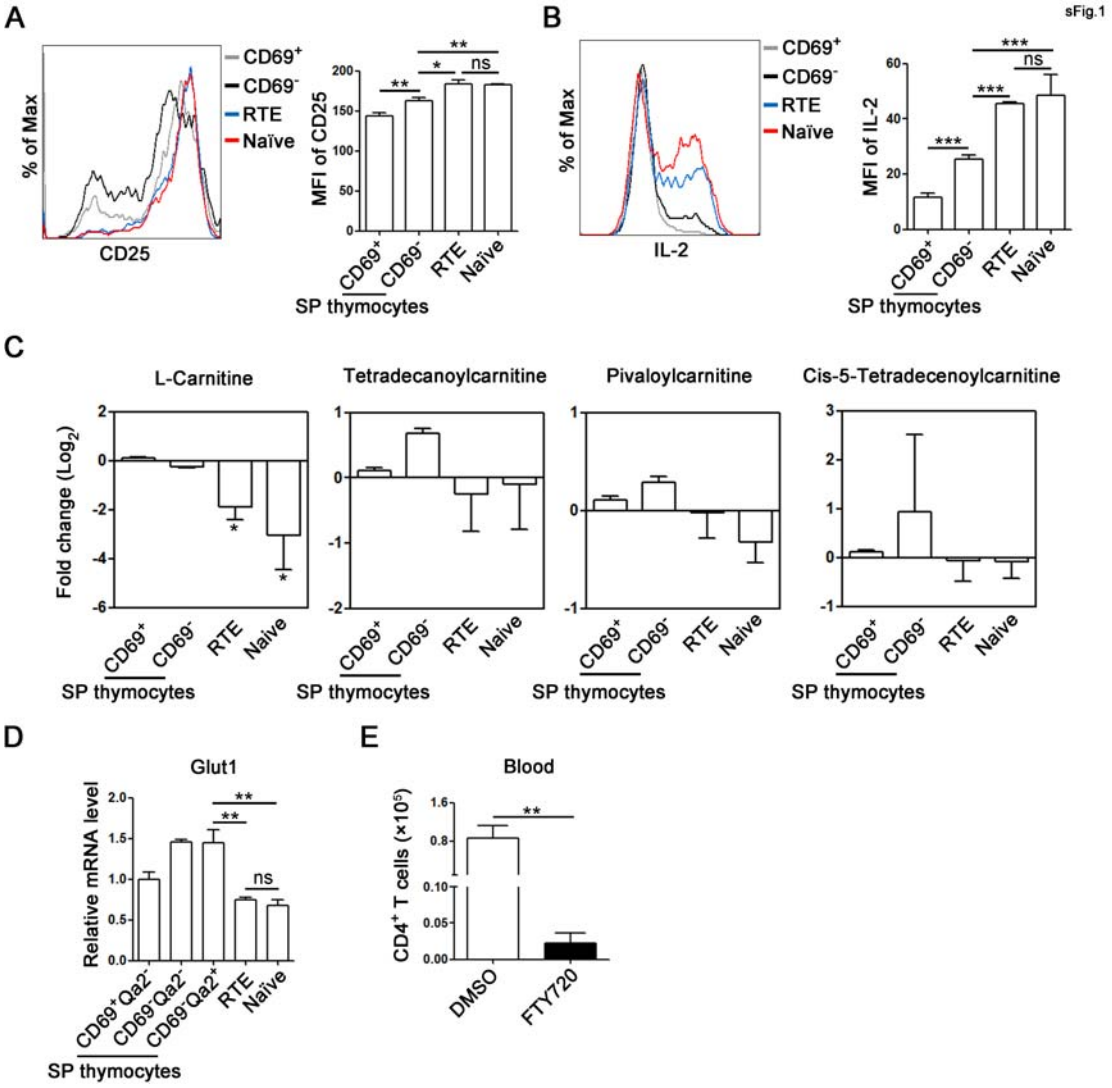
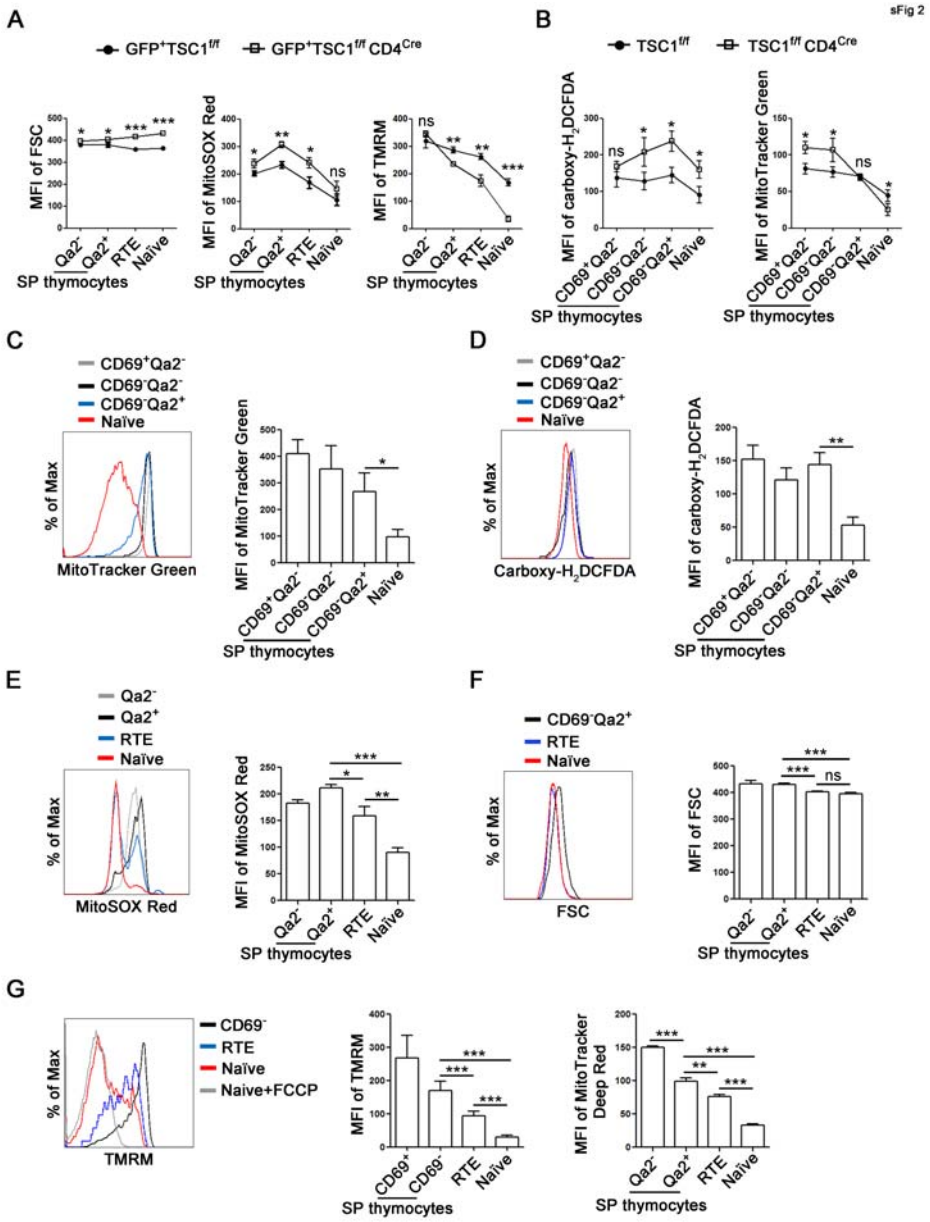
Supplemental Figure 1



sFig. 1 Comparison of cell activation, metabolites, and Glut1 expression in various T cell subsets. (A) Comparison of CD25 expression in $CD69^+$ and $CD69^-$ CD4 SP thymocytes, $CD4^+$ RTEs, and naïve T cells upon activation. (B) Comparison of IL-2 production in various T cells subsets upon activation. (C) Comparison of metabolites involved in the fatty acid β-oxidation in various T cell subsets. (D) Comparison of Glut1 transcription in various T cell subsets. (E) Total numbers of $CD4^+$ T lymphocytes in the peripheral blood of FTY720 (or DMSO) treated mice (three mice per group). Reduced circulating T cells in FTY720-treated mice demonstrates a successful blockage of T cell egress.

Supplemental Figure 2



sFig. 2 Comparison of mitochondria between wild type and *Tsc1*$^{-/-}$ CD4^{+} T cells and between wild type CD8^{+} RTEs and naive T cells. (A) *Tsc1*$^{-/-}$ RTEs and naïve T cells had larger cell size, higher level of mROS and lower level of mitochondrial membrane potential. (B) *Tsc1*$^{-/-}$ naïve T cells had higher level of ROS and mitochondria content. (C) Decreased mitochondrial content in wild type CD8^{+} naive T cells. Histograms show overlay of mean fluorescence intensity (MFI) in gated cells. (D) Decreased ROS in CD8^{+} naive T cells. (E) Decreased mROS in CD8^{+} RTEs and naive T cells. (F) Decreased cell size in CD8^{+} RTEs and naïve T cells. The overlay of forward scatter values of CD69^{-}Qa2^{+} SP thymocytes, RTEs and naïve T cells were shown on the left. (G) Decreased mitochondrial membrane potential in CD8^{+} RTEs and naïve T cells. At least three independent experiments were performed and similar results were obtained.