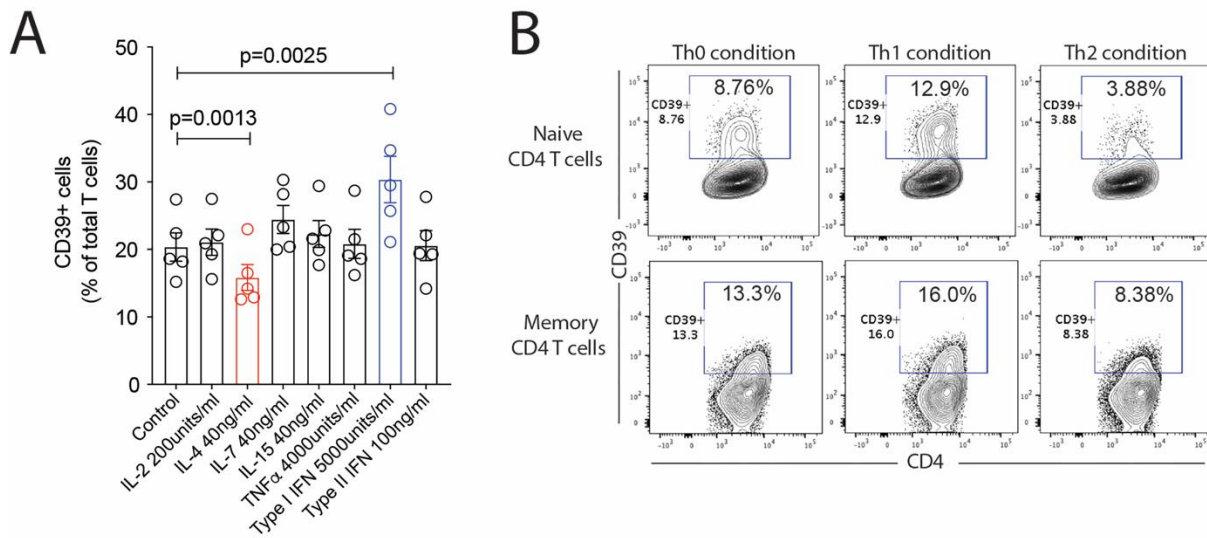
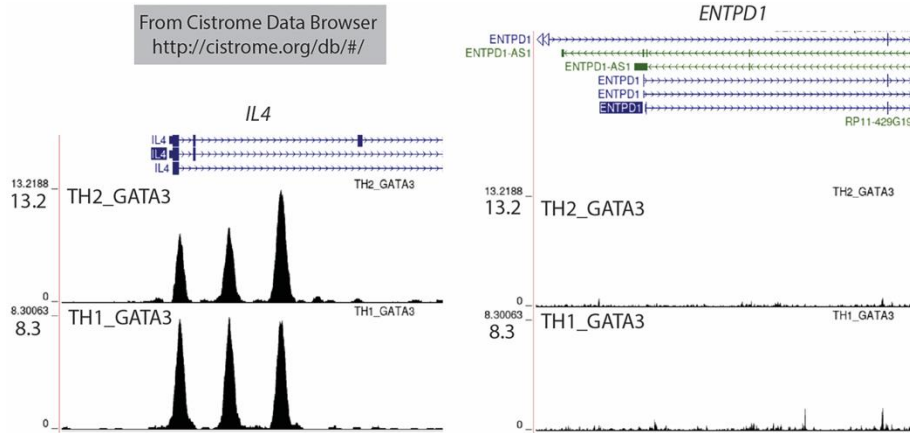


Supplemental Material

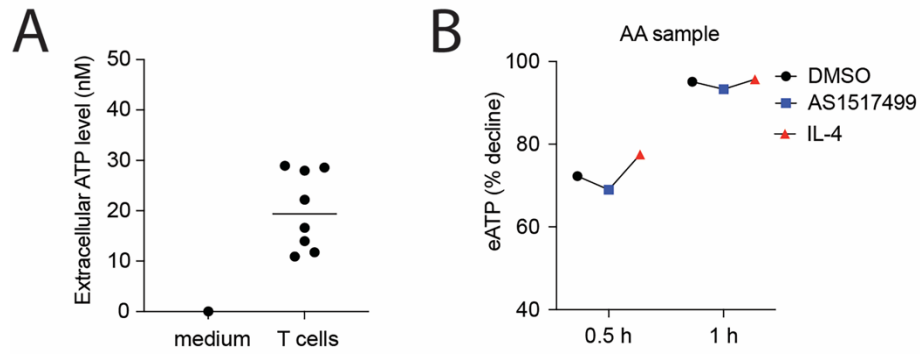


Supplemental Figure 1. IL-4 signaling prevents induction of CD39 expression on activated T cells. (A) Purified naïve and memory CD4 T cells were activated and differentiated under Th0 (TCR signaling only), Th1 (TCR signaling plus IL-12 and anti-IL-4 Ab) or Th2 (TCR signaling plus IL-4 and anti-IFN γ Ab) condition. (B) Purified total T cells were activated by anti-CD3/CD28 Dynabeads in the presence of indicated cytokines. 5 days later, CD39 cell surface expression was analyzed by flow cytometry. Data were compared by one-way ANOVA with Tukey's post hoc test.



Supplemental Figure 2. GATA3 is not recruited to the *ENTPD1* promoter.

GATA3 CHIP-seq data from in-vitro differentiated human TH1 and TH2 cells were downloaded from Cistrome (Kanhere et al., 2012). Left panel shows GATA3 binding to the *IL4* gene; right panel shows the promoter region of *ENTPD1*.



Supplementary Figure 3. Effect of CD39 expression on degradation of extracellular ATP (eATP).
 A. eATP concentrations were determined in medium and in supernatants of T cells activated for 4 days.
 B. T cells from an individual with the CD39 low-expressor A/A SNP were activated in the presence of DMSO control, AS1517499 or IL-4. On day 4, cells were resuspended in medium supplemental with 20 μ M ATP. eATP was determined after 30 minutes and one hour. Results are given as the percent decline from the original concentration.