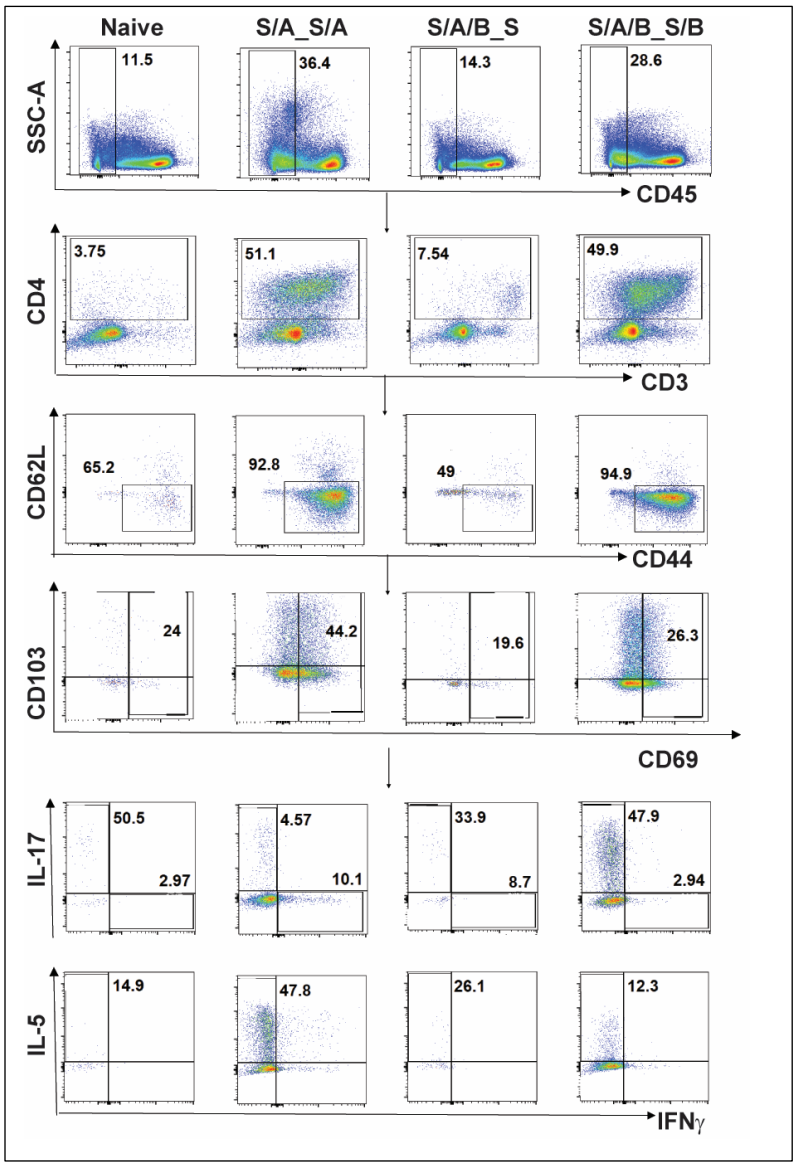

Figure S1: Gating strategy to identify resident and circulating memory T cells in the lungs. Mice were injected with CD45 PE antibody 10 minutes before sac to distinguish between resident (CD45-) and circulating (CD45+) T cells. PMA/Ionomycin stimulated cells stained with surface markers to identify antigen experienced CD4+CD44+CD62L-CD69+ CD4+ cells were fixed, pearmeabilized and followed by intracellular cytokine staining (ICS) to analyze the production of IFNγ, IL-5 and IL-17. Shown is the sequential gating strategy to identify lymphocytes by forward and side scatter, single cells, live cells, CD45- cells, CD3+CD4+ cells, CD44+CD62L- cells and CD69+ cells. The proportion of IFNγ+, IL-17+ and IL-5+ cells within the CD3+CD4+CD45-CD44+CD62L-CD69+ fraction was determined. The same sequential gating strategy was used to identify CD45+ cells. A similar strategy was employed to identify antigen-specific cells in Figure 2.

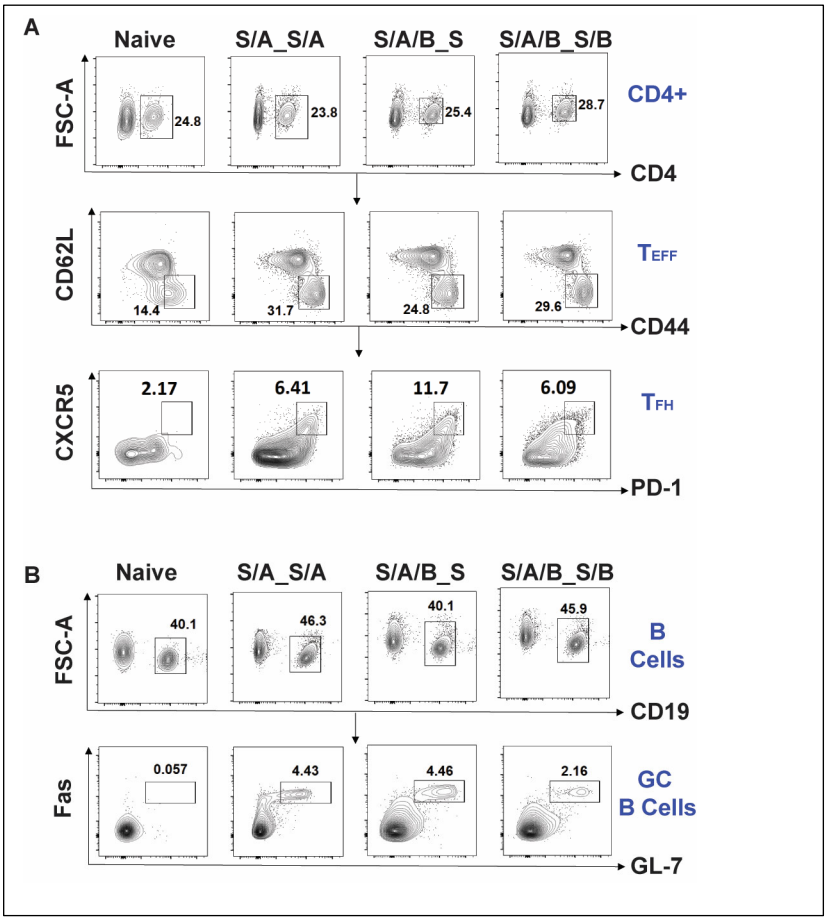

Figure S2: Gating strategy to identify PD-1^{hi} CXCR5^{hi} Tfh cells and Fas+GL7+ GC B cells in the draining mediastinal lymph node.

(A) Dissociated lymph node cells stained with antibodies against CD4, CD44, CD62L, PD-1 and CXCR5 to identify CD44^{+}PD-1^{high} CXCR5^{high} T_{FH} cells. (B) Lymph node cells stained with antibodies against GC B cells (Fas+GL7+).

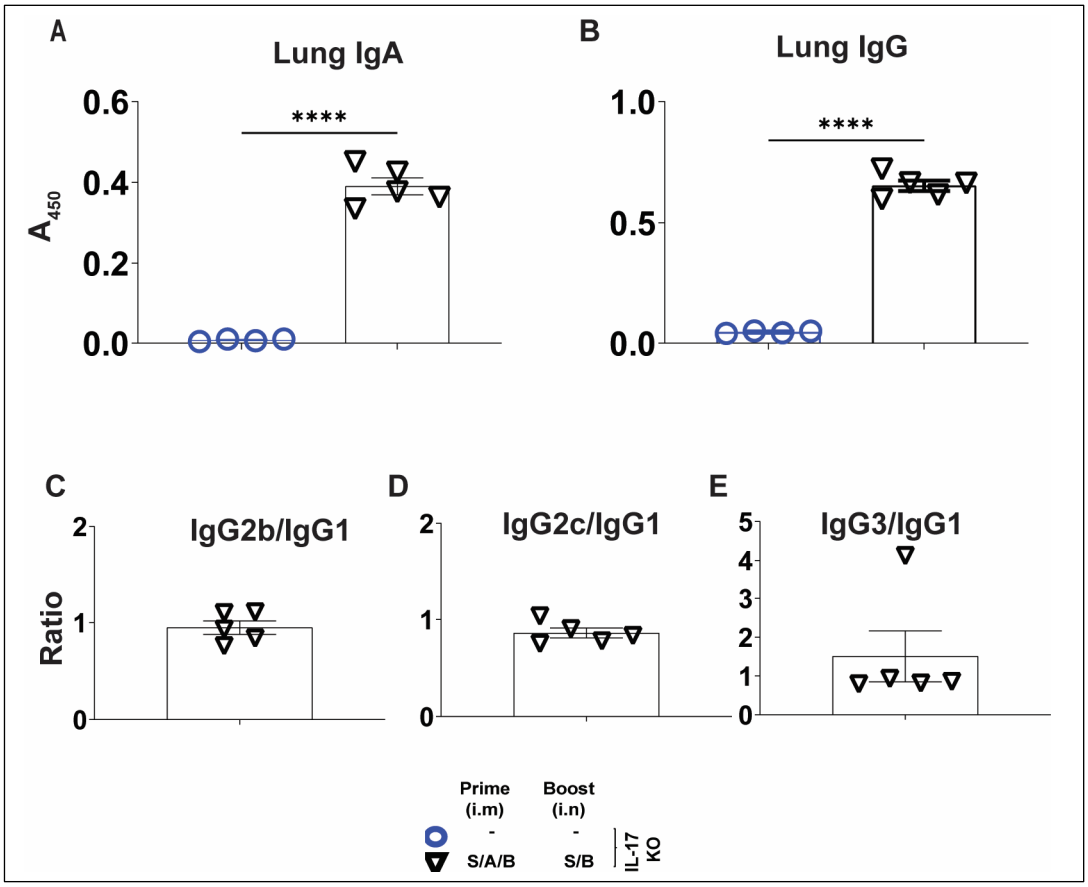

Figure S3: Lung antibodies and isotypes in IL-17 KO mice immunized with SAB/SB vaccine

S-specific antibodies were evaluated by ELISA. (A) Lung IgA (B) lung IgG. Ratio of (C) IgG2b/IgG1, (D) IgG2c/IgG1, and (E) IgG3/IgG1in lungs homogenates.