Figure S1

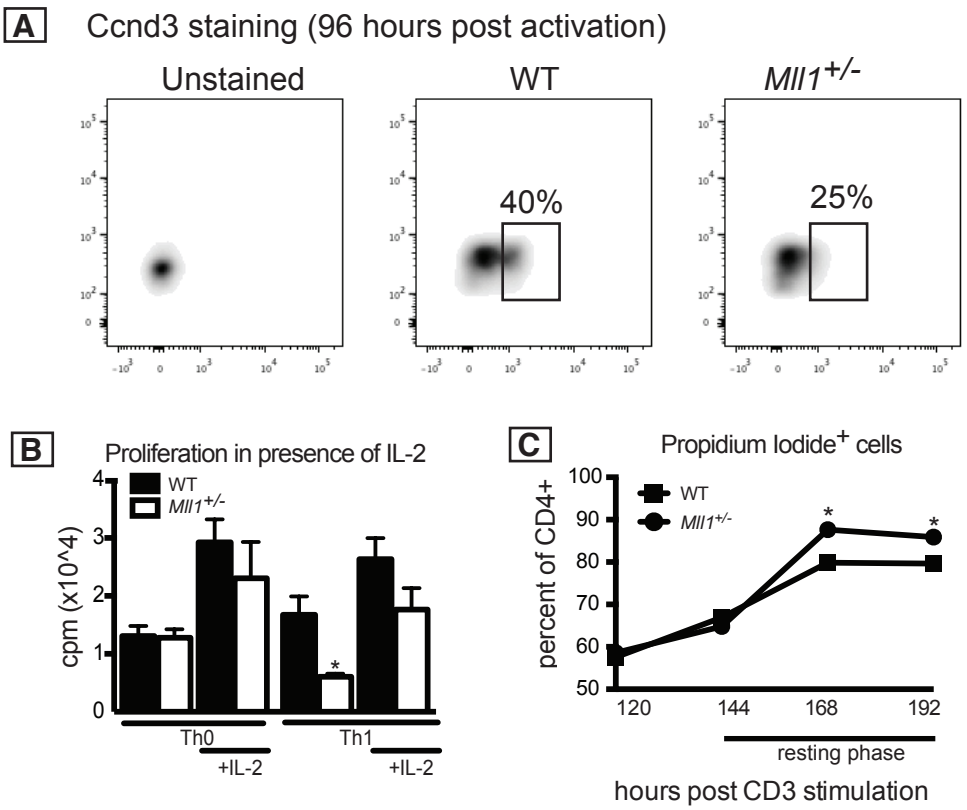
A
Ccnd3 staining (96 hours post activation)
Unstained
WT
Mll1+/-
40%
25%
B
Proliferation in presence of IL-2
WT
Mll1+/-
cpm (x10^4)
Th0
Th1
+IL-2
+IL-2
C
Propidium Iodide+ cells
WT
Mll1+/-
percent of CD4+
resting phase
hours post CD3 stimulation

Figure S2

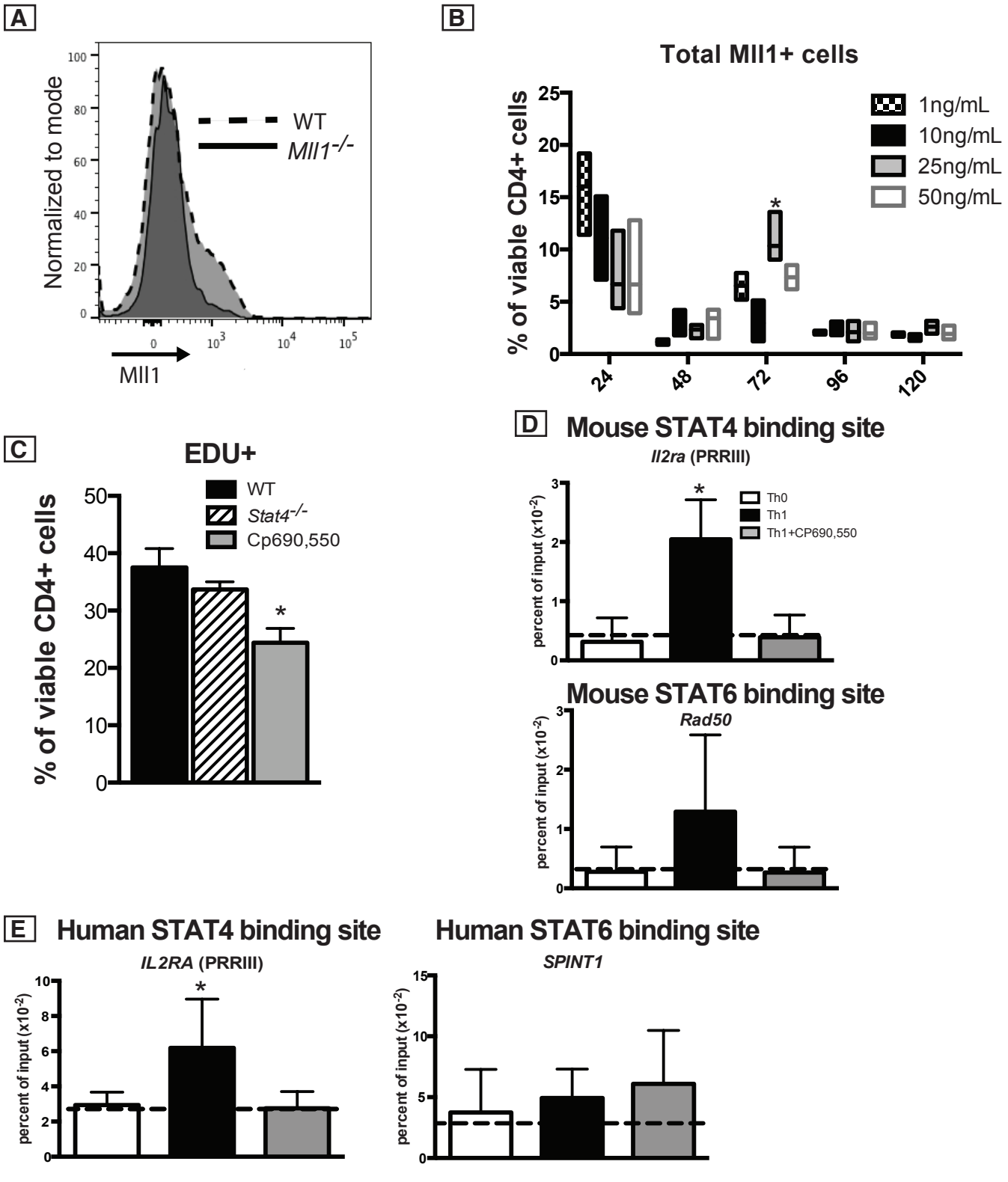
A
Normalized to mode
WT
Mll1-/-
Mll1
B
Total Mll1+ cells
% of viable CD4+ cells
1ng/mL
10ng/mL
25ng/mL
50ng/mL
24
48
72
96
120
C
EDU+
% of viable CD4+ cells
WT
Stat4-/-
Cp690,550
D
Mouse STAT4 binding site
Il2ra (PRRIII)
percent of input (x10-2)
Th0
Th1
Th1+CP690,550
Mouse STAT6 binding site
Rad50
E
Human STAT4 binding site
IL2RA (PRRIII)
Human STAT6 binding site
SPINT1

Figure S1: A) Staining of WT and Mll1+/- CD4 cells with Ccnd3 at 96 hours post activation. Data for the entire timecourse is depicted in 3F B) Proliferation of WT and Mll1+/- CD4 cells at 96 hours post activation in the presence and absence of 10 ng/mL IL-2. IL-2 was added from the beginning of the culture. *$p<0.05$ as determined by one way ANOVA. C) Assessment of cell death in WT and Mll1+/- cultures from 120 hours - 192 hours post activation. *$p<0.01$ as determined by one way ANOVA.

Figure S2: A) Staining of WT and *Mll1*$^{-/-}$ cells with anti-Mll1 antibody. B) Assessment of Mll1^{+} expression viable CD4^{+} cells in response to increasing doses of IL-12. *$p\leq0.01$ as determined by two way ANOVA. C) Incorporation of the nucleotide analog EDU into Th1 cell cultures from WT or *Stat4*$^{-/-}$ mice or WT mice treated with CP690,550 at 72 hours post activation. *$p\leq0.05$ as determined by one way ANOVA. D) Analysis of STAT4 binding to the PRRIII locus within the promoter of *Il2ra* and to a confirmed STAT6 binding site within the *Rad50* locus in murine T cells. Results are pooled from 3 separate experiments. Cells were taken for analysis at 96 hours post activation. E) Analysis of STAT4 binding to the PRRIII locus and a confirmed STAT6 binding site in human Th0 and Th1 cells and Th1 cells treated with CP690,550. Results are pooled from two donors. Cells were analyzed at 144 hours post activation.