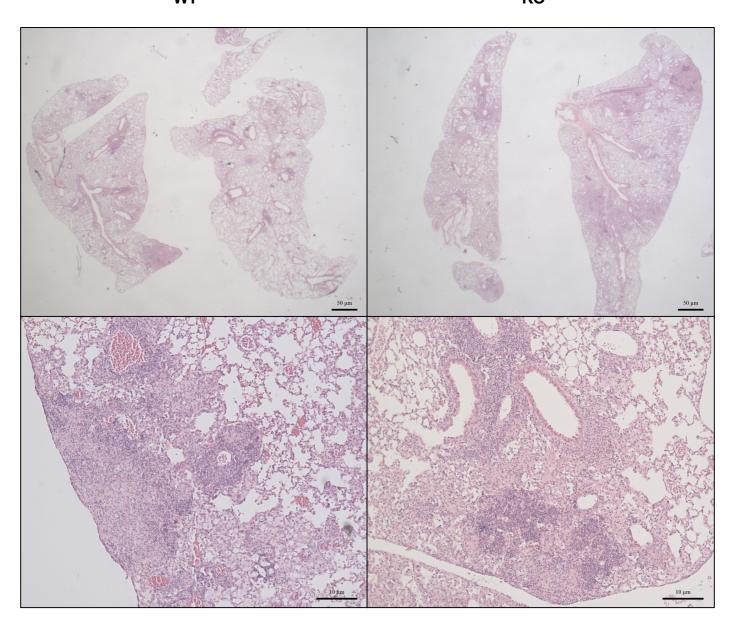
**Supplementary Figure 3.** Kinetics of lung CXCR6+ CD4+ and CD8+ T-lymphocytes after pulmonary infection. CXCR6+ CD4+ and CD8+ T-lymphocytes were quantitated in CXCR6-reporter mice in the lung parenchyma (red) or vasculature (black). Frequency of CXCR6+ (A) CD4+ and (B) CD8+ T-lymphocytes, or number of CXCR6+ (C) CD4+ and (D) CD8+ T-lymphocytes at 3, 6 or 12 weeks after *M. tuberculosis* infection (n=5). Frequency of CXCR6+ (E) CD4+ and (F) CD8+ T-lymphocytes, or number of CXCR6+ (G) CD4+ and (H) CD8+ T-lymphocytes at 3, 10, 20 or 42 days after PR8-P25 infection (n=4-5). Data are the means ± SEM. The statistical significance of differences between parenchymal and vascular cells at each time point were analysed by multiple t tests with correction for multiple comparisons using the Holm-Sidak method (\*p<0.05, \*\*p<0.01, \*\*\*p<0.001, \*\*\*\*p<0.0001).

A 3 weeks

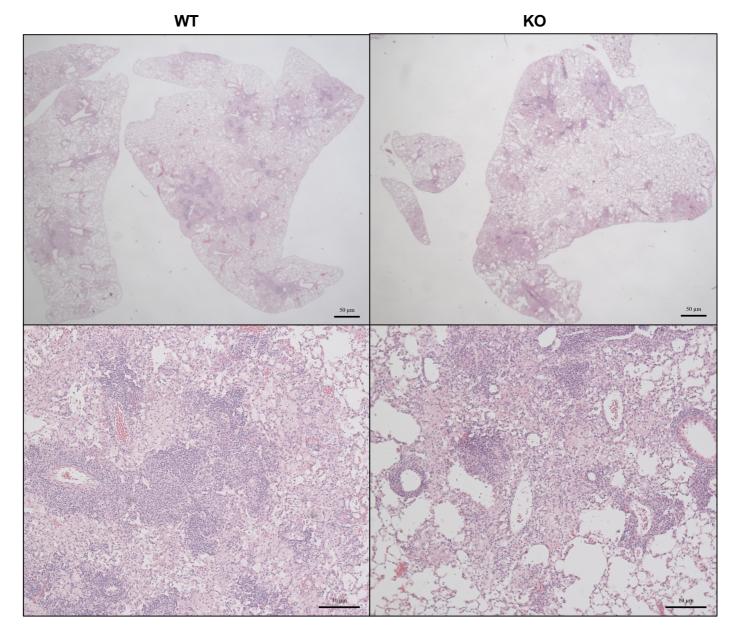
WT KO



B 6 weeks
WT KO

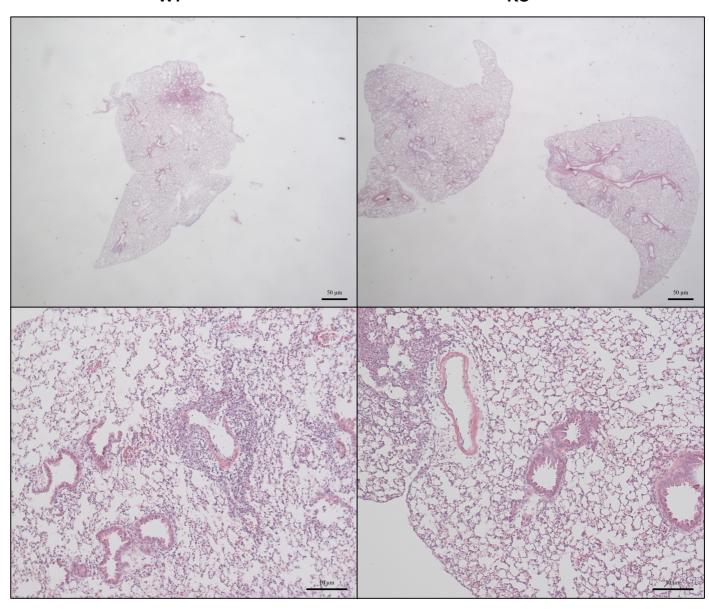


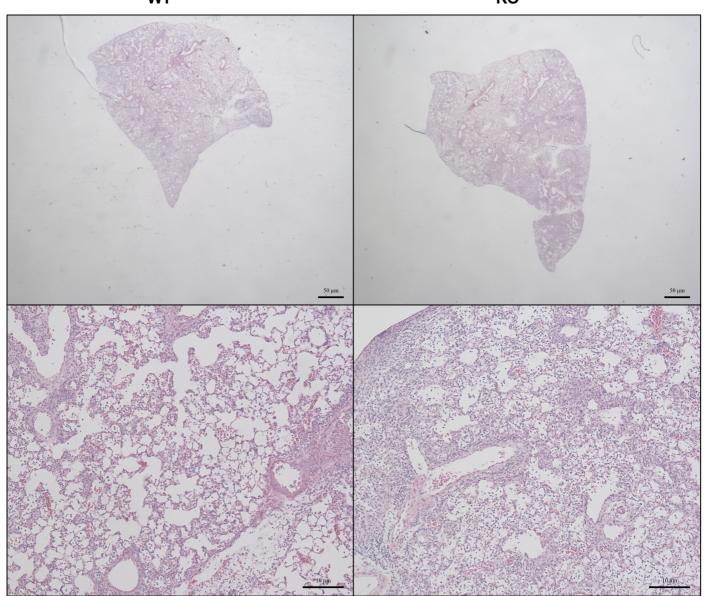
C 12 weeks



Supplementary Figure 4. Lung histology of CXCR6<sup>WT</sup> and CXCR6<sup>KO</sup> mice after *M. tuberculosis* infection. CXCR6<sup>WT</sup> and CXCR6<sup>KO</sup> mice (n=5) were infected with *M. tuberculosis* (100 CFU), and hematoxylin and eosin stained lung sections were examined at (A) 3 (B) 6 and (C) 12-weeks post infection. Representative images at 12.5x (top row, 500  $\mu$ m scale bar) and 100x (bottom row, 100  $\mu$ m scale bar) magnification are shown.

A Day 3 WT KO





Supplementary Figure 5. Lung histology of CXCR6<sup>WT</sup> and CXCR6<sup>KO</sup> mice after PR8-P25 infection. CXCR6<sup>WT</sup> and CXCR6<sup>KO</sup> mice (n=3-5) were infected with PR8-P25 (20 PFU), and hematoxylin and eosin stained lung sections were examined at (A) 3 and (B) 7 days post infection. Representative images at 12.5x (top row,  $500 \mu m$  scale bar) and 100x (bottom row,  $100 \mu m$  scale bar) magnification are shown.