## **Supplemental Figures**



Figure S1. Tim-1 and CD40 signaling together strongly promoted B cell IL-10 production while Tim-1 defect in B cells reduced IL-10 production. Purified splenic CD19<sup>+</sup> B cells from 2-3 month-old WT and Tim-1<sup>-/-</sup> mice were cultured in the presence of anti-Tim-1 (clone 5F12), anti-CD40 or both. After 3 days, IL-10 production in culture supernatants was measured by CBA. \* P < 0.01; n = 3.



Figure S2. Transfer of Tim-1<sup>+</sup> Bregs but not Tim-1<sup>-</sup> B cells reduced EAE severity. Splenic Tim-1<sup>+</sup> and Tim-1<sup>-</sup> CD19<sup>+</sup> B cells (2 x 10<sup>6</sup>) purified from WT mice were transferred into WT mice. One day later, the mice were immunized with MOG35-55/CFA to induce EAE. Mice (n = 5 per group) were scored daily for clinical signs of EAE. \* P < 0.05.



**Figure S3. Tim-1**<sup> $\Delta$ mucin</sup> mice at 12<sup>+</sup> months of age showed increased Tim-1<sup>+</sup> Bregs. Frequencies of Tim-1<sup>+</sup> Bregs in spleens of 12<sup>+</sup>-month old WT, Tim-1<sup>-/-</sup>, and Tim-1<sup> $\Delta$ mucin</sup> mice were determined by flow cytometry. Representative histograms and bar graphs with cumulative data are shown. \* P < 0.01; n ≥ 3 per group.



Figure S4. Tim-1<sup>-/-</sup> mice, like Tim-1<sup> $\Delta$ mucin</sup> mice at 12<sup>+</sup> months of age developed hyper-activated IFN- $\gamma^+$  and IL-17<sup>+</sup> T cells and had more mononuclear cell infiltration in livers. A) Splenic CD4<sup>+</sup> T cell phenotypes in 12<sup>+</sup>-month old WT, Tim-1<sup>-/-</sup>, and Tim-1<sup> $\Delta$ mucin</sup> mice were determined by flow cytometry. B) Single cell suspension of livers from mice in A showed increased accumulation of mononuclear cells as determined by flow cytometry. n ≥ 3 per group.