Supplementary Figure 1

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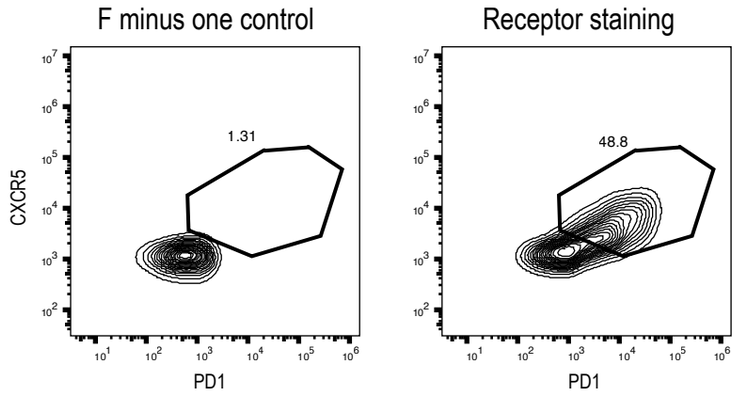

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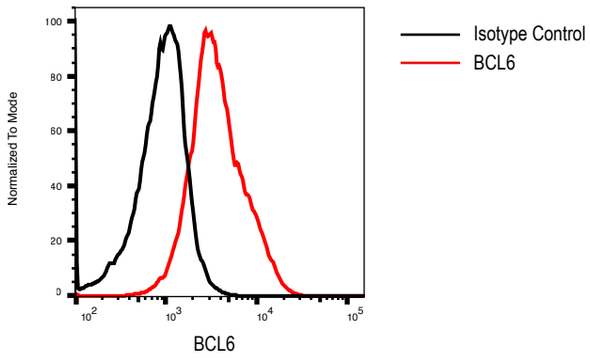
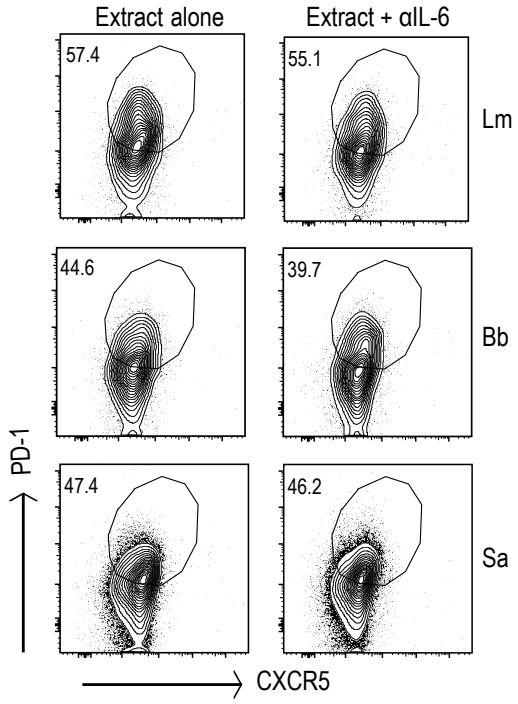
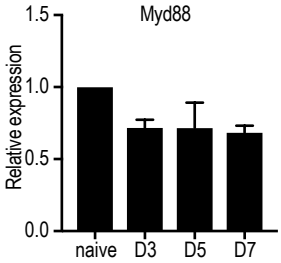


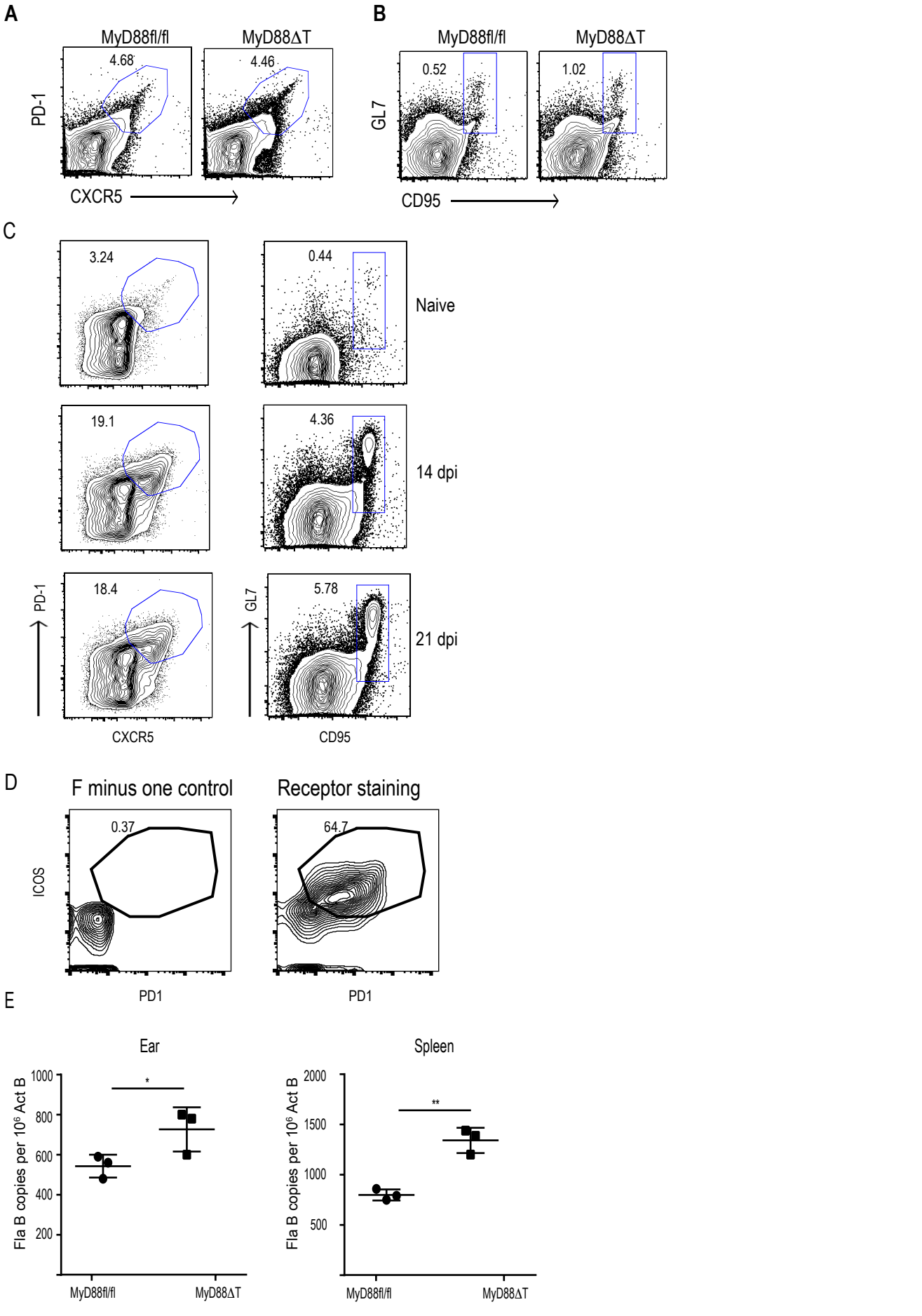
Supplementary Figure 2



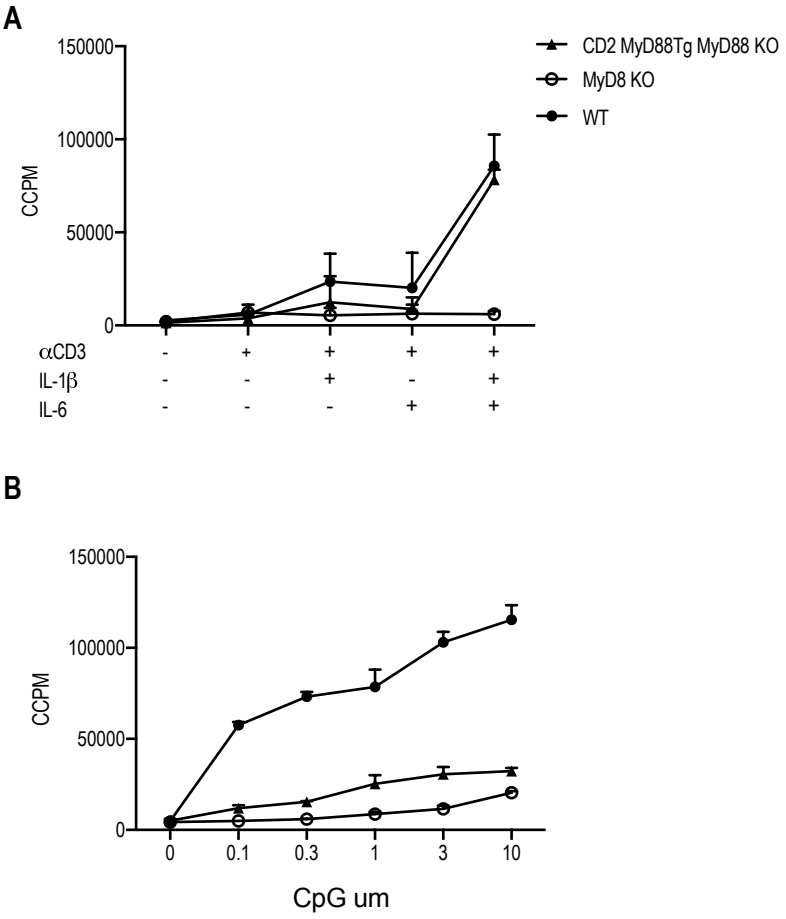
Supplementary Figure 3



Supplementary Figure 4



Supplementary Figure 5



Supplementary Figure Legends

Figure S1. Gating strategy for PD-1 and CXCR5 expression and BCL6 expression in activated CD4 T cells.

(A) Cells are gated on CD4+ T cells from Peyer's patches from a naïve mouse. **(B)** Sorted naive WT OT-II cells (CD45.1) were transferred into congenic (CD45.1) immunocompetent mice ($1x10^5$ cells/mouse). The next day, mice were immunized with OVA+LPS emulsified in IFA subcutaneously in the hind footpads. Histograms show intracellular expression of BCL6 in donor CD4 T cells on day 7 post-immunization.

Figure S2. Neutralization of IL-6 does not affect the generation of Tfh lineage cells.

Naive CD4 T cells from WT mice were co-cultured with splenic DCs in the presence of *Lm* bacterial extract (10μg/ml) for 5 days in the presence or absence of αIL-6 neutralizing antibody (10μg/ml). Flow plots show expression of PD-1 and CXCR5 on $CFSE^{lo}$ CD4+ T cells. Data are representative of two independent experiments.

Figure S3. MyD88 expression in CD4 T cells during antigen specific differentiation

WT naive CD4 T cells were CFSE labelled and co-cultured with WT CD11c+ splenic DCs in the presence of 10ug/ml of *Lm* extract. $CFSE^{lo}$ CD4 T cells were sorted on day 3, 5 and 7 post stimulation and relative expression of MyD88 was quantified by qPCR in. Data is normalized to 18s. Data are representative of two independent experiments. Error bars represent SEM.

Figure S4. Intradermal infection of mice by Borrelia Burdgorferi leads to measurable and sustained Tfh and GC responses in the spleen that fail to confer protection in the absence of MyD88 in T cells.

(A and B) Spleens from MyD88$^{fl/fl}$ and MyD88ΔT littermate controls were harvested, processed, and analyzed for steady state proportions of **(A)** CD4^{+} CXCR5^{+} PD-1^{+} Tfh cells and **(B)** CD19^{+} CD95^{+} GL7^{+} GC B cells by flow cytometry. **(C)** WT mice were infected with low passage *Bb* strain 296 (10^5/mice) intradermally. CXCR5+ PD-1+ and ICOS+ Tfh cells and GL7+ CD95+ GC B cells in the spleen of infected mice at given time points. **(D)** Gating strategy for PD1 and ICOS expression on CD4^{+} T cells from Peyer's patches from a naïve mouse. **(E)** MyD88$^{fl/fl}$ and MyD88ΔT mice were infected with *Bb* (10^5 CFU/mice) intradermally. Quantification of *Bb* burden in MyD88$^{fl/fl}$ and MyD88ΔT by qPCR in the ears and spleen.

Figure S5. Functional characterization of CD2-MyD88 Tg mice on MyD88 deficient background.

(A) Naive CD4 T cells from indicated strains were stimulated with plate bound anti-CD3ε and anti-CD28 in the presence or absence of IL-1β (20ng/ml) and IL-6 (20ng/ml) for 72 hours. After 60 hours 3H-thymidine was added to the cultures and cell proliferation was measured using a beta-counter. **(B)** Purified CD19+ B cells were cultured in the presence of titrating concentrations of CpG ODNs for 72 hours and proliferation was measured by a 3H thymidine incorporation assay.