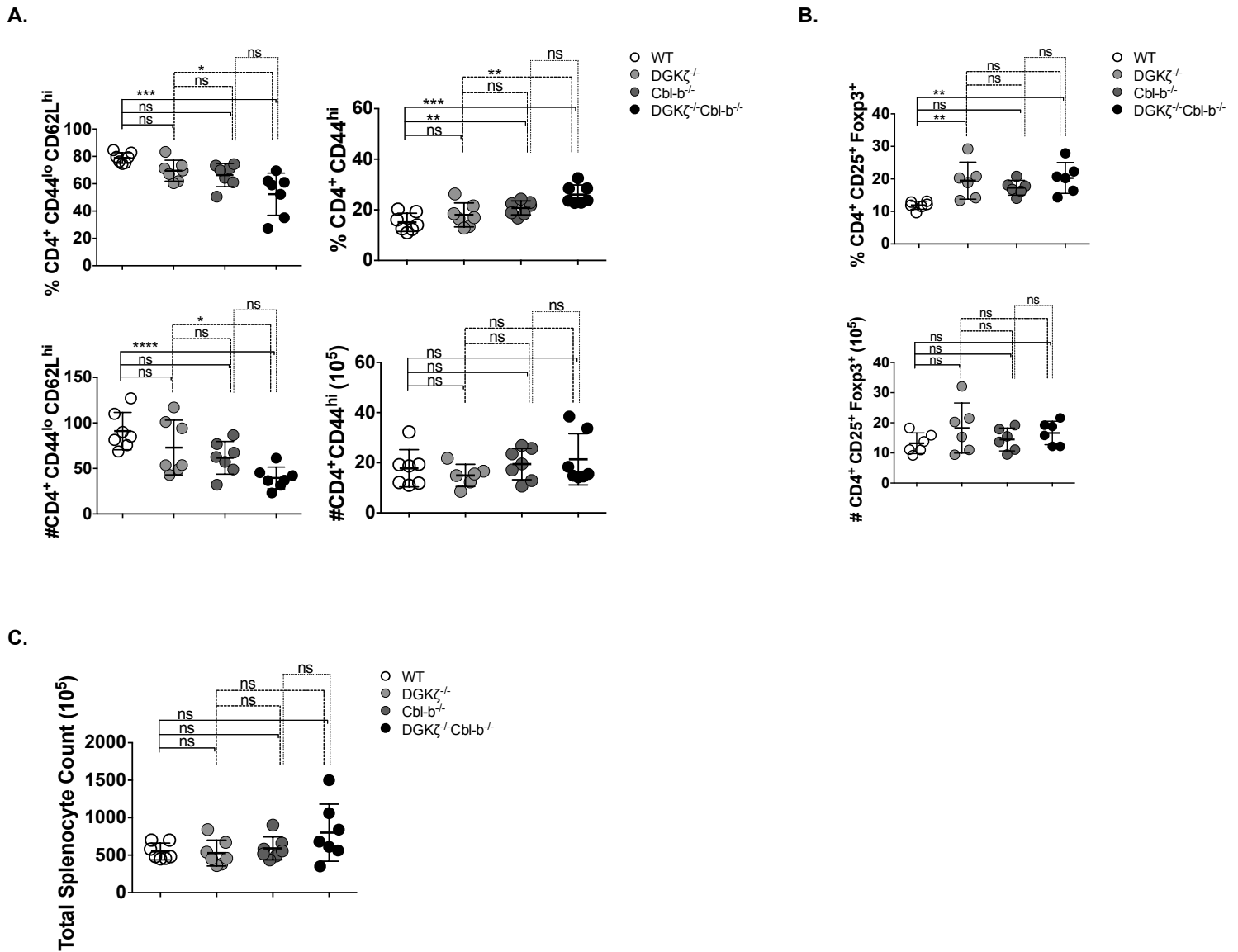


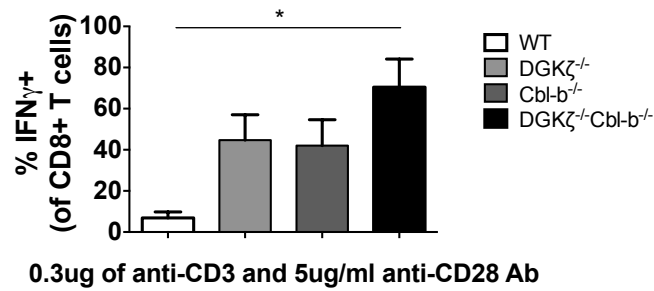
Supplemental Figure 1.



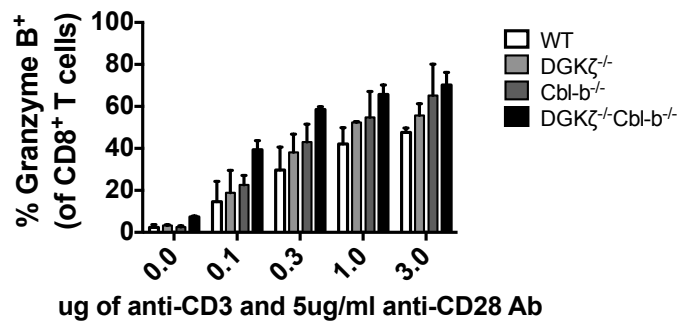
**Supplemental Figure 1. Increased percentage of CD4<sup>+</sup> T cells with an activated phenotype in DGK $\zeta$  and Cbl-b deficient mice.** (A) Splenocytes were stained for cell surface markers CD4, CD8, and cell activation markers CD44 and CD62L, and the percentage and absolute number of naïve (CD4<sup>+</sup>CD44<sup>lo</sup>CD62L<sup>hi</sup>) or activated (CD4<sup>+</sup>CD44<sup>hi</sup>) cells were determined after gating for CD4<sup>+</sup> (n=7 for each group). (B) Splenocytes were stained for cell surface markers CD4 and CD25, and intracellular FoxP3, and the percent and absolute number of FoxP3<sup>+</sup>CD25<sup>+</sup> was determined after gating for CD4<sup>+</sup> T cells. (C) Total number of splenocytes from mice of each genotype was quantified.

## Supplemental Figure 2.

A.



B.



**Supplemental Figure 2. Increased cytokine production in DGK $\zeta$  and Cbl-b deficient mice at minimal CD3 concentrations.**  $1 \times 10^6$  MACS-purified T cells were incubated with 5ug/ml anti-CD28 antibodies and either 0.3 (A) or indicated (B)  $\mu$ g of anti-CD3 at 37°C for 18 hrs. Cells were surface-stained for viability, CD8 and CD4, fixed and then stained for IFN $\gamma$  (A) or granzyme B (B). Depicted graphs represent percentage of CD8<sup>+</sup> cells staining positive for the indicated marker as assessed by flow cytometry.