

Figure S1: Generation and characterization of CD28 conditional knockout mice. A. Targeting construct designed to generate CD28^{flox/flox} mice. **B**. Southern-blot to detect the floxed CD28 allele. Tail DNA was digested with EcoRV and electrophoresed on an agarose gel. The 3' probe shown in panel A was used to detect the floxed CD28 allele. Lane 1, B6 wild type mouse. Lane 2, CD28^{flox/+} mouse. **C**. CD28 expression in CD28^{flox/flox} mice. Gray line, CD28^{-/-} mouse; black line, B6 wild type mouse; red line, CD28^{flox/flox} mouse (all plots gated on CD4⁺ cells).

Α



3: CD28-/- CD4+ cells

Figure S2: Sorted WT or CD28-DTregs were lysed and CD28 was detected with an antibody to the c-terminal portion of CD28. CD4⁺ T cells from a CD28^{-/-} mouse were used as control. Full length CD28 protein is the upper band which runs at 44kD and is only present in lane 1. The lower band in each lane is non-specific.

Supplementary Figure 3



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<u>Figure S3:</u> Characterization of B cells, NK cells, myeloid cells and dendritic cells in CD28-DTreg mice. Thymus, BM, LN and spleen from 5 week old mice and littermate controls were stained with markers for B and NK cells (**A**), myeloid cells (**B**) and dendritic cells (**C**). Data are representative of 3 independent experiments.



<u>Figure S4:</u> CD28-DTregs demonstrate stability in vitro. **A & B** Sorted CD28-sufficient (top panels) or CD28-DTregs (bottom panels) from 4-5 week old mice were cultured for 4 days under Th1 (**B**) or Th17 (**C**) differentiation conditions and then restimulated for 5 hours with PMA plus ionomycin. Naïve cells were included as positive controls. Data are representative of 3 experiments.