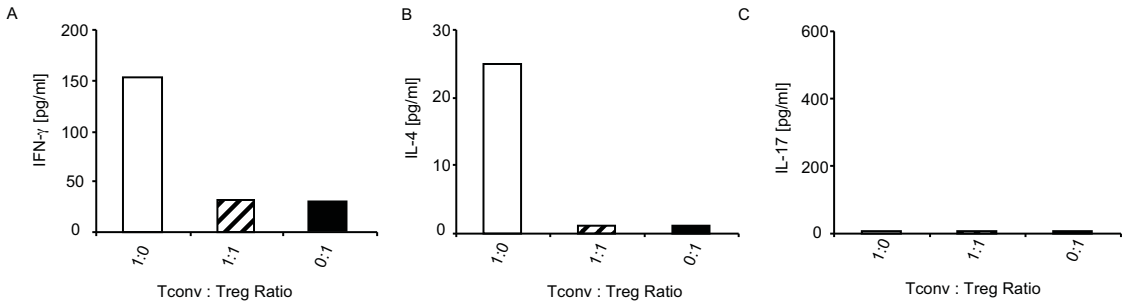
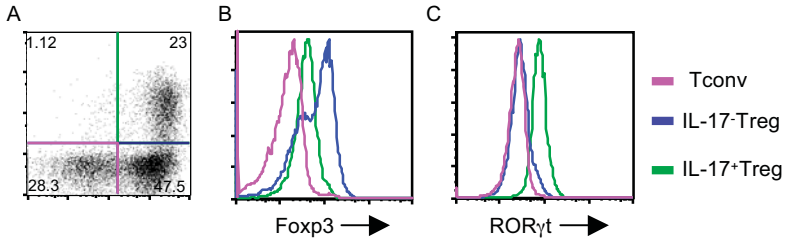
S1



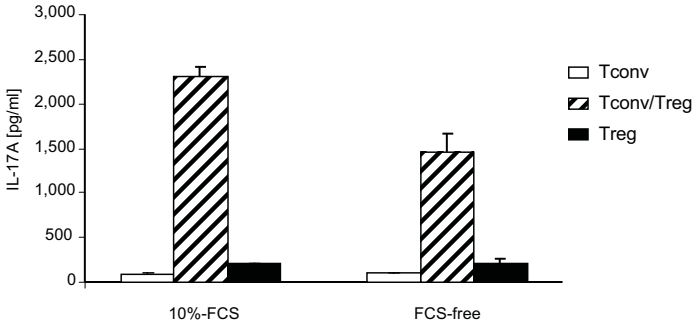
S1. Co-culture of Tconv and Treg with anti-CD3 and anti-CD28 mAbs in the absence of APC fails to generate IL-17. Tconv cells cultured with or w/o Treg cells were stimulated with anti-CD3 and anti-CD28 mAbs, supernatants were collected on day 3 of culture and production of IFN-γ, IL-4 and IL-17 was measured by ELISA.

S2



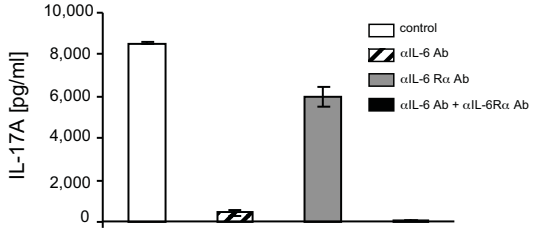
S2. Expression of Foxp3 and RORgt in IL-17+Treg cells at day 5 of culture. Thy1.1- Tconv and Thy1.1+ Treg were mixed at 1:1 ratio and cultured with APC and anti-CD3 mAb for 5 days. Production of IL-17A was assessed by intracellular staining (A). Expression levels of Foxp3 (B) and RORγt (C) on Thy1.1- Tconv cells, Thy1.1+IL-17- Treg cells and Thy1.1+IL-17+ cells were analyzed by flow cytometry.

S3



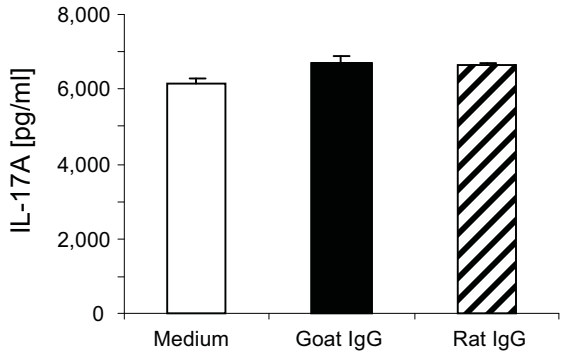
S3. Co-culture of Tconv and Treg in FCS-free medium results in IL-17 production but to a lesser extent compared to the co-culture carried out in 10% FCS medium. Tconv cultured with or w/o Treg were stimulated with anti-CD3 mAb in the presence of APC. The cultures were carried out either in FCS-free X-VIVO medium or RPMI medium containing 10%FCS. Supernatants were collected on day 3 of culture and production of IL-17 was measured by ELISA.

S4



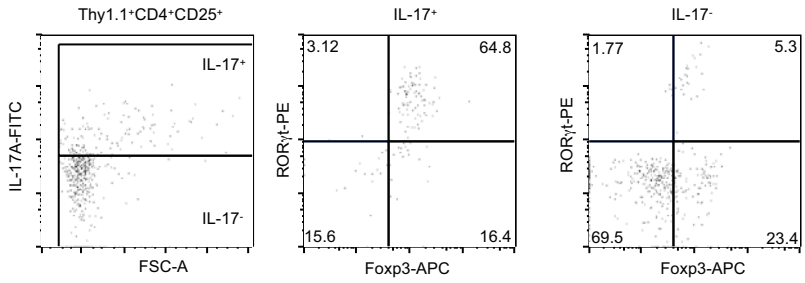
S4. Neutralizing antibodies for IL-6 and blocking antibodies for IL-6Rα abrogate IL-17 production induced by IL-6. Tconv cultured with APC were stimulated with anti-CD3 mAb in the presence of TGF-β and IL-6 (Th17 polarizing conditions). Neutralizing antibody for IL-6 and blocking antibody for IL-6Rα were added individually or in combination and production of IL-17 was measured by ELISA.

S5



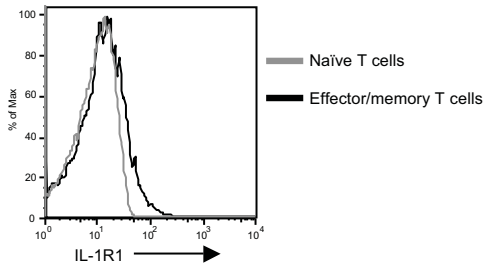
S5. Isotype control antibodies have no effects on the production of IL-17 by Treg. Tconv and Treg were mixed in 1:1 ratio, cultured with anti-CD3 mAb and APC in the presence of media, goat IgG isotype control for IL-1β neutralizing antibody and IL-6R blocking antibody, or Rat IgG isotype control for IL-6 neutralizing antibody. IL-17A was assessed by ELISA.

S6



S6. IL-17$^+$ Treg express RORγt and Foxp3. Treg cells from B6.PL congenic mice (Thy1.1$^+$) were adoptively transferred into IL-1R1KO mice, which were subsequently immunized with KLH in IFA. Lymphocytes were collected three days after immunization and expression of RORγt and Foxp3 were analyzed by intracellular staining and flow cytometry.

S7



S7. Expression of IL-1R1 on naïve and effector/memory CD4+ T cells. Freshly isolated CD4+ T cells were simultaneously stained with PE-Cy7-anti-CD25, FITC-anti-CD44, APC-anti-CD62L and PE-anti-IL-1R1 antibodies. Expression of IL-1R1 was examined on gated naïve (CD25-CD62L+) and effector/memory (CD44+CD62L-) CD4+ T cell populations.