

Supplementary Figures

Major histocompatibility complex class II-dependent basophil-CD4⁺ T cell interactions promote T_H2 cytokine-dependent immunity

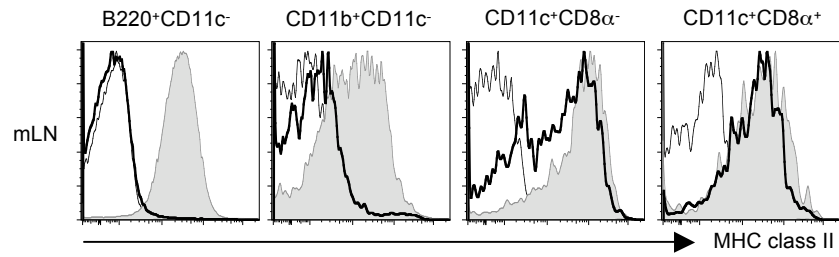
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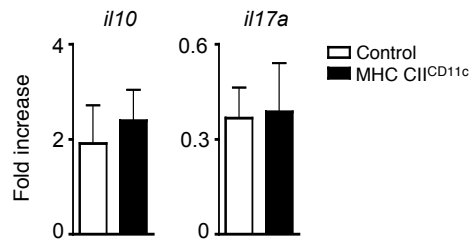
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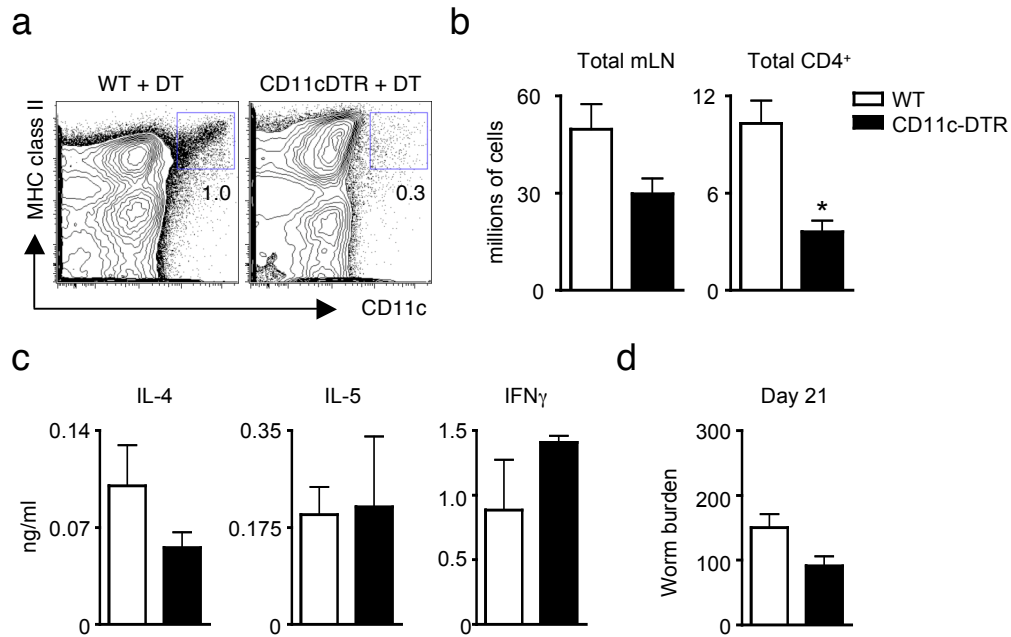
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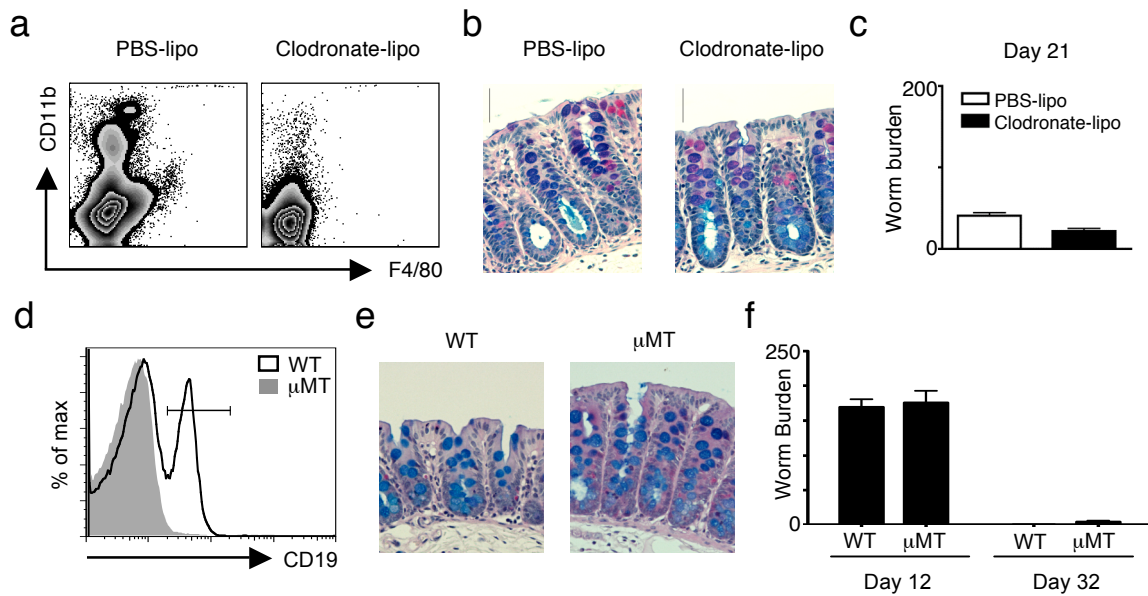
Supplementary Figure 1. Selective expression of MHC class II on CD11c⁺ DC in MHC II^{CD11c} mice. Characterization of MHC class II expression by flow cytometry on mLN cells isolated from MHC class II^{-/-} mice (thin line), littermate control mice (shaded grey), or MHC II^{CD11c} mice (bold line).



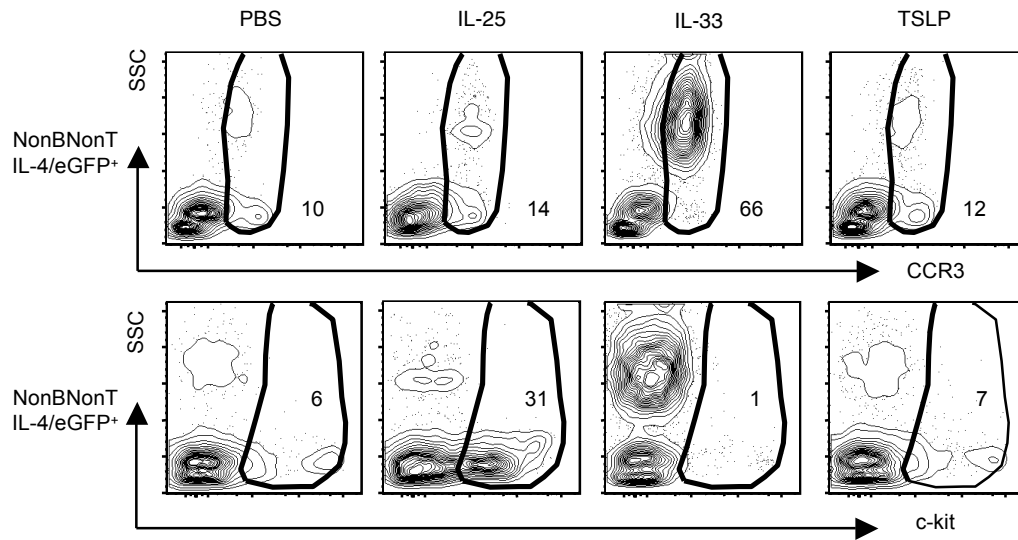
Supplementary Figure 2. No significant induction of IL-10 or IL-17 following *Trichuris* infection. Real-time quantitative PCR analysis of mLN cells isolated from naïve and infected littermate control (open bars) or MHC II^{CD11c} mice (filled bars). Results represented as fold-increase over naïve littermate controls; $n = 3-5$ mice per group.



Supplementary Figure 3. Depletion of CD11c⁺ cells during *Trichuris* infection results in normal expression of Th2 cytokines and expulsion of *Trichuris*. (a) Flow cytometry of splenic DC day 2 following injection of 100ng diphtheria toxin i.p. in WT and CD11c-DTR mice (b) Total mLN cellularity and total numbers of mLN CD4⁺ T cells at day 21 post-*Trichuris* infection in WT or CD11c-DTR chimeric mice depleted of DC every three days throughout infection. (c) ELISAs of supernatants from mLN cells from day 21 infected WT or CD11c-DTR chimeric mice polyclonally stimulated with anti-CD3/anti-CD28 for 48 hours. (d) Worm burdens at day 21 post-infection in WT or CD11c-DTR chimeric mice. Results are representative of 2 independent experiments with 2-4 mice per group.



Supplementary Figure 4. Th2 cytokine-dependent primary immunity to *Trichuris* is independent of macrophages and B cells. (a) Flow cytometry of splenocytes from mice treated with either control PBS loaded-liposomes or Clodronate-loaded liposomes. (b) Cecal worm burdens at day 21 post-infection. (c) Alcian blue/periodic acid-Schiff staining of cecal section from infected control or macrophage-depleted mice. (d) Flow cytometry of splenocytes from either WT (solid line) or μ MT mice (filled grey). (e) Worm burdens at day 12 and day 21 post-infection of WT or μ MT mice.



Supplementary Figure 5. IL-25 and IL-33 elicit distinct IL-4/eGFP⁺ cell populations.

Flow cytometry of splenocytes from mice treated with PBS, rTSLP, rIL-25, or rIL-33 for four days. Plots are gated on IL-4/eGFP⁺ cells.