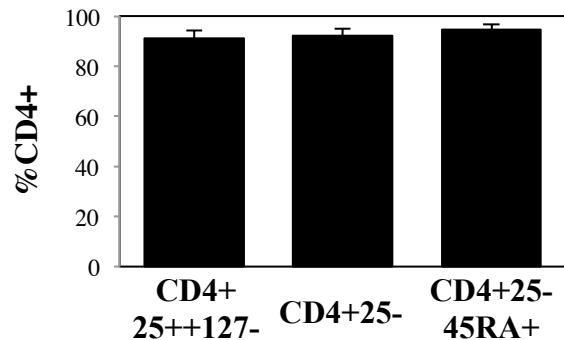
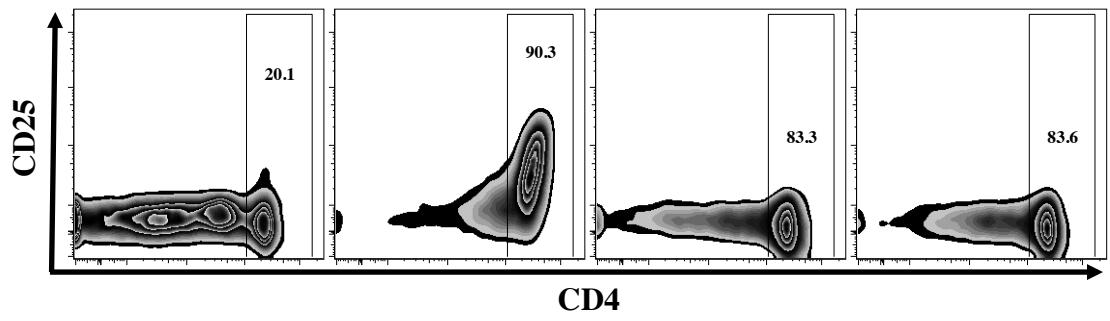
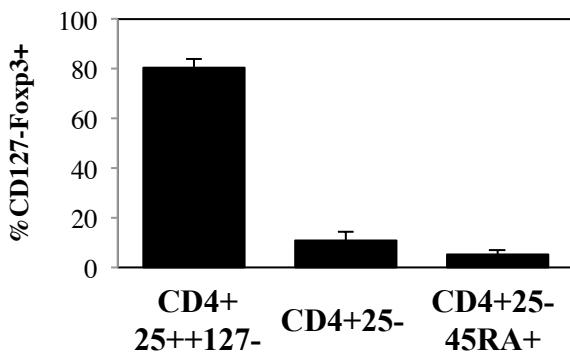
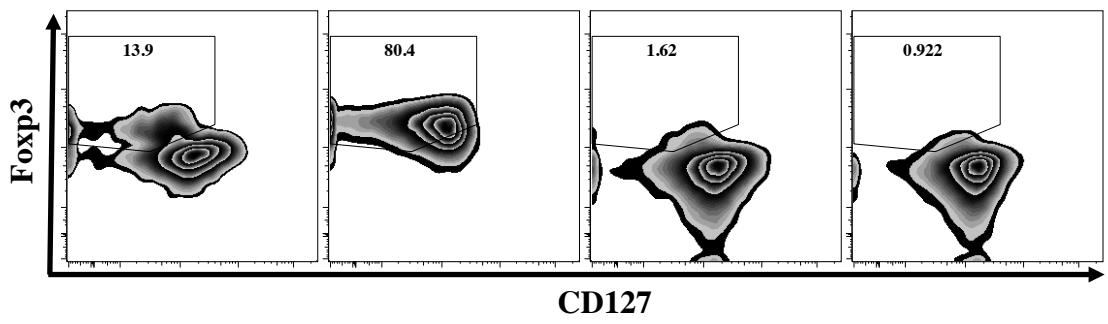
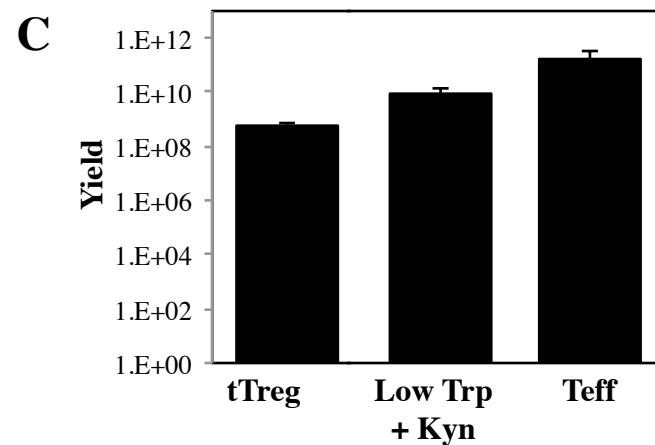
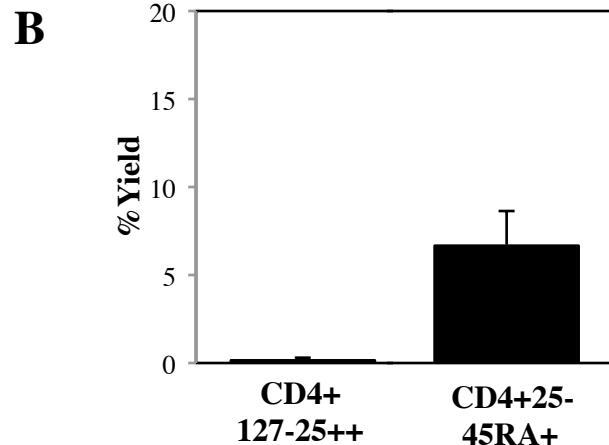
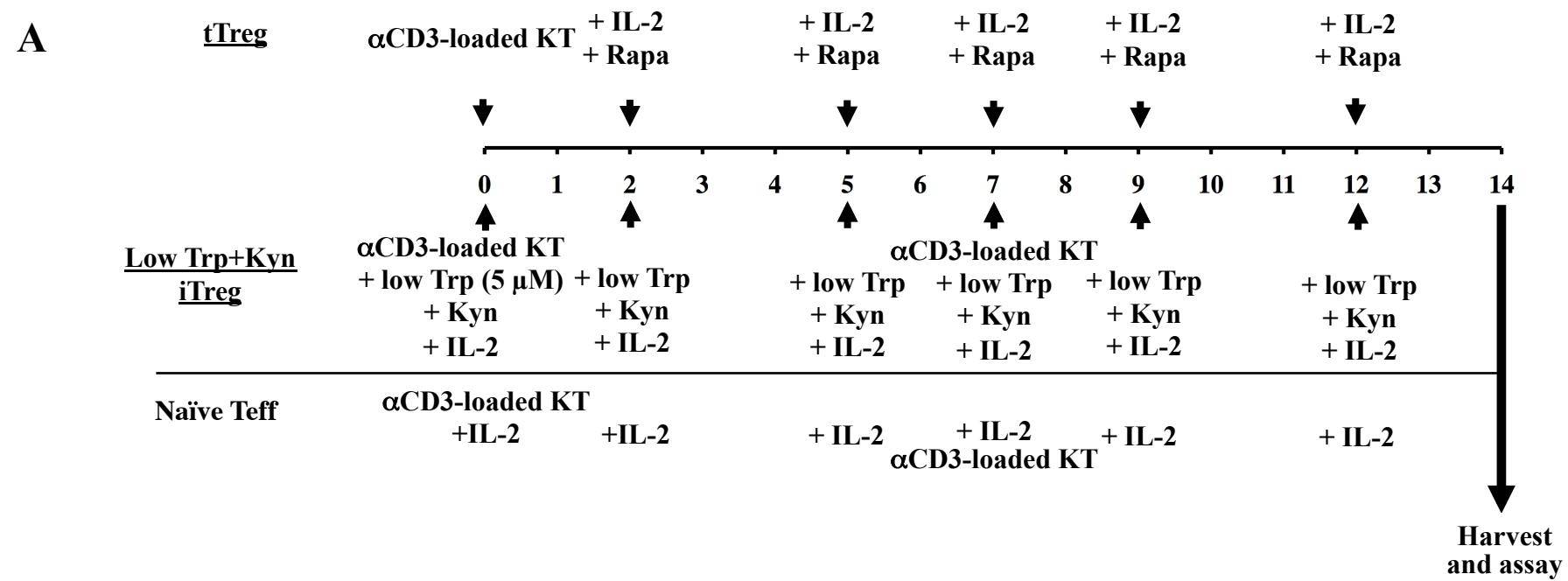


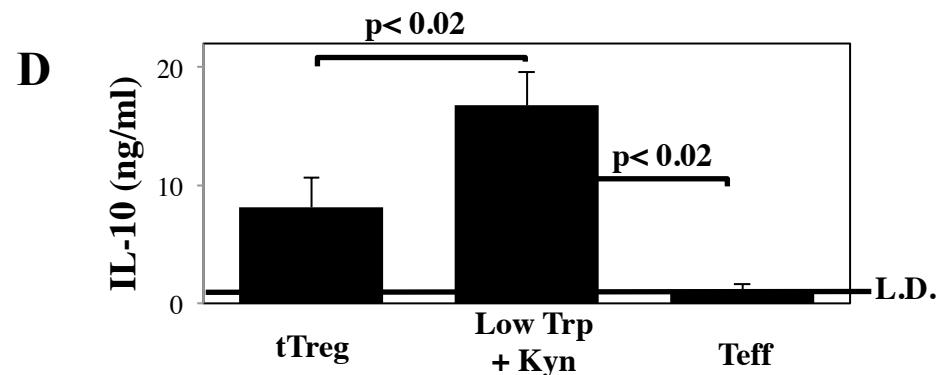
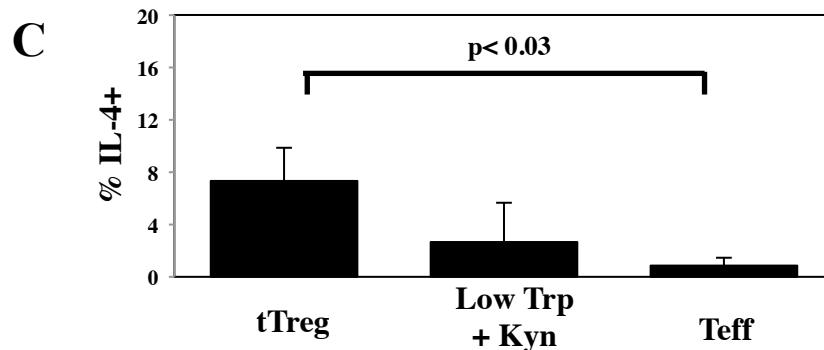
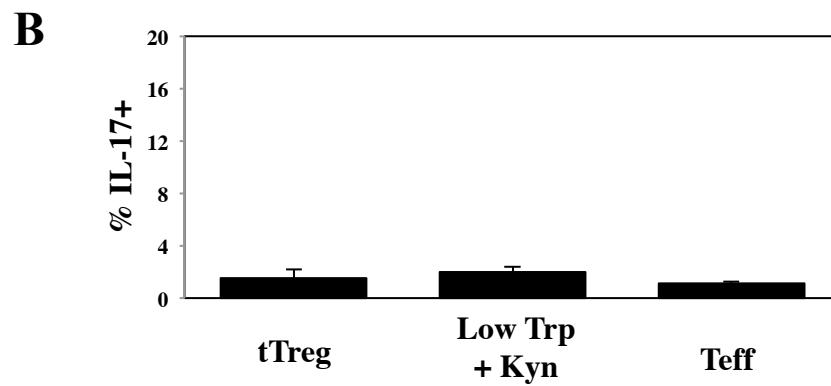
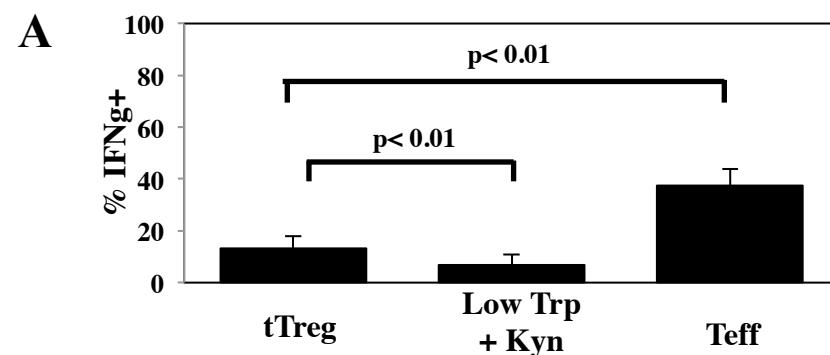
**A****B**

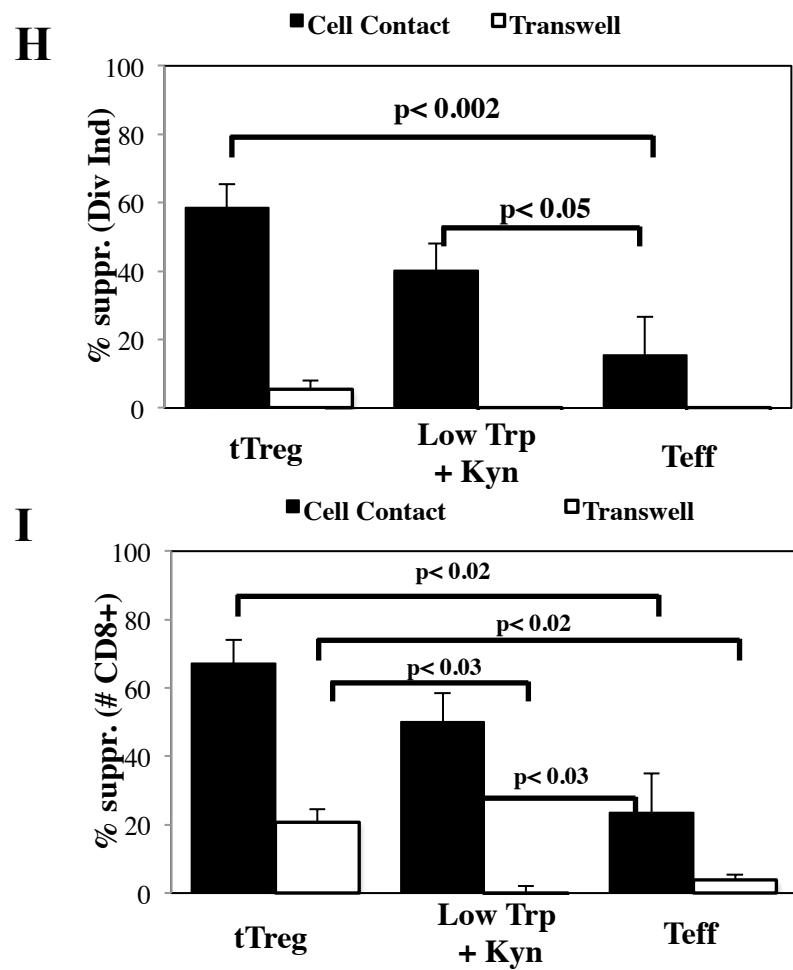
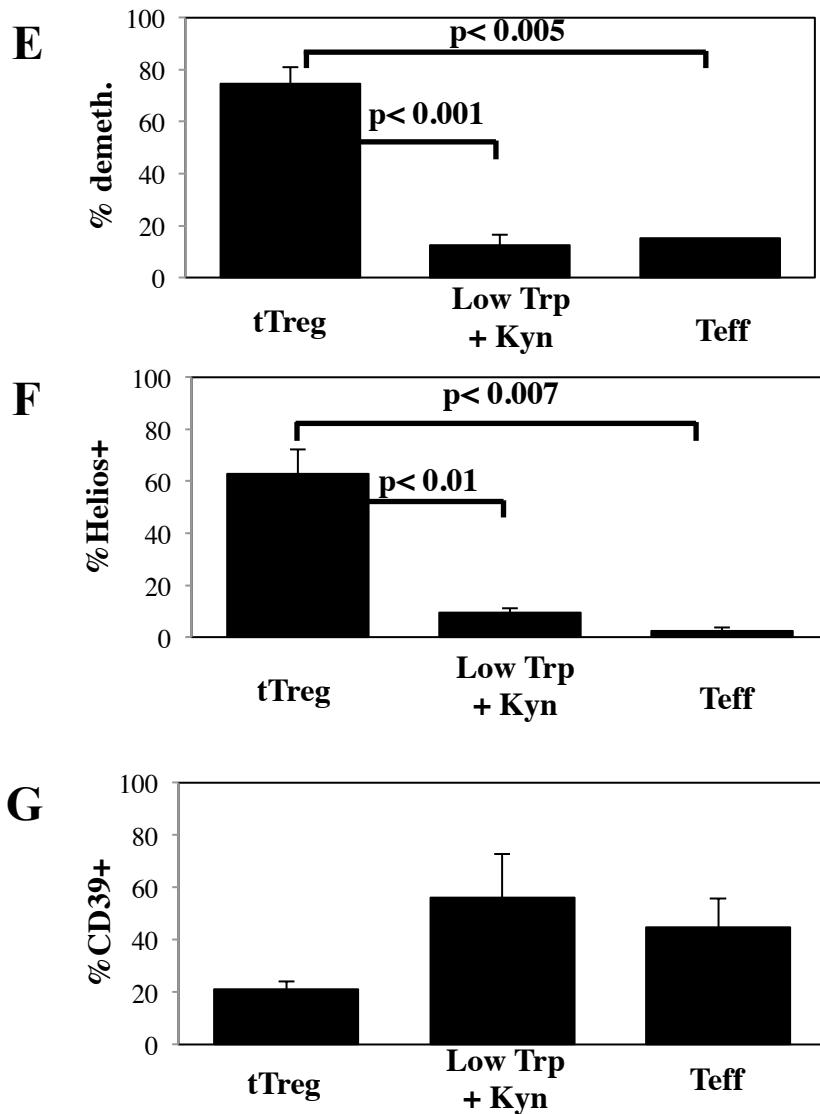
**Figure S1: Purification phenotype of cells used in this study.**

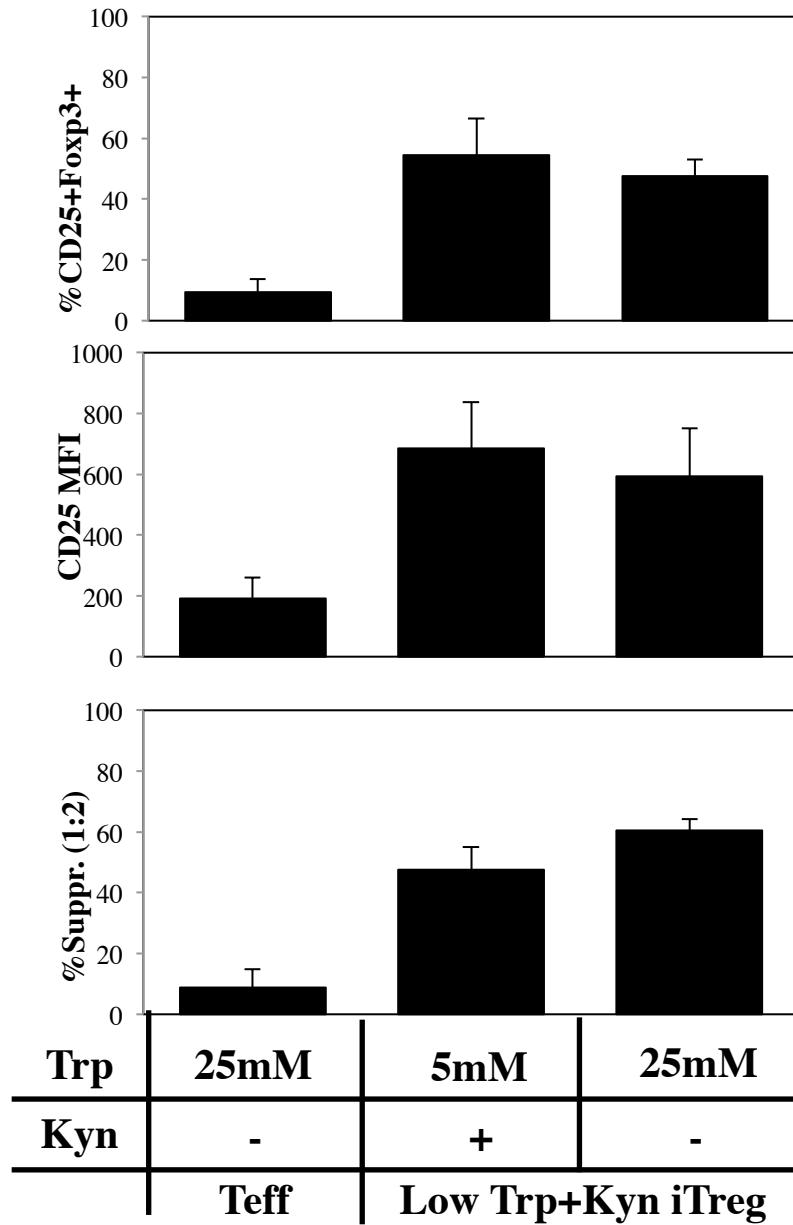
**Figure S2: Schema for in vitro expansion of tTreg, Rapa/TGF $\beta$  iTreg, naïve CD4 Teff and naïve CD4+ LT/Kyn iTreg.**



**Figure S3: Low Trp+Kyn iTreg, like tTreg, secrete IL-10 and not effector cytokines but do not have Foxp3 gene hypomethylation or Helios expression**



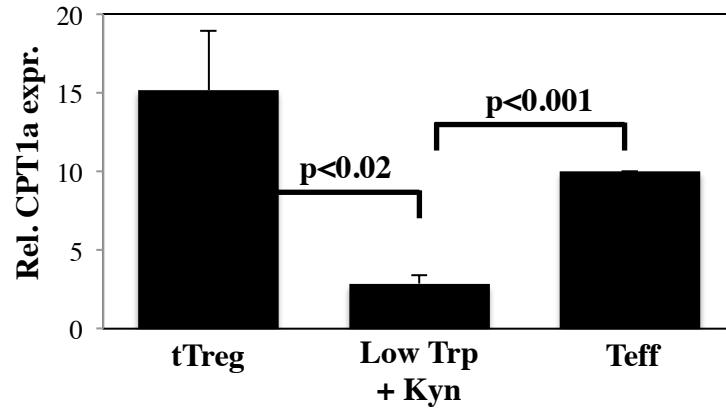




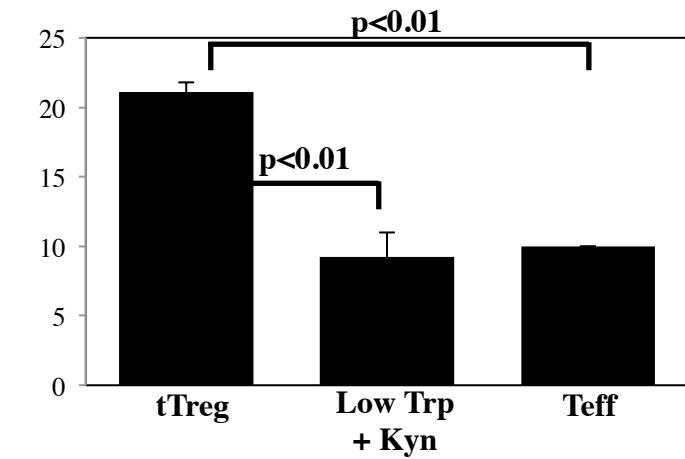
**Figure S4: Low Trp + Kyn iTreg phenotype and suppressive function are stable in vitro.**

**Figure S5: tTreg express significantly higher levels of genes involved in FAO compared to Low Trp+Kyn iTreg and Teff.**

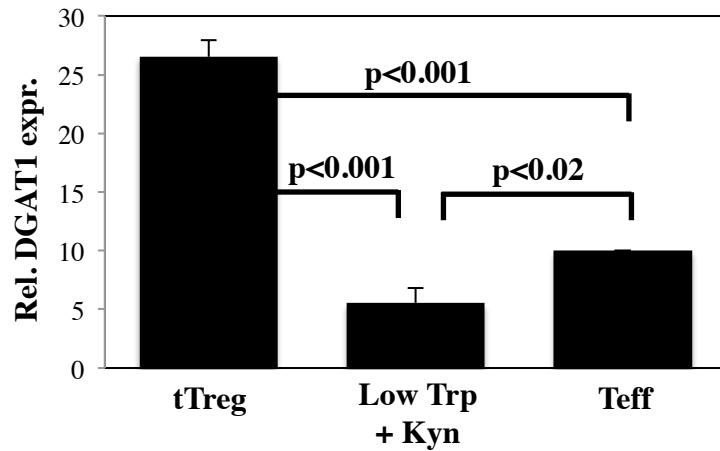
**A**



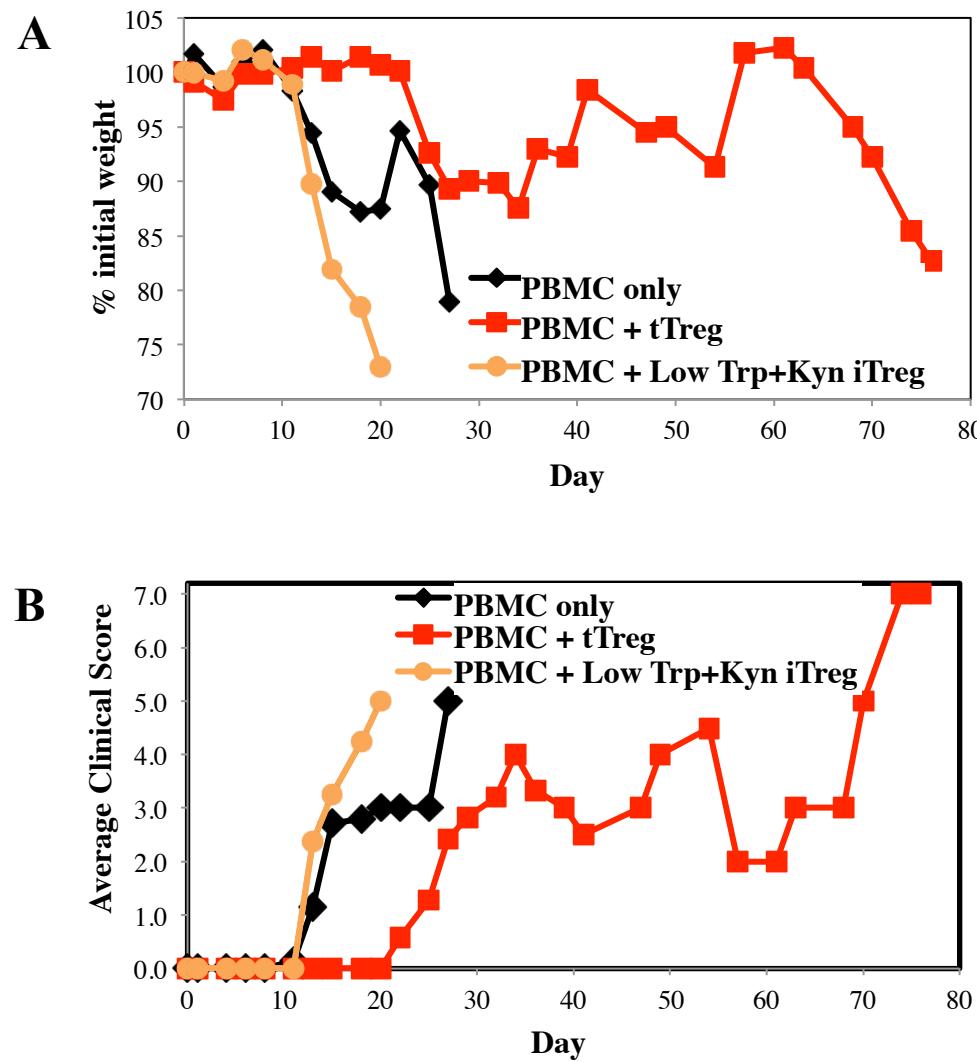
**B**



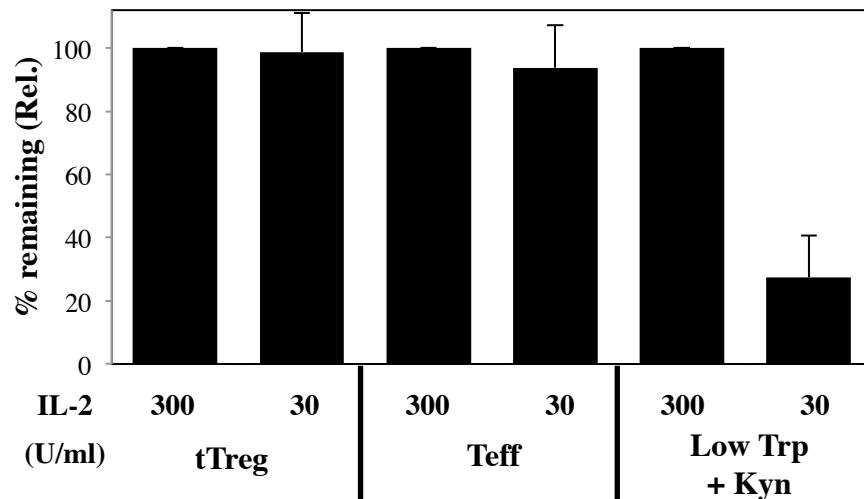
**C**



**Figure S6: Adoptive transfer of Low Trp + Kyn iTreg does not increase survival in a xenogeneic model of GVHD.**

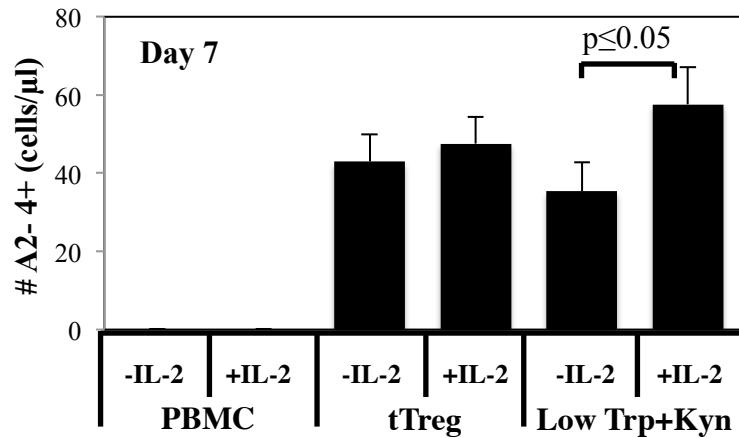


**Figure S7: Low Trp+Kyn iTregs are highly IL-2-dependent for survival.**



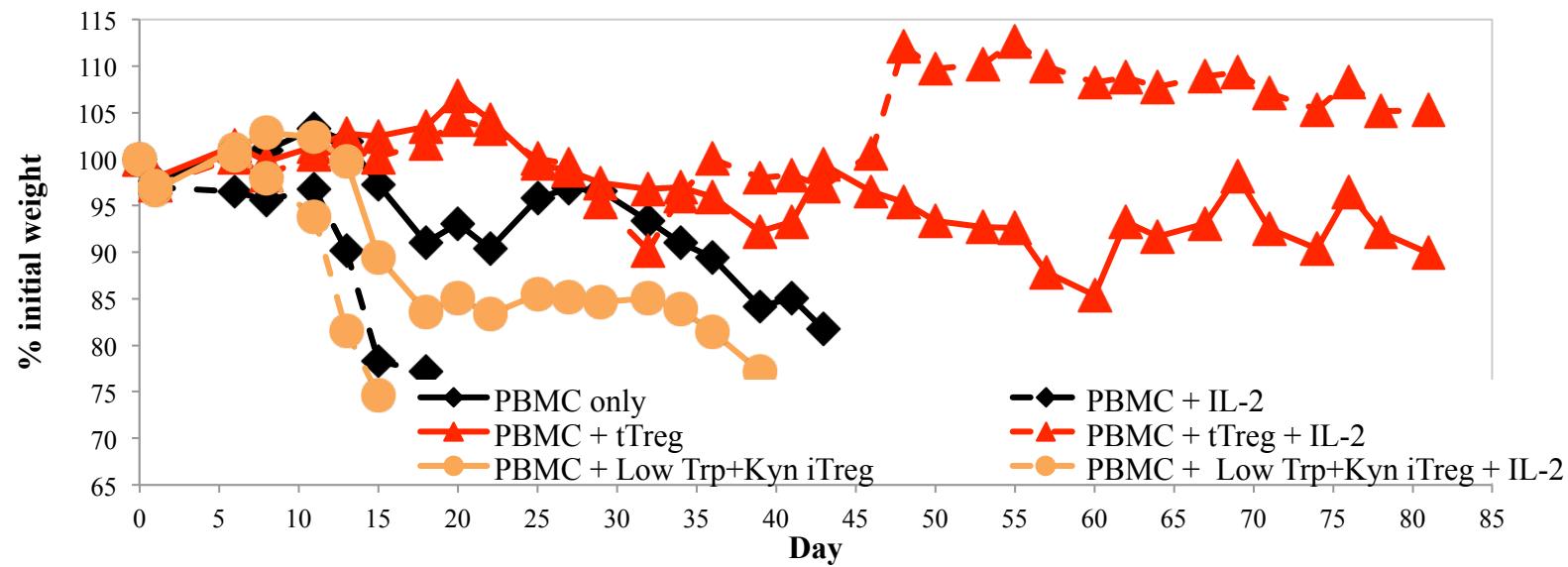
**Figure S8: Ultra-low dose IL-2 improves xenoGVHD survival in mice treated with Low Trp+Kyn iTregs, but does not increase overall recipient survival.**

A



**Figure S8: Ultra-low dose IL-2 improves xenoGVHD survival in mice treated with Low Trp+Kyn iTregs, but does not increase overall recipient survival.**

**B**



**C**

