

Supplemental material

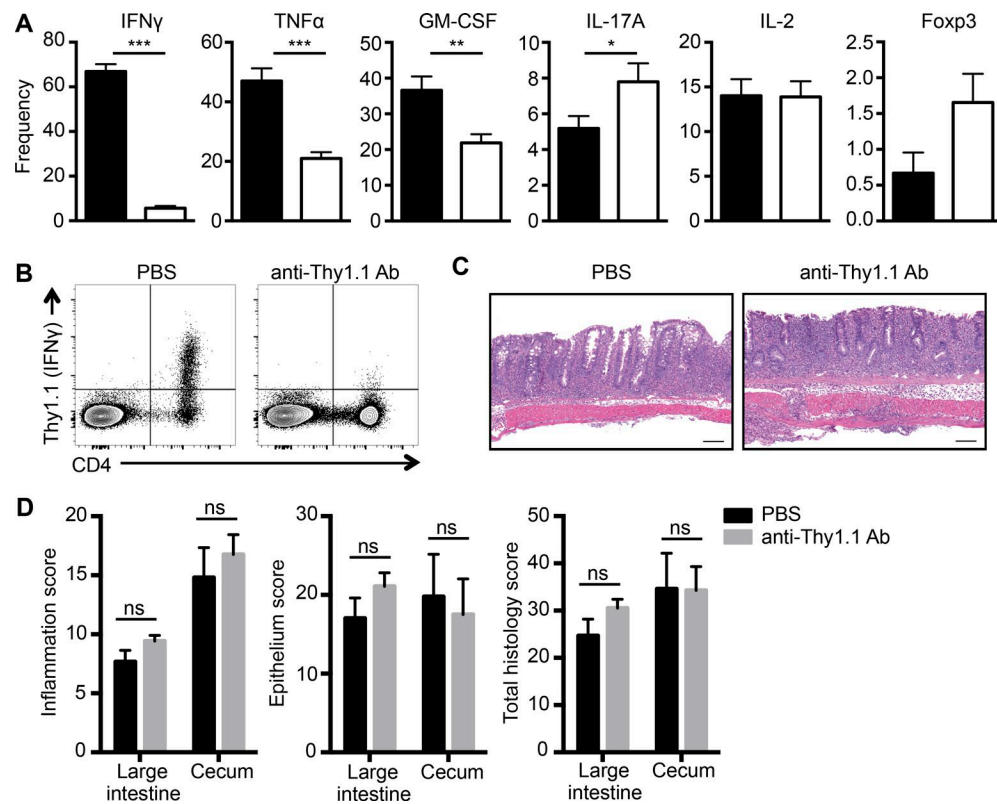
Shin et al., <https://doi.org/10.1084/jem.20172335>

Figure S1. IFN γ -producing CD4 T cells produce proinflammatory effector cytokines during IBD but are dispensable to induce intestinal inflammation. (A) Naive CD4 T cells from IFN γ KI mice were transferred to Rag1^{-/-} recipient mice. After 6–8 wk, CD4 T cells from large intestine were segregated by expression of Thy1.1, the IFN γ reporter molecule, and staining of indicated molecules was assessed by flow cytometry ($n = 15$ –19, four to five experiments). (B–D) After transfer of IFN γ KI naive CD4 T cells, recipient mice were treated with anti-Thy1.1 depleting antibody (clone 19e1.2) or PBS for 6–8 wk. (B) Thy1.1 expression on CD4 T cells in spleen after treatment. (C) Representative hematoxylin and eosin-stained sections from the large intestine of treated mice. The images were made with a 10 \times objective. Bars, 135 μ m. (D) Disease scores from treated mice ($n = 8$ –10, two experiments). Graphs show the mean \pm SD; unpaired t test: *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$.

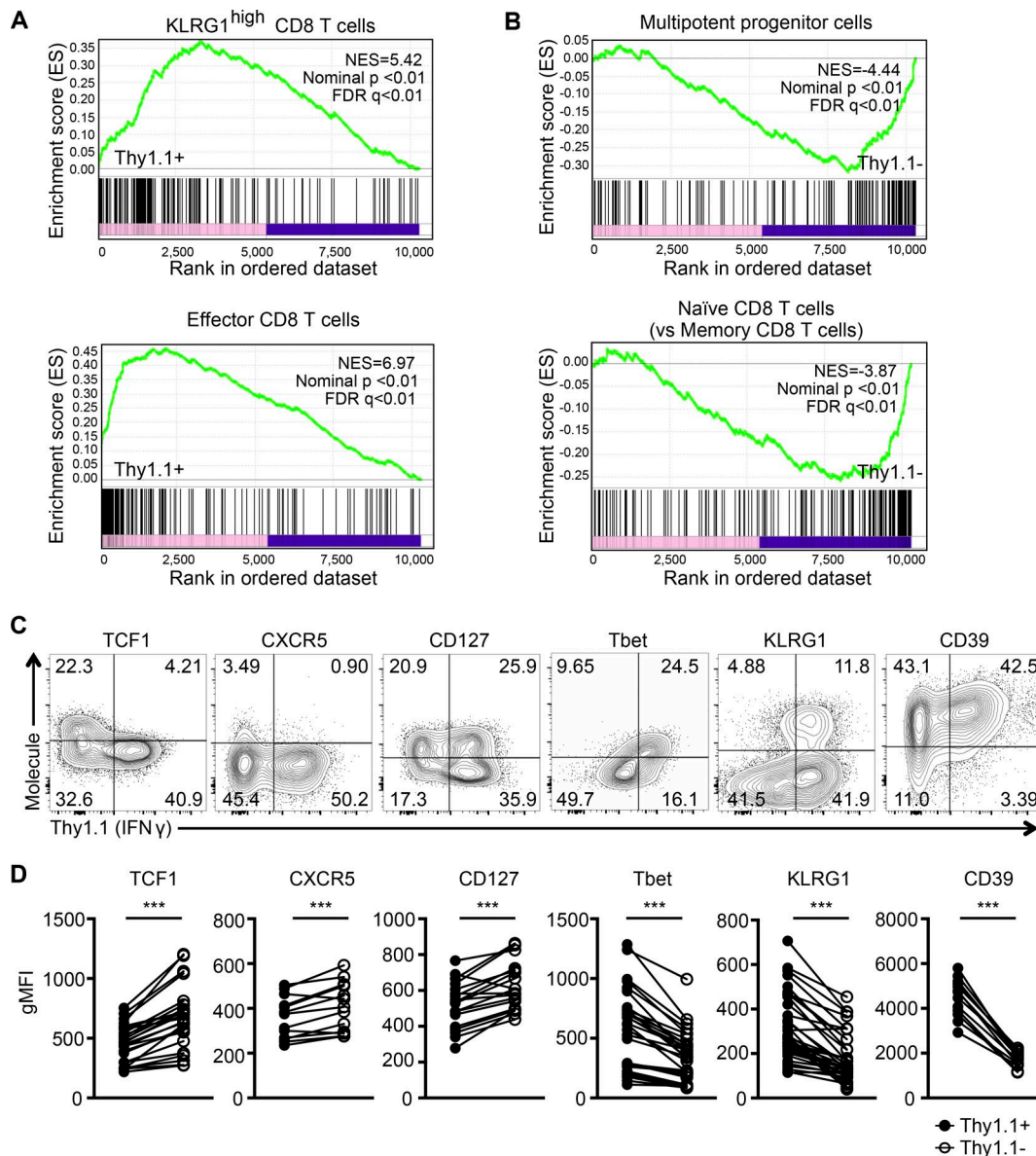


Figure S2. **IFN γ -producing CD4 T cells express a terminally differentiated signature, whereas IFN γ -nonproducing CD4 T cells possess a self-renewing, progenitor-like profile.** (A and B) GSEA plots illustrate enrichment of Thy1.1⁺ and Thy1.1⁻ CD4 T cell RNA sequencing data with previously published gene sets. (A) Representative GSEA of effector CD8 T cell gene sets (GSE10239, top; dataset from Kaech et al., 2002, bottom). (B) Representative GSEA of naïve CD8 T cell gene sets in comparison to memory CD8 T cell gene signature (GSE37301, top; dataset from Luckey et al., 2006, bottom). (C and D) Expression of indicated molecules in the splenic CD4 T cells was determined by flow cytometry at 4–7 wk after colitis induction. The geometric mean fluorescent intensity for Thy1.1⁺ and Thy1.1⁻ CD4 T cells is shown. ($n = 14$ –35, two to five independent experiments). Paired t test: ***, $P < 0.001$.

References

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- Luckey, C.J., D. Bhattacharya, A.W. Goldrath, I.L. Weissman, C. Benoist, and D. Mathis. 2006. Memory T and memory B cells share a transcriptional program of self-renewal with long-term hematopoietic stem cells. *Proc. Natl. Acad. Sci. USA*. 103:3304–3309. <https://doi.org/10.1073/pnas.051137103>