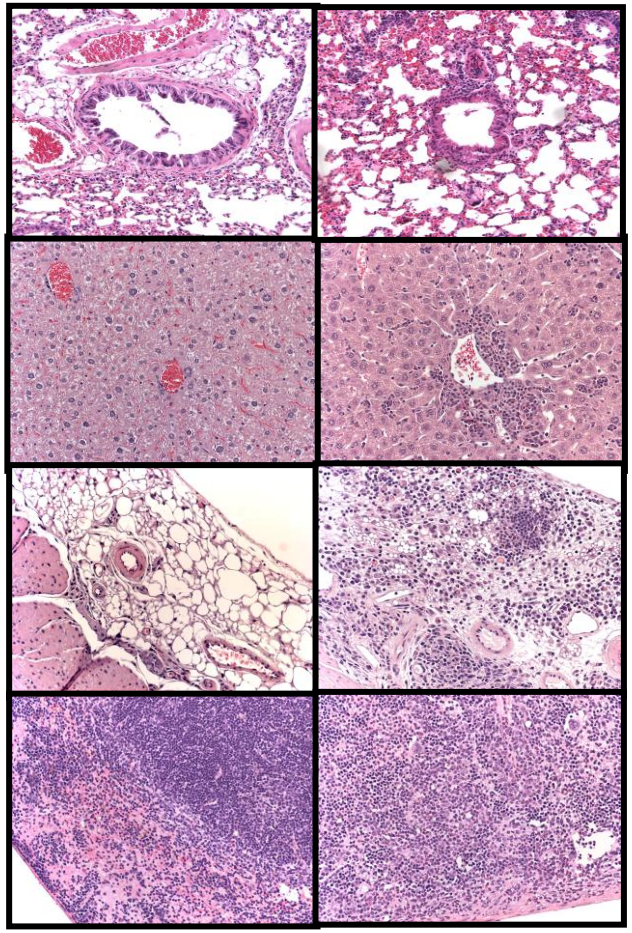
lung

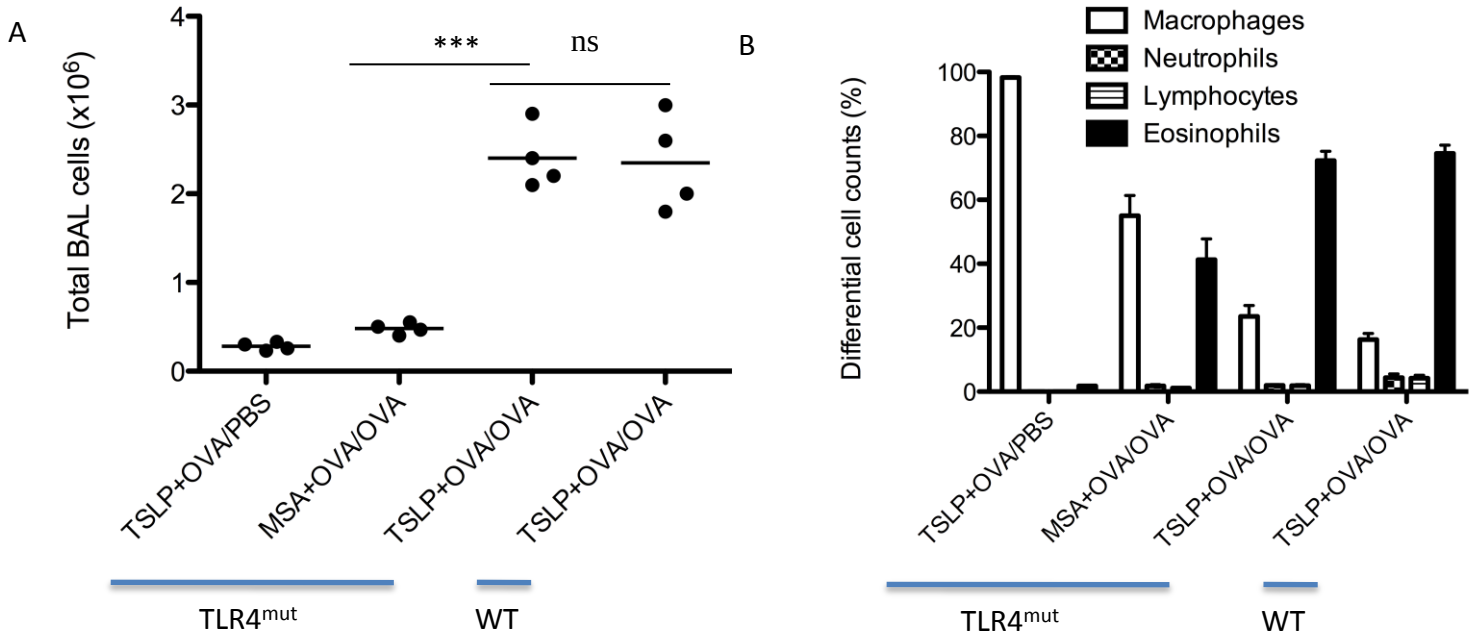
liver

stomach

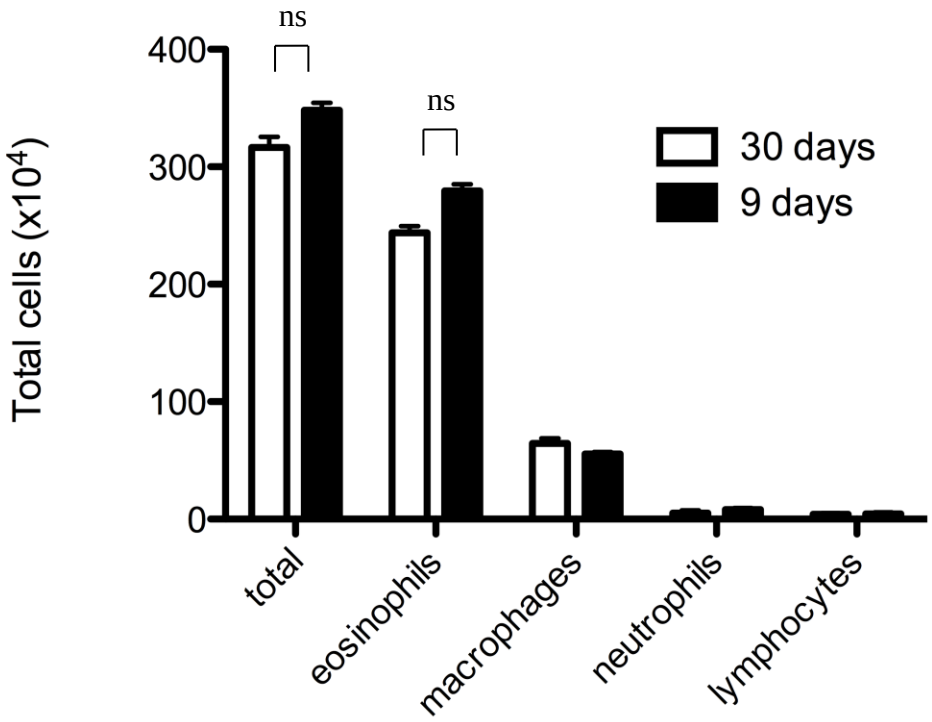
spleen



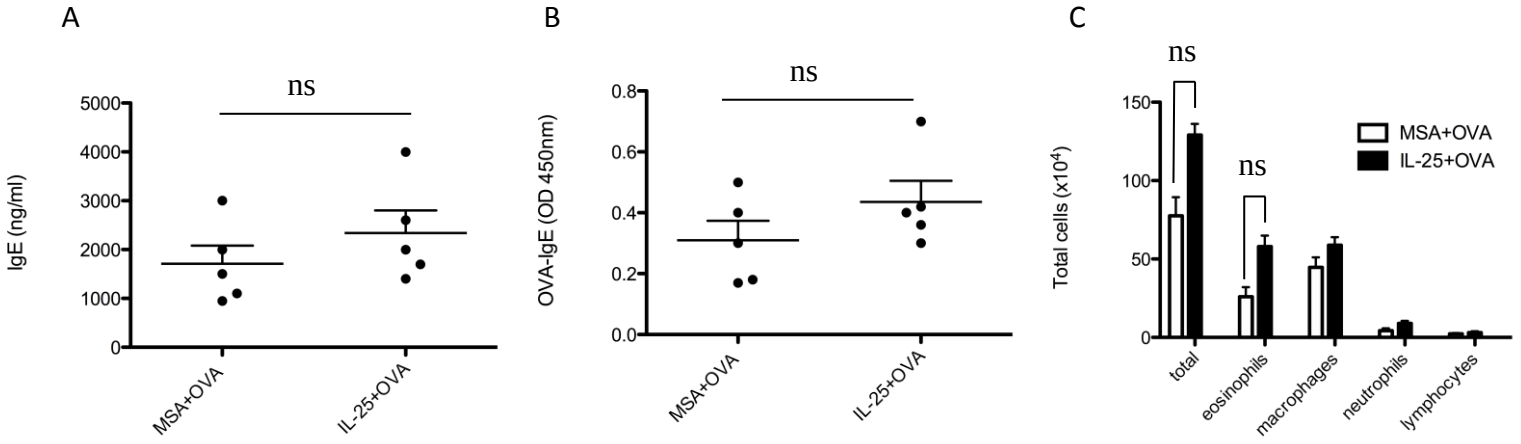
Supplemental Figure 1. Histological observations of lung, liver, stomach and spleen in normal littermate control (NLC, left) and K5-TSLP mice (right). Paraffin-embedded sections from a K5-TSLP mouse and an NLC were stained with H&E (20x).



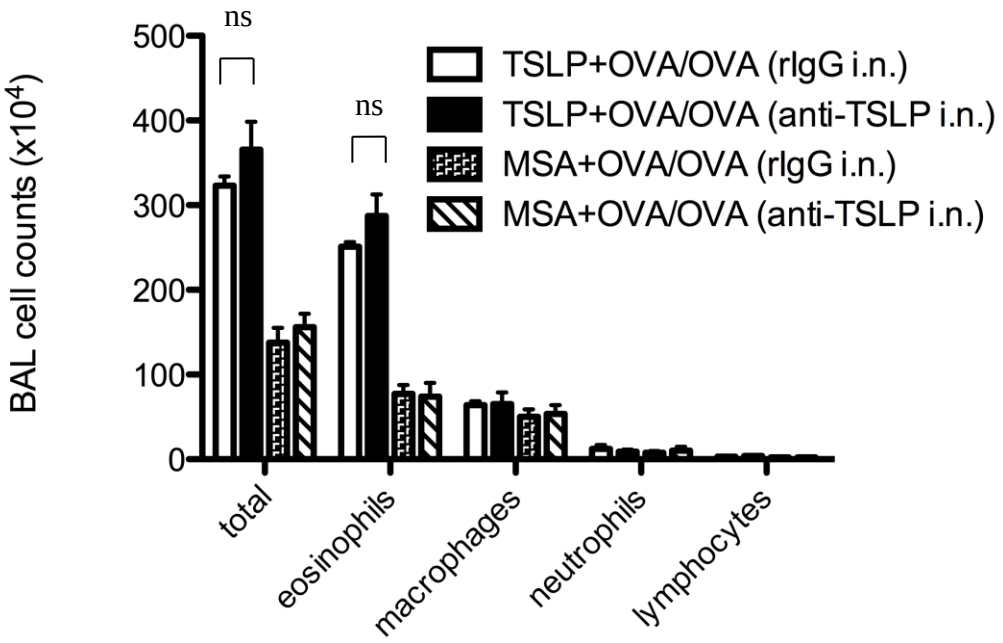
Supplemental Figure 2. Mice sensitized with IL-25+OVA and challenged with OVA do not develop airway inflammation. Mice received injections of 5 µg IL-25 (gift of Amgen Inc.) and OVA and rested for 9 days and challenged with OVA on 4 consecutive days. Total serum IgE (A) and OVA-specific IgE (B) on D25 (n = 5). (C) Cell counts in the BAL fluid. The significance between two groups was determined by two-tailed Student's t test.



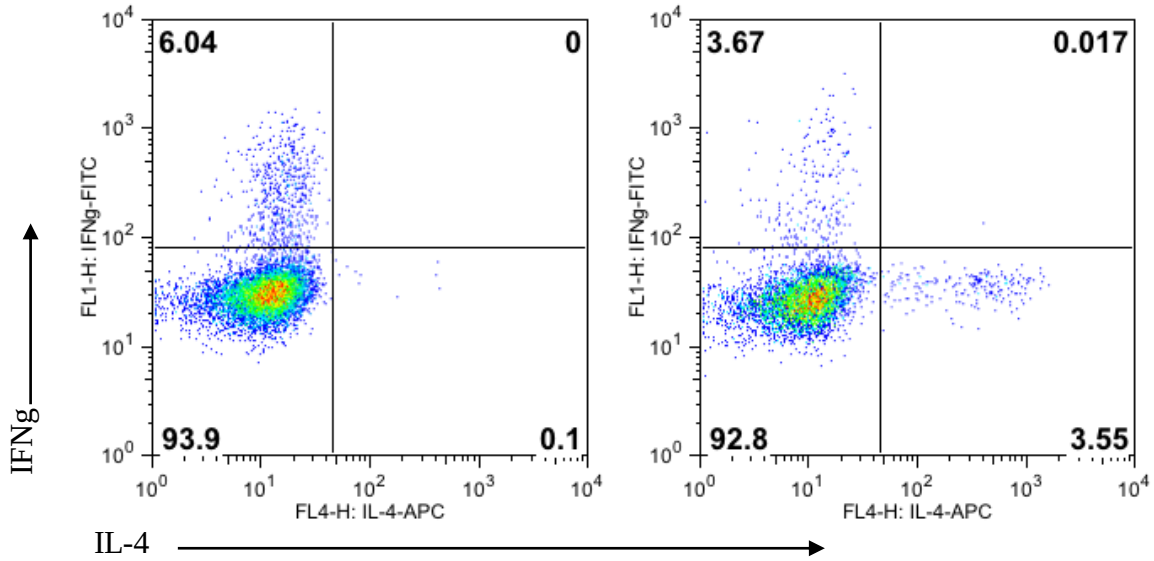
Supplemental Figure 3. Disease in TSLP+OVA treated mice is not dependent on TLR4. (A) Total cell counts in the BAL. (B) Differential cell counts in the BAL (n = 4).



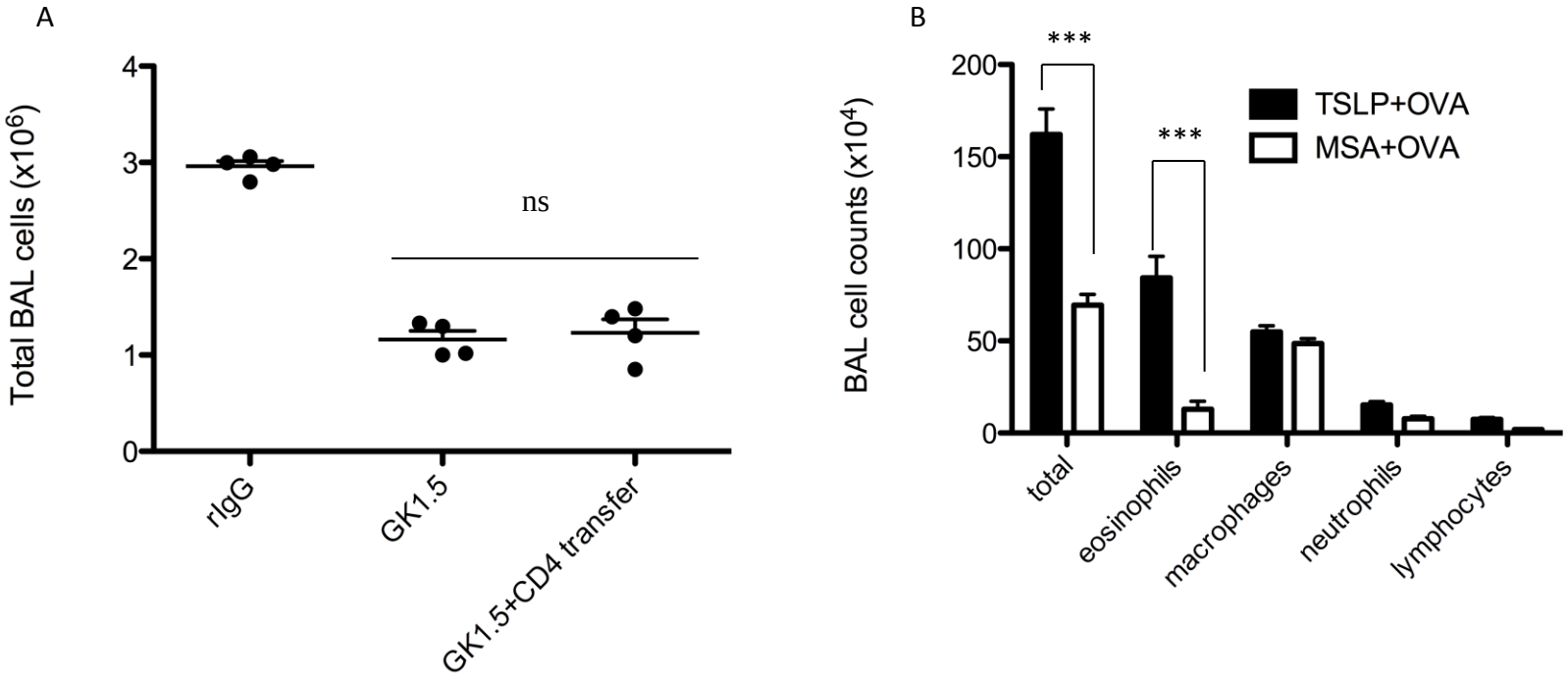
Supplemental Figure 4. Airway inflammation develops indistinguishably from mice rested 9 days and 30 days. Mice received injections of TSLP and OVA and rested for 9 or 30 days and challenged with OVA on 4 consecutive days. Cell counts in BAL fluid. n = 3 mice per group. The significance between two groups was determined by two-tailed Student's t test.



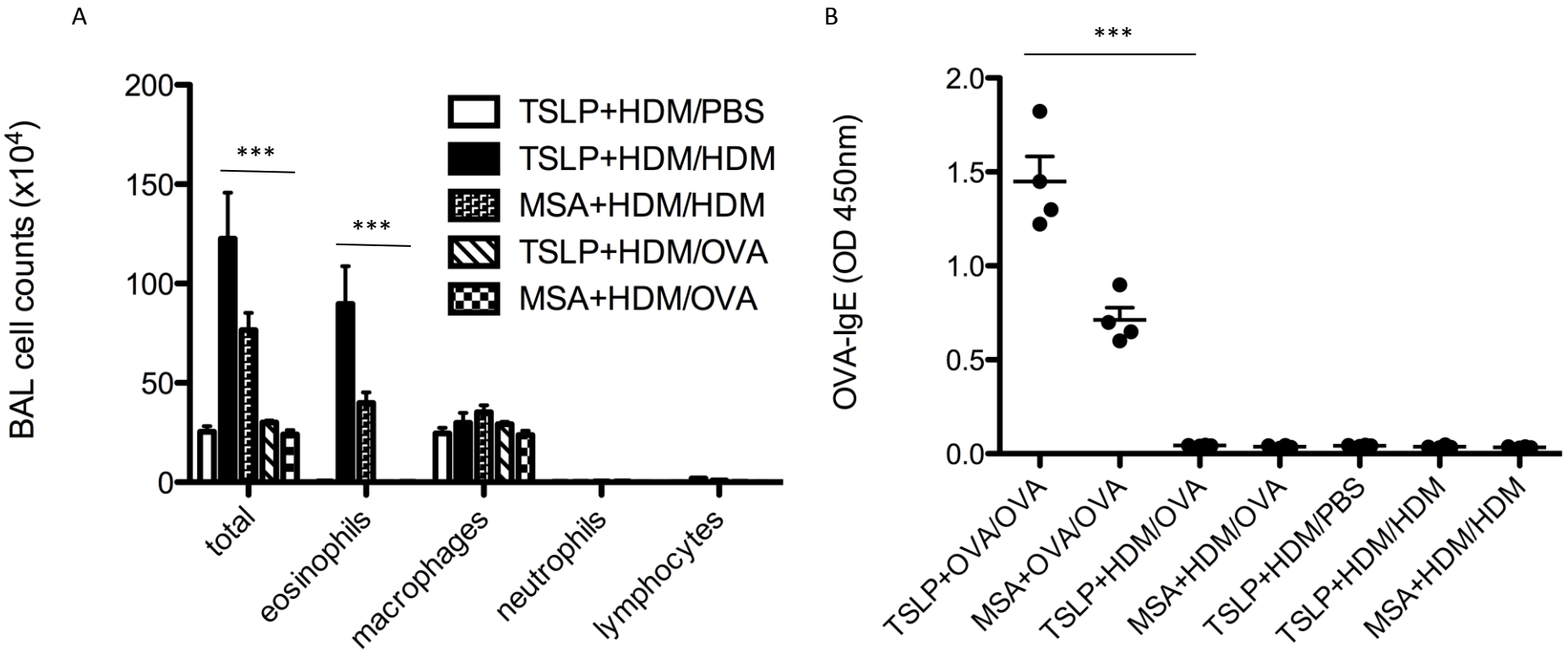
Supplemental Figure 5. Intra-nasal anti-TSLP treatment during skin sensitization does not prevent airway inflammation. To exclude systemic levels of TSLP through leakage, an antibody to murine TSLP was administered intranasally at time of skin sensitization (50 μg i.n. on D0 and D8). The significance between two groups was determined by two-tailed Student's t test.



Supplemental Figure 6. Intracellular staining of IL-4 and IFN-γ in CD4+ T cells from mice treated with MSA+OVA (left) or TSLP+OVA (right). Cells were isolated from inguinal lymph nodes on day 14.



Supplemental Figure 7. Primed LN cells from TSLP+OVA mice restore disease in naïve mice. (A) TSLP+OVA treated mice were treated i.p. with rIgG or anti-CD4 Ab (GK1.5). Some mice received CD4 T cells from DO11.10/RAG-/- mice six days after CD4 depletion. Total BAL counts were shown (n=4). The significance between two groups was determined by two-tailed Student's t test. (B) Skin-draining LN cells from TSLP+OVA treated mice transfer disease to naïve mice. Skin-draining LN cells from mice treated with TSLP+OVA (solid square) and MSA+OVA (open square) were isolated, and cells were cultured with OVA (100 μg/mL) for 72 hours prior to washing and intravenous transfer to naïve mice (2 x 10^7 cells/mouse). Cell counts in BAL fluid. n = 5 mice per group.



Supplemental Figure 8. Antigen specificity shown by experiments in which mice sensitized with HDM and challenged with OVA. (A) Cell counts in BAL fluid. (B) OVA-specific serum IgE on D25. n = 4 mice per group.