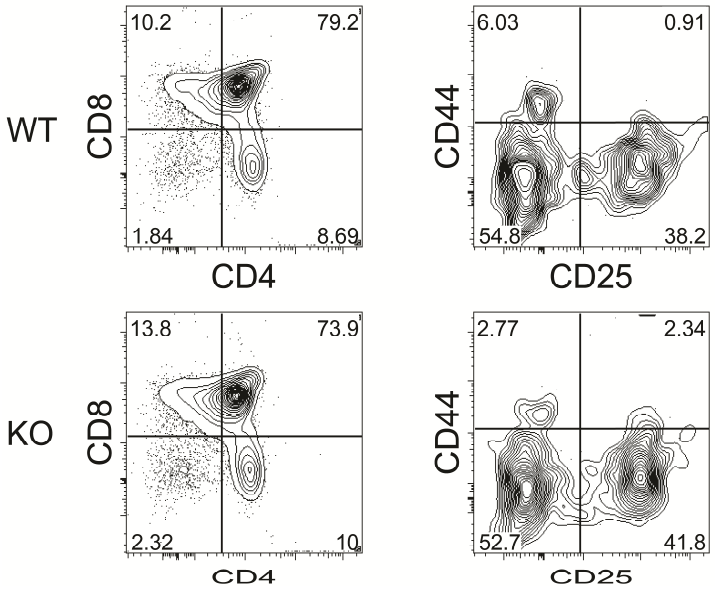
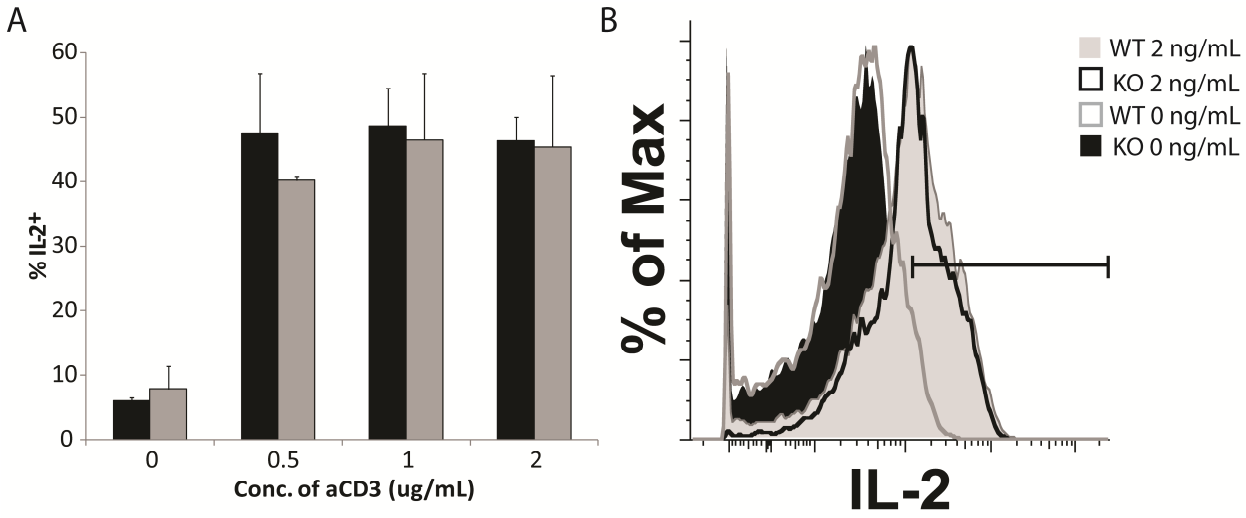
Supplementary Figure 1



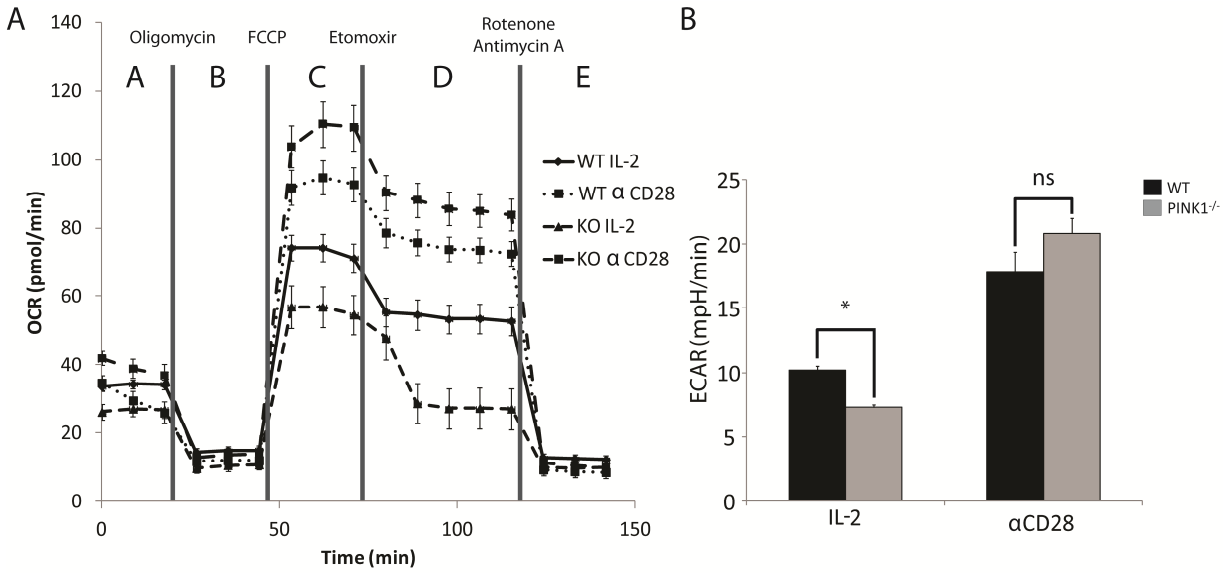
Flow cytometry analysis of thymus cells from wild type and *PINK1*$^{-/-}$ mice. Left contour plots represent all cells, right contour plot has been gated solely on the double negative thymocytes to assess populations of DN1-4 T cell precursors (n = 3).

Supplementary Figure 2



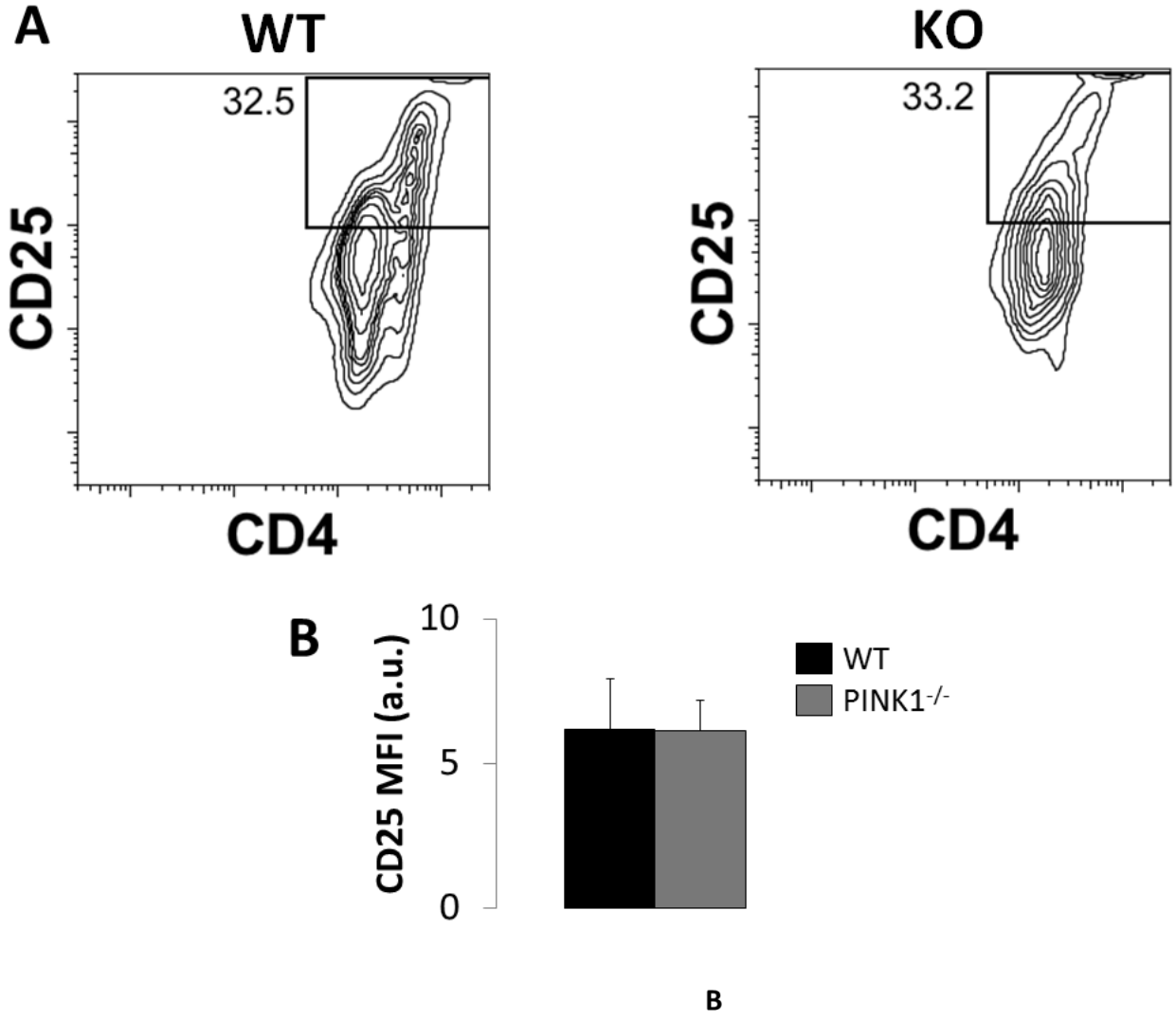
Intracellular cytokine staining of cells grown in RPMI after α-CD3/α-CD28 stimulation. Cells were then incubated with GolgiStop, PMA and ionomycin for 5 hours before flow cytometry analysis (n = 6 +/- SD).

Supplementary Figure 3



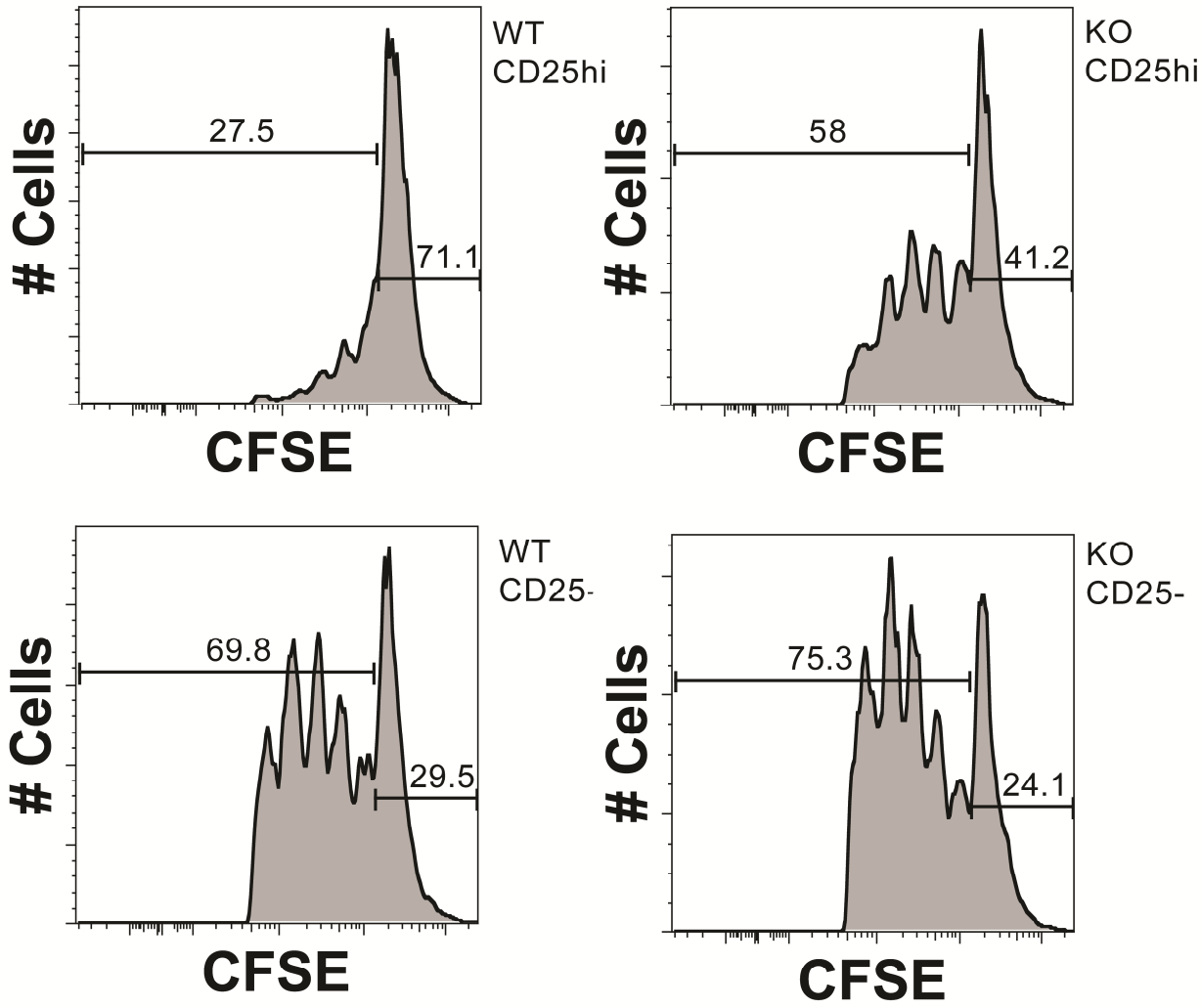
$CD4^+$ T cells were cultured in medium containing α-CD3 (1 μg/mL) with either IL-2 (1 ng/mL) or α-CD28 (0.5 μg/mL) for 48 hours. Next, $4x10^6$ cells were plated on Cell-Tak coated plates in XF assay medium containing 25 mM glucose and 1 mM sodium pyruvate. Oligomycin (1 μM), FCCP (1.5 μM), etomoxir (200 μM) or rotenone/antimicin A (1 μM each) were added at the time points indicated by vertical bars. OCR and ECAR were measured by an XF-96 bioanalyzer. A) Graph of oxygen consumption rate (OCR) versus time as a measure of oxidative phosphorylation (n = 4 +/- SEM). B) Graph of baseline extracellular acidification rate (ECAR) to measure glycolysis (n = 3 +/- SD).

Supplementary Figure 4



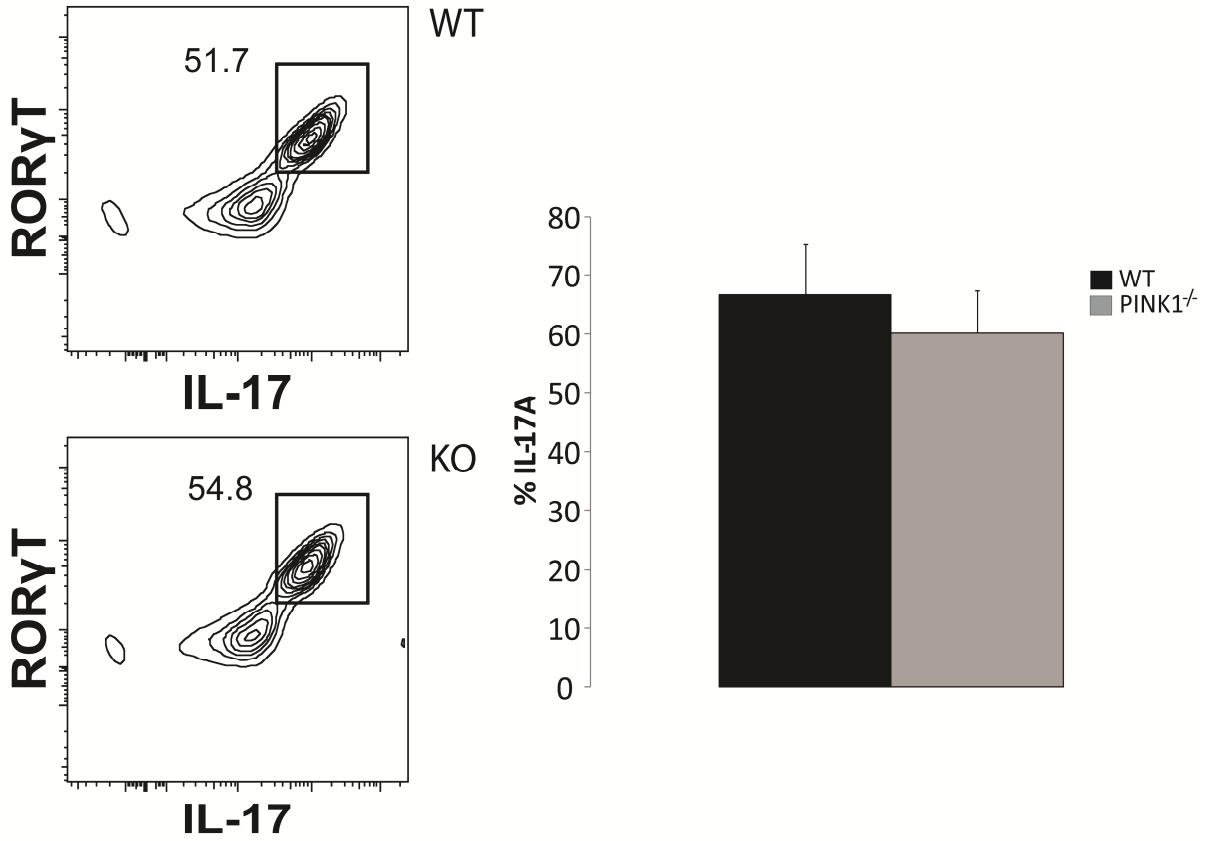
Phenotype of cells used in suppressor assay. Although the contour plots look slightly different (A), sorted populations had equivalent mean fluorescence of CD25 (B) and percentage of $CD25^{hi}$ cells (not shown) (n=3, Mean +/- SD)

Supplementary Figure 5



Representative histograms of the suppressor assay performed in Figure 3C (n=3).

Supplementary Figure 6



Representative flow cytometry contour plot of Th17 polarized $CD4^+$ T cells (left). Cells were cultured with α-CD3 (1 μg/mL) in medium containing TGF-β (5 ng/mL) and IL-6 (10 ng/mL) for 3 days before changing to an IL-23 (10 ng/mL) containing medium for a final 3 days. Intracellular cytokine staining was performed as described in the text. Bar graph of IL-17 expression (right) (n = 6 +/- SD).