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Supporting Information

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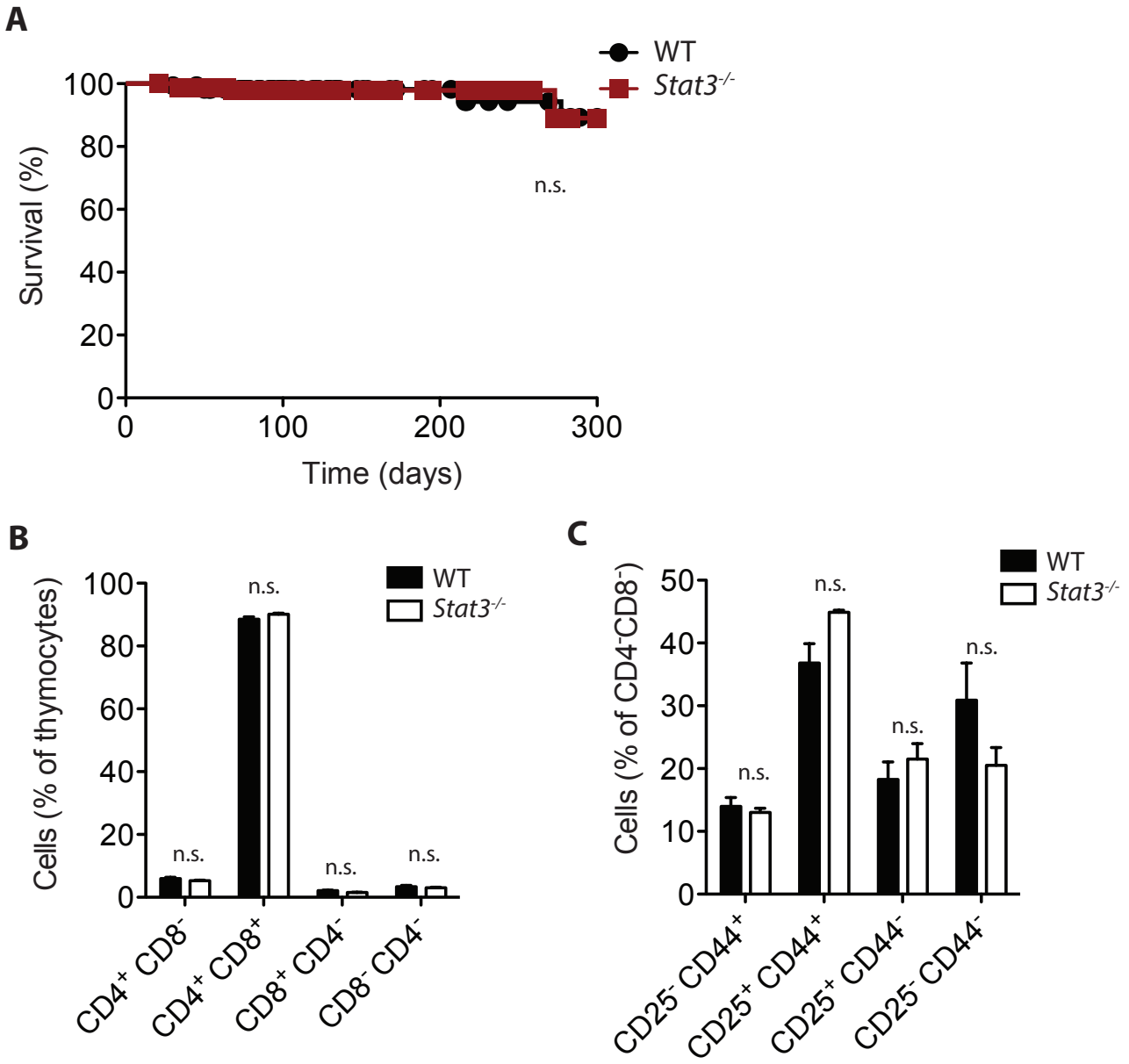
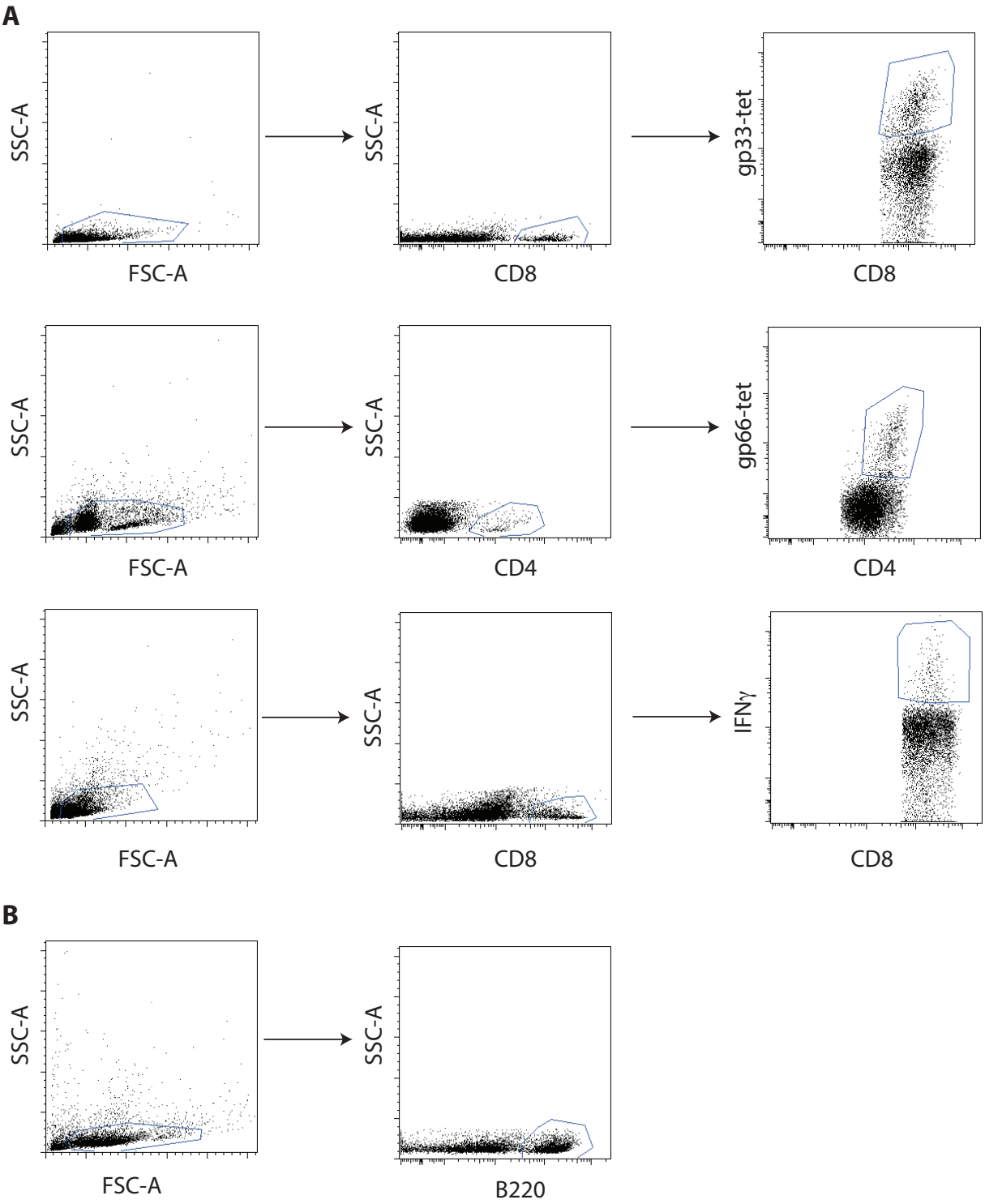
T-cell STAT3 is required for the maintenance of humoral immunity to LCMV

Supporting Information
Figure 1



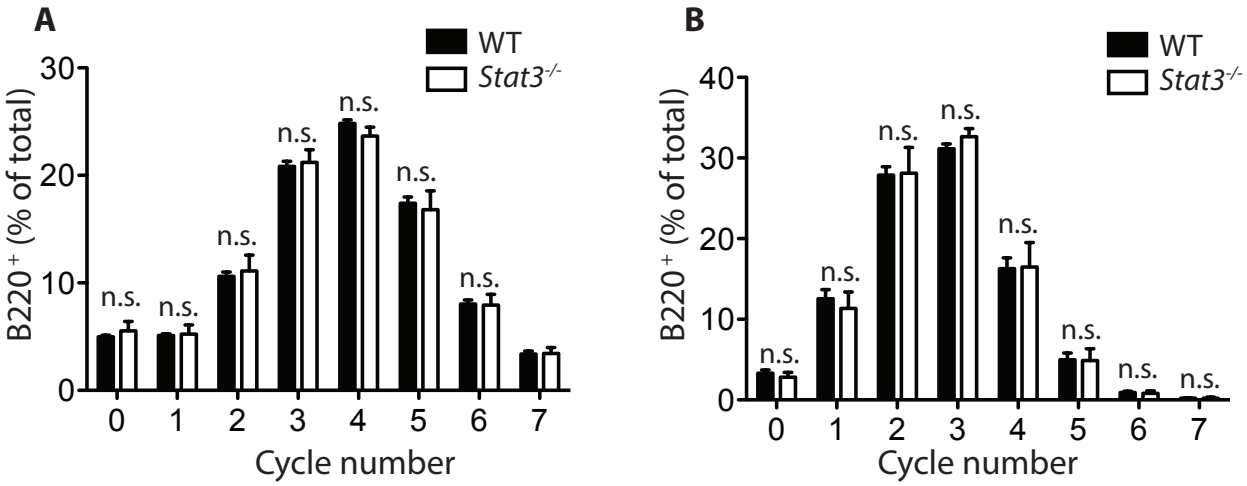
Supporting Information Figure 1: Thymic T cell populations and survival are similar between naïve control and T-cell STAT3 deficient mice. (A) Survival of naïve uninfected *Lck-Cre*$^{-}$ *Stat3*$^{fl/fl}$ vs. *Lck-Cre*$^{+}$ *Stat3*$^{fl/fl}$ mice was monitored over time (mean ± SEM; n=155-175 mice/group). (B) CD4^{+}, CD8^{+}, CD4^{+}CD8^{+} and CD4^{-}CD8^{-} T-cells were measured in naïve thymus samples from *Lck-Cre*$^{-}$ *Stat3*$^{fl/fl}$ vs. *Lck-Cre*$^{+}$ *Stat3*$^{fl/fl}$ mice (mean ± SEM; n=5-6 mice, data pooled from 2 independent experiments). (C) CD44 and CD25 expression were analyzed on double negative (CD4^{-}CD8^{-}) T cells in naïve thymus from *Lck-Cre*$^{-}$ *Stat3*$^{fl/fl}$ vs. *Lck-Cre*$^{+}$ *Stat3*$^{fl/fl}$ mice (mean ± SEM; n=5-6 mice). Data shown in (B and C) are pooled from 2 independent experiments. Statistical significance between groups was determined by Student's *t*-test or Kaplan Meier log rank test for survival data.

Supporting Information
Figure 2



Supporting Information Figure 2: Representative flow cytometry gating strategy. (A) pre-gating strategy used to identify T cells, including tetramer positive CD8 (upper panel) or CD4 (middle panel) or IFNγ positive (lower panel) T cells as shown in figure 1. (B) pre-gating strategy used to identify B cells as shown in figure 2.

Supporting Information
Figure 3



Supporting Information Figure 3: B Cell proliferation is unaffected by absence of STAT3 in T cells. Percentage of cells in each division cycle for positively selected ($B220^+$), CFSE labeled Lck-$Cre^-$$Stat3^{fl/fl}$ vs. Lck-Cre^+ $Stat3^{fl/fl}$ B-cells, stimulated with (A) 1µg/ml LPS or (B) 2µg/ml CD40-L and 10ng/ml Il-4 for 72h as measured by flow cytometry (mean ± SEM; n=4-6 mice). Data is pooled from 2 independent experiments. Statistical significance between groups was determined by Student's *t*-test.