PTPN22 modifies regulatory T cell homeostasis via GITR upregulation

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Supplemental Figures S1 and S2

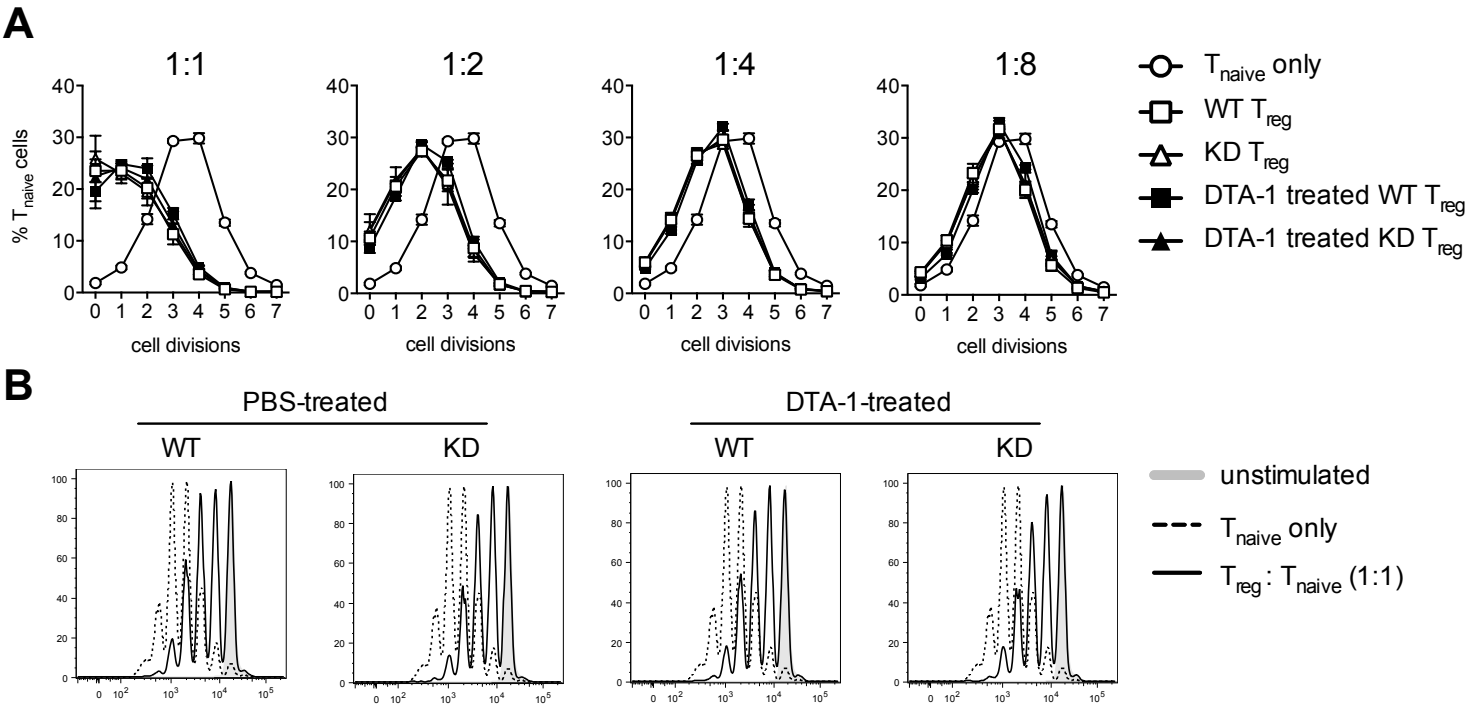

Figure S1

WT and *Ptpn22* KD Treg cells suppress the proliferation of naïve T cells *in vitro* equally well irrespective of DTA-1 pre-treatment. $CD4^+CD25^+$ T cells were isolated from WT and *Ptpn22* transgenic mice 1 week after anti-GITR (DTA-1) injection. Mice received doxycycline for 4 weeks prior to GITR stimulation and until Treg cell purification 1 week later. Treg cells were mixed at different ratios with WT naïve $CD4^+CD62L^+$ T cells labeled with a fixable eFluor450 proliferation dye and stimulated for 4 days in the presence of irradiated splenocytes and 1µg/ml anti-CD3. Unstimulated naïve $CD4^+$ T cells and naïve $CD4^+$ T cells stimulated in the absence of Treg cells were used as controls. (**A**) Frequency of responding T cells that had undergone the indicated number of divisions at different Treg cell to naïve T cell ratios (1:1, 1:2, 1:4 and 1:8). (**B**) Representative histograms for the 1:1 ratio showing the dilution of proliferation dye as analyzed by flow cytometry. Mean values +/- SEM from 4 mice per group are shown. Data are representative of 2 experiments.

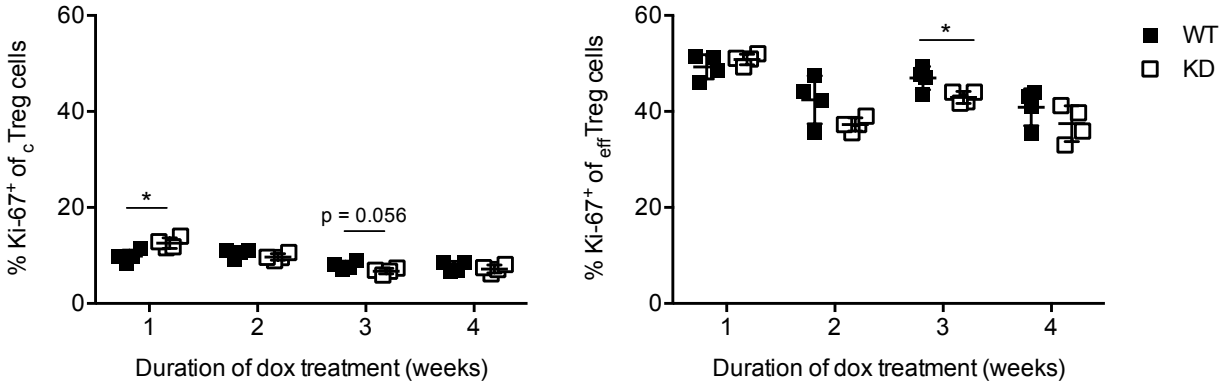

Figure S2

Ptpn22 silencing does not increase Treg cell proliferation. The frequency of Ki-67^{+} $_{c}$Treg (left panel) or $_{eff}$Treg cells (right panel) was measured in WT and *Ptpn22* KD mice 1, 2, 3 and 4 weeks after the start of doxycycline treatment. Results for 4 mice per group and per time-point are shown. Data are representative of 2 experiments. Error bars denote SEM. *, $p < 0.05$.