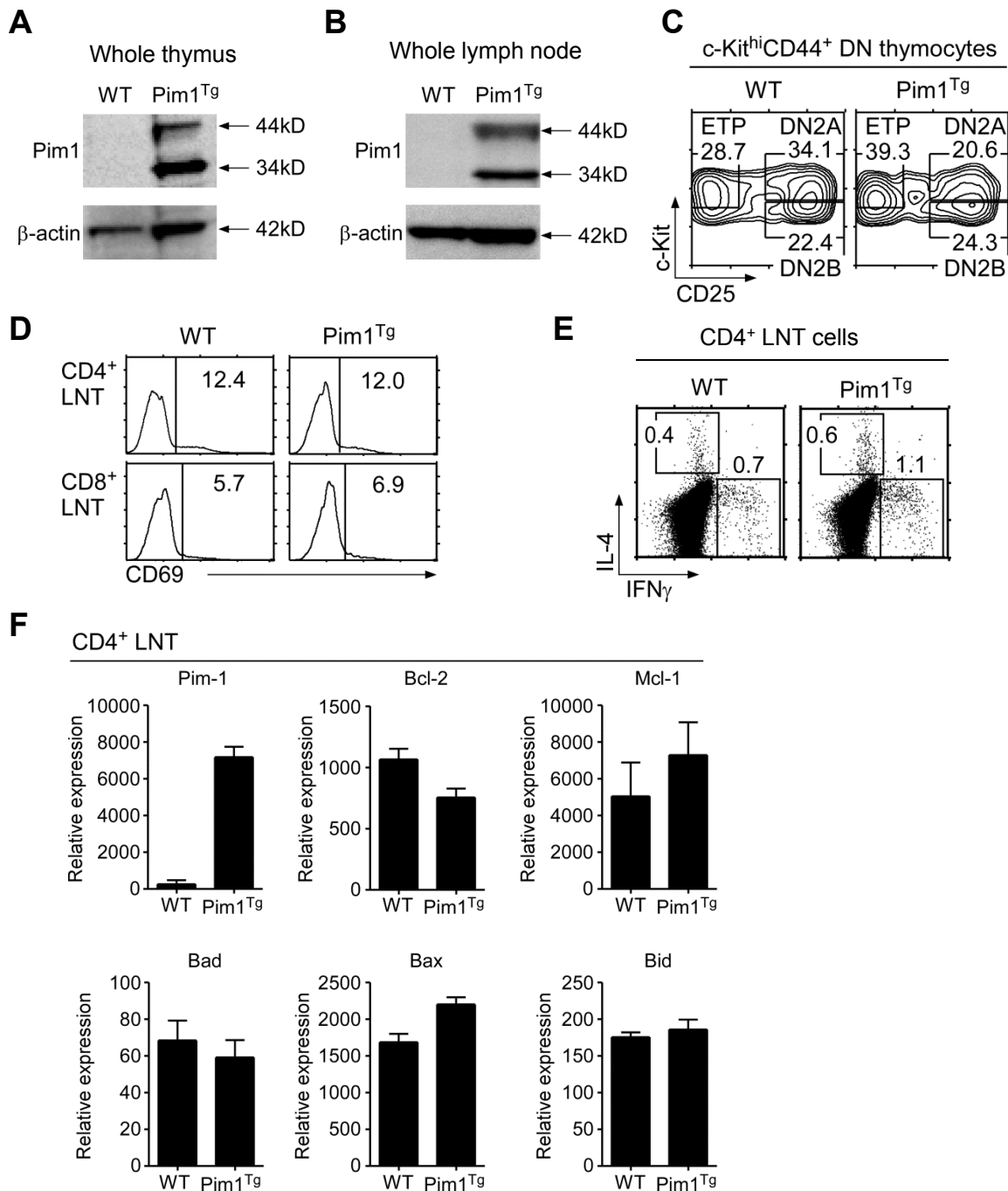


Supplementary Figure 1



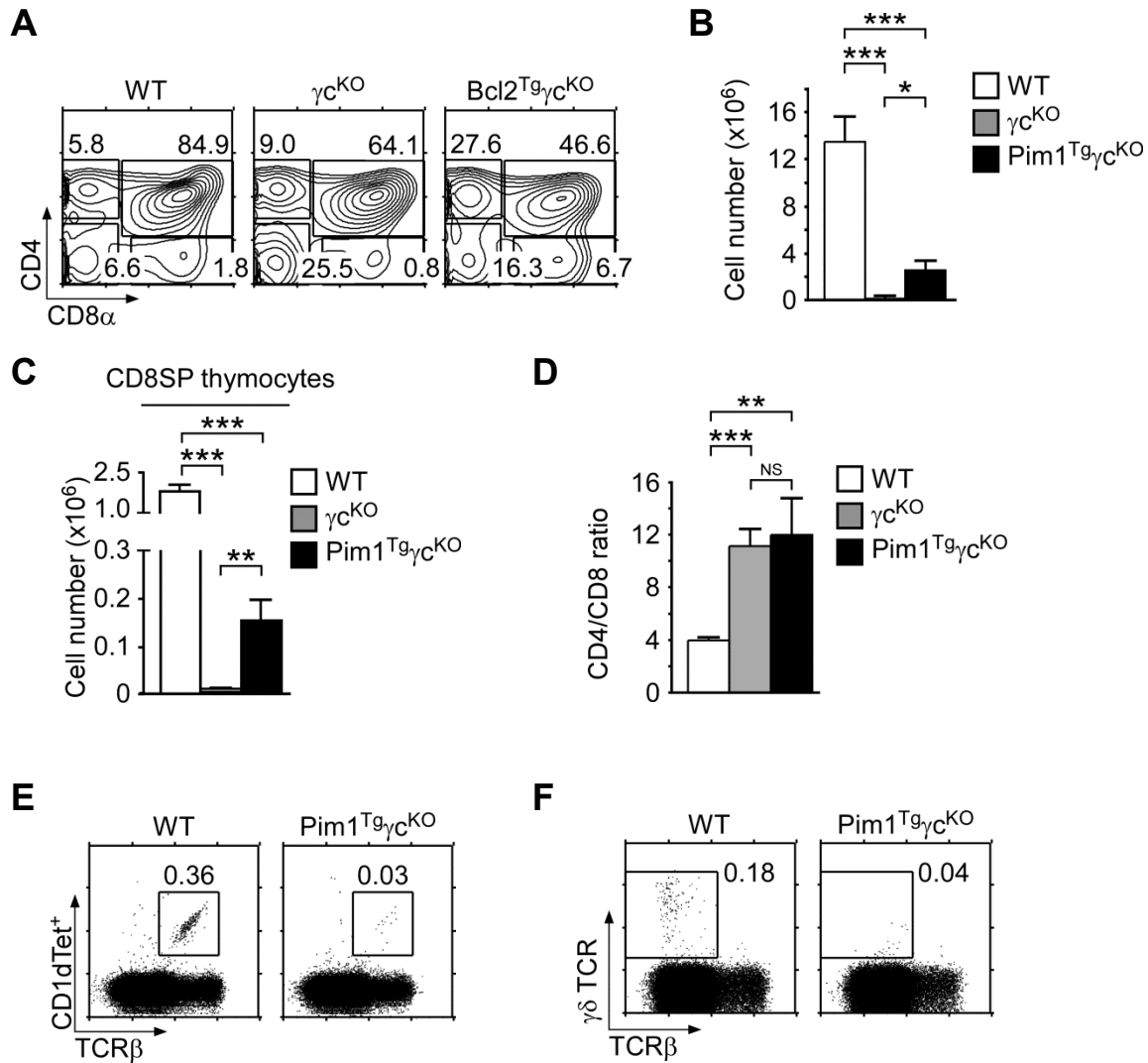
Supplemental Fig. 1. Characterization of Pim1 transgenic mice.

Immunoblot detection of Pim1 expression in the thymus (**A**) and LN (**B**). Whole thymocyte or LN cell lysates of indicated mice were probed for Pim1 and β -actin. Data are representative of three independent experiments. (**C**) DN thymocyte differentiation of c-Kit^{hi}CD44⁺ lineage marker negative (Lin⁻) thymocytes. Numbers in box indicate percentages of ETP (Early Thymic Progenitor) and DN2A and DN2B cells. Data are representative of two independent experiments with each two WT and two Pim1^{Tg} mice.

(**D**) CD69 expression on freshly isolated LNT cells. Data are representative of eight independent experiments. (**E**) Cytokine expression profiles of freshly isolated CD4⁺ LNT cells. Intracellular IL-4 and IFN γ expression was assessed after 3 hrs of PMA + ionomycin stimulation in the presence of brefeldin A.

(**F**) Pro- and anti-apoptotic gene expression in WT and Pim1^{Tg} CD4⁺ LNT cells. Total RNA from purified CD4⁺ LNT cells were reverse transcribed into cDNA and assessed for expression of the indicated genes by quantitative RT-PCR. Data were normalized to *Hprt* expression. Data are the summary of three independent experiments.

Supplementary Figure 2



Supplemental Fig. 2. T cell development in Pim1^{Tg} γ_c^{KO} mice.

(A) Thymocyte profiles of WT, γ_c^{KO} , and Bcl2^{Tg} γ_c^{KO} mice. Contour plots show CD4/CD8 profiles of whole thymocytes. Data are representative of three independent experiments.

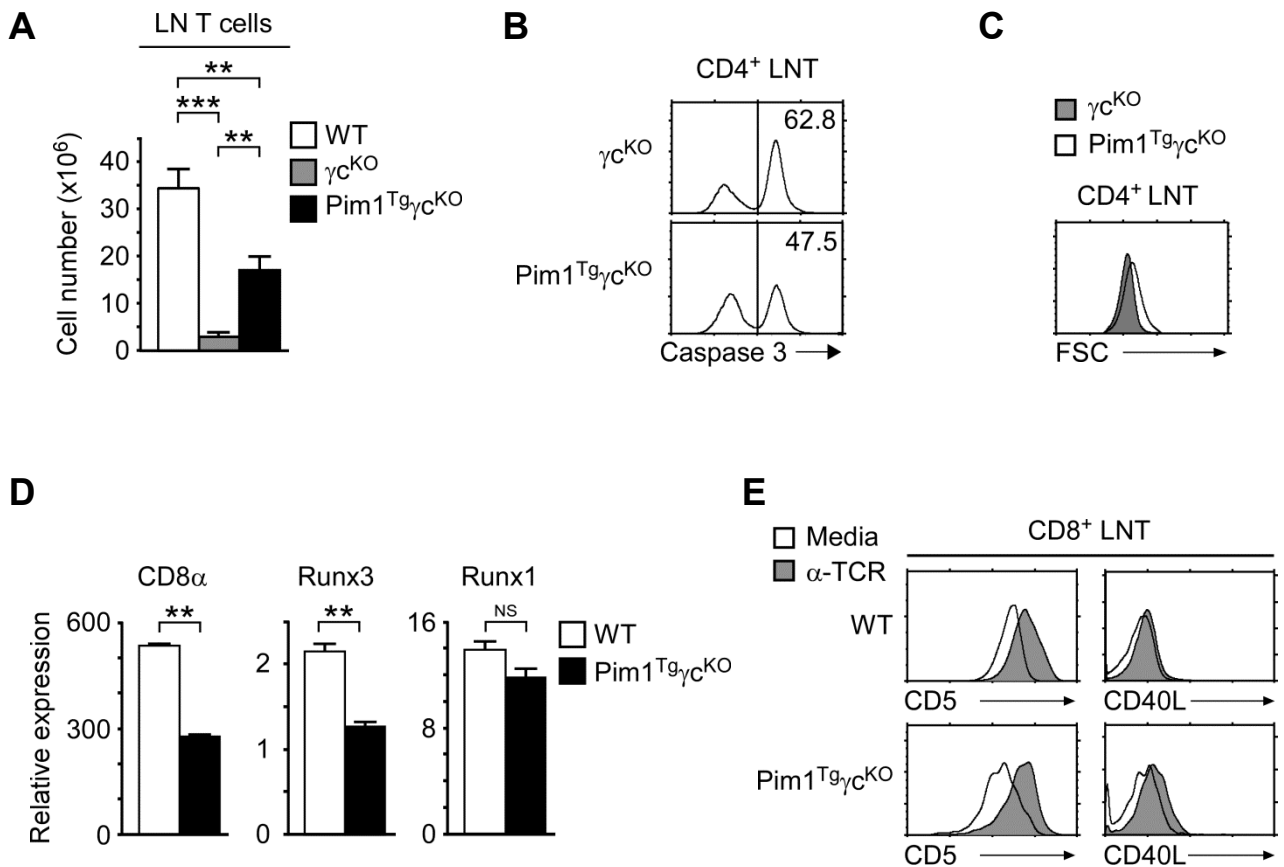
(B) TCR β^{hi} mature thymocyte numbers and (C) TCR β^+ CD8SP thymocyte numbers in WT, γ_c^{KO} , and Pim1^{Tg} γ_c^{KO} mice. Data are mean \pm SEM of each 12 WT, 7 γ_c^{KO} , and 9 Pim1^{Tg} γ_c^{KO} mice.

(D) CD4/CD8 ratio of mature SP thymocytes. Ratios were determined from TCR β^{hi} gated thymocytes. Data are average \pm SEM of each 12 WT, 7 γ_c^{KO} , and 9 Pim1^{Tg} γ_c^{KO} mice.

(E) NKT cell development in WT and Pim1^{Tg} γ_c^{KO} thymocytes. Total thymocytes were assessed for TCR β expression and CD1d-tetramer staining to identify thymic NKT cells. Data are representative of two independent experiments.

(F) $\gamma\delta$ T cell development in WT and Pim1^{Tg} γ_c^{KO} thymocytes. Total thymocytes were assessed for TCR β and $\gamma\delta$ TCR expression to identify thymic $\gamma\delta$ T cells. Data are representative of two independent experiments.

Supplementary Figure 3



Supplemental Fig. 3. LN T cell analysis of Pim1^{Tg} γ^C KO mice

(A) LN T cell numbers in WT, γ^C KO, and Pim1^{Tg} γ^C KO mice. Data are mean \pm SEM of 11 WT, 6 γ^C KO, and 8 Pim1^{Tg} γ^C KO mice.

(B) Caspase-3 analysis on overnight cultured LN T cells from γ^C KO and Pim1^{Tg} γ^C KO mice. Data are representative of three independent experiments.

(C) Cell size of freshly isolated CD69 negative CD4⁺ LNT cells. Data are representative of three independent experiments.

(D) Quantitative RT-PCR analysis of purified WT and Pim1^{Tg} γ^C KO CD8⁺ LN T cells. CD8⁺ T cells were electronically sorted from Pim1^{Tg} γ^C KO LN and analyzed for CD8 α , Runx3 and Runx1 mRNA expression. Data were normalized to *Hprt* (X1,000) and are the summary of two independent experiments.

(E) CD5 and CD40L expression on overnight TCR stimulated WT and Pim1^{Tg} γ^C KO CD8⁺ LN T cells. Data are representative of two independent experiments.