

Figure S1. Representative flow cytometry dot plots for $CD19^+CD5^+CD1d^{high}$ Breg cell frequency following treatment with LPS + PIM and/or TSA for 48 h *in vitro*. Breg, regulatory B cell; LPS, lipopolysaccharide; PIM, phorbol myristate acetate and ionomycin; TSA, trichostatin A; FITC, fluorescein isothiocyanate; PerCP, peridinin-chlorophyll protein.

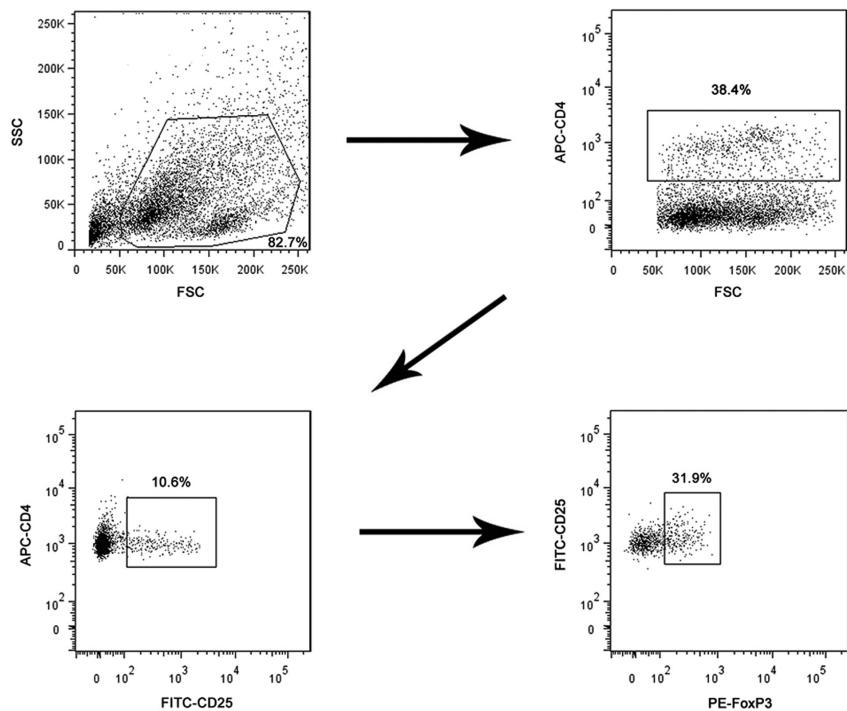


Figure S2. Representative flow cytometry dot plots for the frequency of IL-10 and TGF- β 1-positive Breg cells *in vitro* following treatment with LPS + PIM and/or TSA. Breg, regulatory B cell; LPS, lipopolysaccharide; PIM, phorbol myristate acetate and ionomycin; TSA, trichostatin A; PE, phycoerythrin; APC, allophycocyanin.

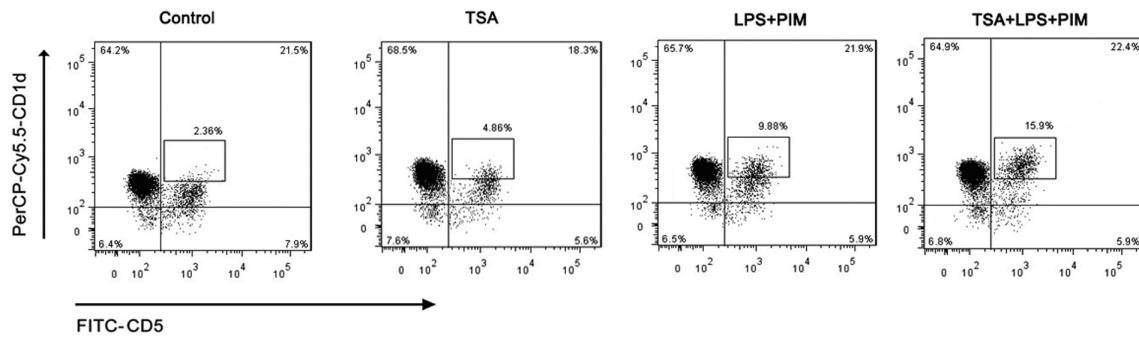


Figure S3. Identification of splenic CD4⁺ T cells and Tregs. Flow cytometry plots illustrating the gating strategy used to identify CD4⁺ T cells and Tregs. Tregs, regulatory T cells; FSC, forward scatter; SSC, side scatter; FITC, fluorescein isothiocyanate; PE, phycoerythrin; APC, allophycocyanin; Foxp3, forkhead box protein p3.

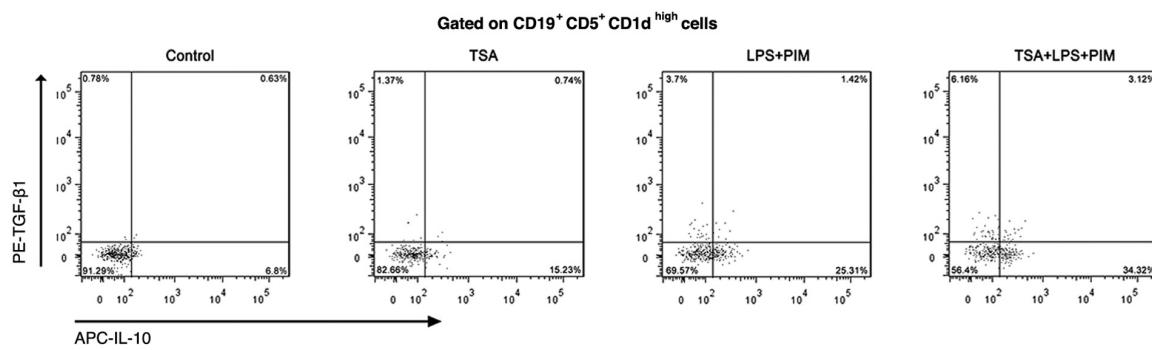


Figure S4. Representative flow cytometry dot plots for the frequency of IL-10-expressing cells in CD4⁺ T cells *in vitro*. TSA, trichostatin A; mAb, monoclonal antibody; PE, phycoerythrin; APC, allophycocyanin.

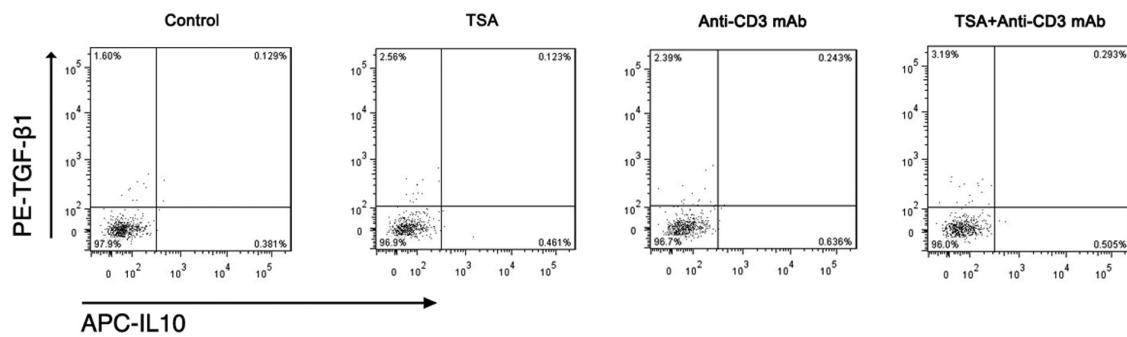


Figure S5. Representative flow cytometry dot plots for the frequency of IL-10-expressing cells in Foxp3⁺ Tregs *in vitro*. Treg, regulatory T cell; Foxp3, forkhead box protein p3; TSA, trichostatin A; mAb, monoclonal antibody; PE, phycoerythrin; APC, allophycocyanin.

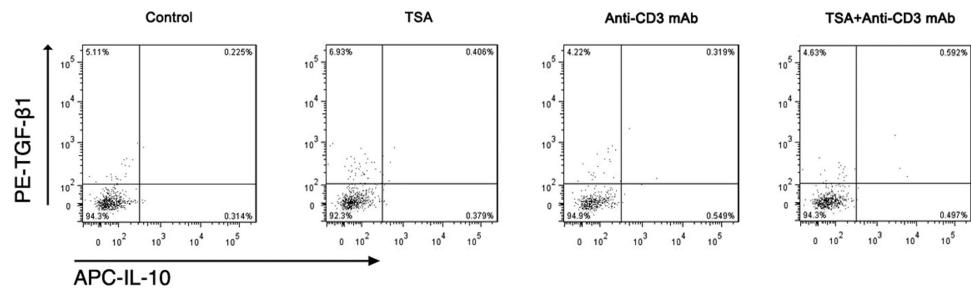


Figure S6. Representative flow cytometry dot plots for $CD19^+CD5^+CD1d^{high}$ Breg cell proportion following treatment with TSA or TSA combined with AS101/anti-CD20 in a heart transplant experiment model. Breg, regulatory B cell; TSA, trichostatin A; PerCP, peridinin-chlorophyll protein.

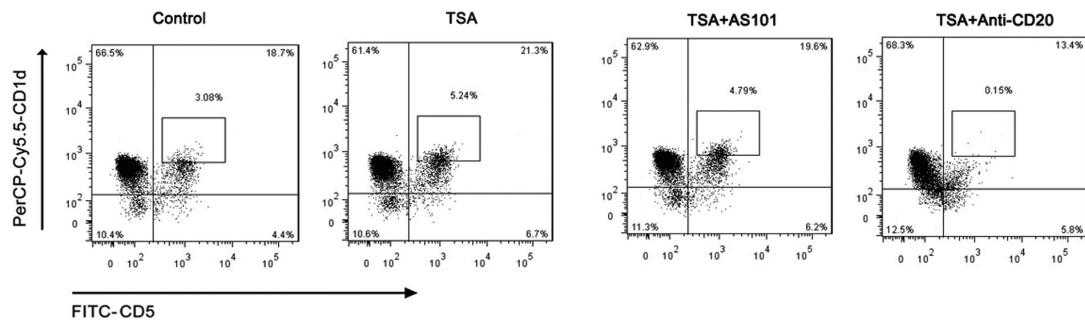


Figure S7. Representative flow cytometry dot plots for the frequency of IL-10-producing CD19⁺CD5⁺CD1d^{high} Bregs in a heart transplant experiment model. Breg, regulatory B cell; TSA, trichostatin A; mAb, monoclonal antibody; PE, phycoerythrin; APC, allophycocyanin.

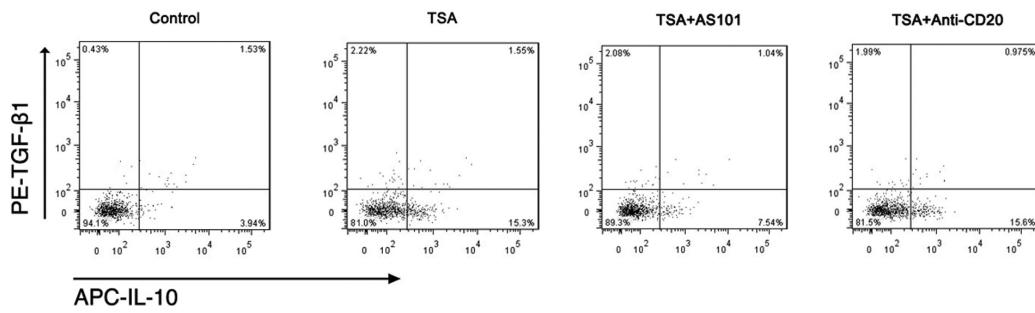


Figure S8. Representative flow cytometry dot plots for the positive cells proportion of IL-10 in the CD19⁺ B cell population in a heart transplant experiment model. TSA, trichostatin A; mAb, monoclonal antibody; PE, phycoerythrin; APC, allophycocyanin.

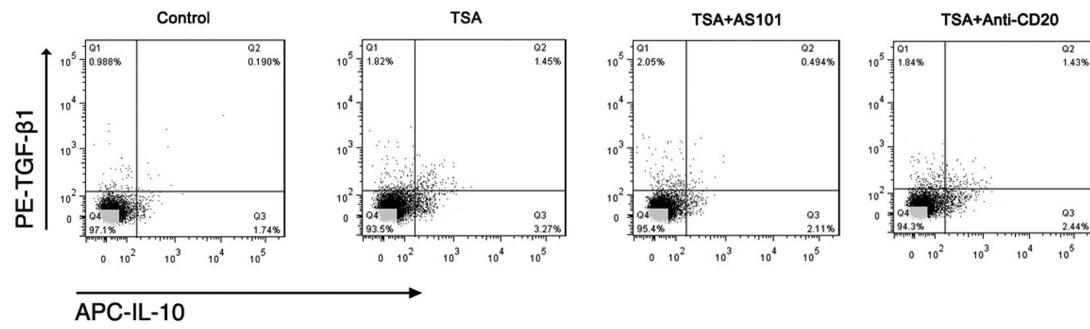


Figure S9. Representative flow cytometry dot plots for the frequency of IL-10-producing cells in the CD4⁺ T cell population in a heart transplant experiment model. TSA, trichostatin A; mAb, monoclonal antibody; PE, phycoerythrin; APC, allophycocyanin.

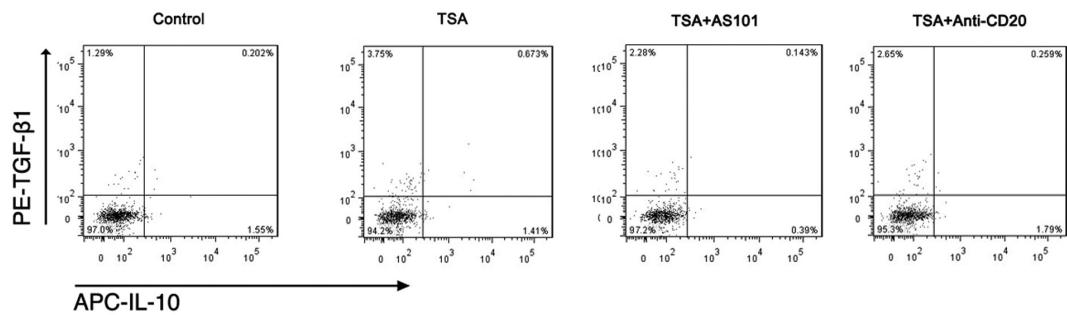


Figure S10. Representative flow cytometry dot plots for the frequency of IL-10-producing cells among Foxp3⁺ Tregs in a heart transplant experiment model. Treg, regulatory T cell; Foxp3, forkhead box protein p3; TSA, trichostatin A; mAb, monoclonal antibody; PE, phycoerythrin; APC, allophycocyanin.

