

## Supplemental material

## Arroyo et al., https://doi.org/10.1084/jem.20190849

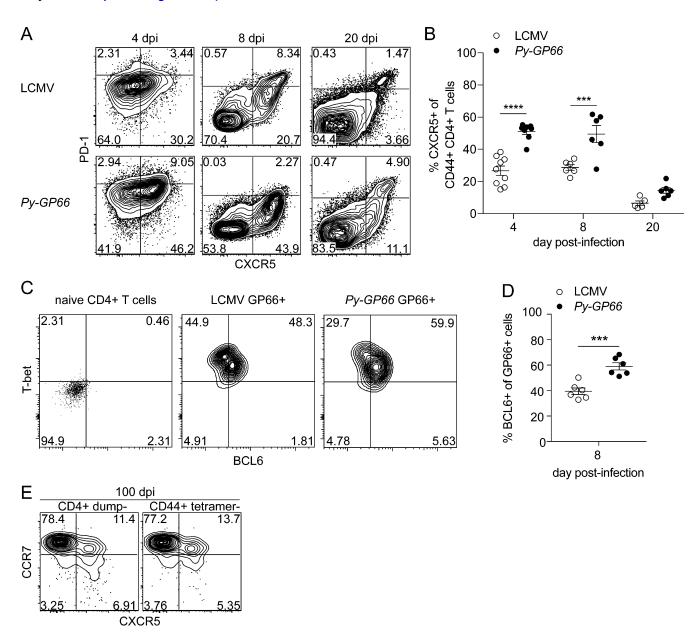


Figure S1. The global CD4\* T cell response to *Py-GP66* is skewed toward a Tfh phenotype. (A) Representative flow plots of CD44\* antigen-nonspecific cells from acute time points with LCMV or *Py-GP66* in WT mice. Cells are gated on dump<sup>-</sup> CD3\* CD8<sup>-</sup> CD4\* CD44\* cells. (B) Summary data of the percentage of CXCR5\* cells from A. Data are pooled from five to nine mice per cohort and are representative of two independent experiments. Data were analyzed by two-way ANOVA. (C) Representative plots of naive cells (gated on dump<sup>-</sup> CD3\* CD8- CD4\* CD44\*) and the LCMV and *Py-GP66* plots (gated on dump<sup>-</sup> CD3\* CD8- CD4\* CD44\* GP66\*) show T-bet and BCL6 expression 8 d after infection with LCMV and *Py-GP66* infection. (D) Summary data of the percentage of BCL6\* GP66\* cells from C. Data are pooled from six mice per cohort and are representative of two independent experiments. Data were analyzed by unpaired *t* test. (E) Plots are gated on dump<sup>-</sup> CD3\* CD8- CD4\* CD4\* GP66- cells, respectively, following 100 d of *Py-GP66* infection. Representative of six mice from at least two independent experiments. For B and D, data are shown as means ± SEM. \*\*\*, P < 0.001; \*\*\*\*, P < 0.0001. ns, not significant.



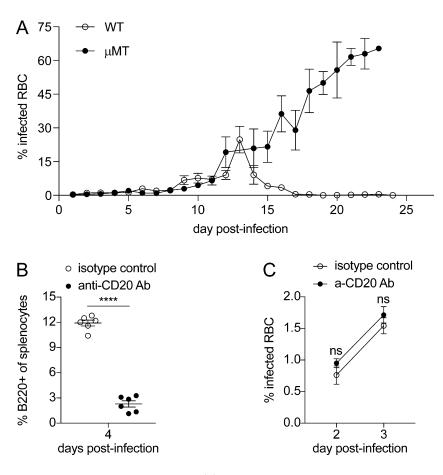


Figure S2. A lack of B cells does not impact early parasite burden. (A) Percentage of infected red blood cells in WT and μMT mice following *Py-GP66* infection. Data are pooled from 3–21 mice per cohort and are representative of over two independent experiments. (B) Percentage of B220\* B cells following anti-CD20 depletion and 4 d of *Py-GP66* infection. Data are pooled from six mice per cohort and are representative of two independent experiments. Data were analyzed by unpaired *t* test. (C) Percentage of infected red blood cells in WT mice treated with anti-CD20 antibody or isotype control. Data are pooled from six mice per cohort and are representative of two independent experiments. Data were analyzed by two-way ANOVA. For A–C, data are shown as means ± SEM.

\*\*\*\*\*, P < 0.0001. Ab, antibody; ns, not significant.



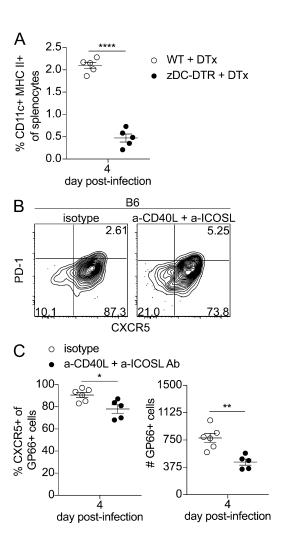


Figure S3. **Costimulatory signal blockade in WT mice results in a decreased Tfh response. (A)** Percentage of CD11c<sup>+</sup> MHC II<sup>+</sup> cells following diphtheria toxin treatment (DTx) in WT and zDC-DTR mice. Data are pooled from five mice per cohort and are representative of two independent experiments. Data were analyzed by unpaired *t* test. **(B)** WT mice were treated with a-CD40L + a-ICOSL antibodies or isotype controls daily 0–3 d after infection. Representative flow plots are from GP66<sup>+</sup> cells 4 d after infection with *Py-GP66*. **(C)** Summary data of the percentage of CXCR5<sup>+</sup> GP66<sup>+</sup> cells and number of GP66<sup>+</sup> cells from A. Data are pooled from five or six mice per cohort and are representative of two independent experiments. Data were analyzed by unpaired *t* test. For A and C, data are shown as means ± SEM. \*, P < 0.05; \*\*\*, P < 0.01; \*\*\*\*, P < 0.0001.