

Figure S1. FPSP and FPSN clones have equally demethylated TSDR regions. Genomic DNA was extracted from female-derived primary FPSP, FPSN and FNSN clones and analyzed for TSDR methylation. Shown is the mean + SEM of % methylation of 10 cytosine guanine dinucleotides (CpGs) of the human Treg specific demethylation region (TSDR). n= 2-4 clones per group. Statistical analysis was done with the one-way ANOVA followed by Tukey's post-test.

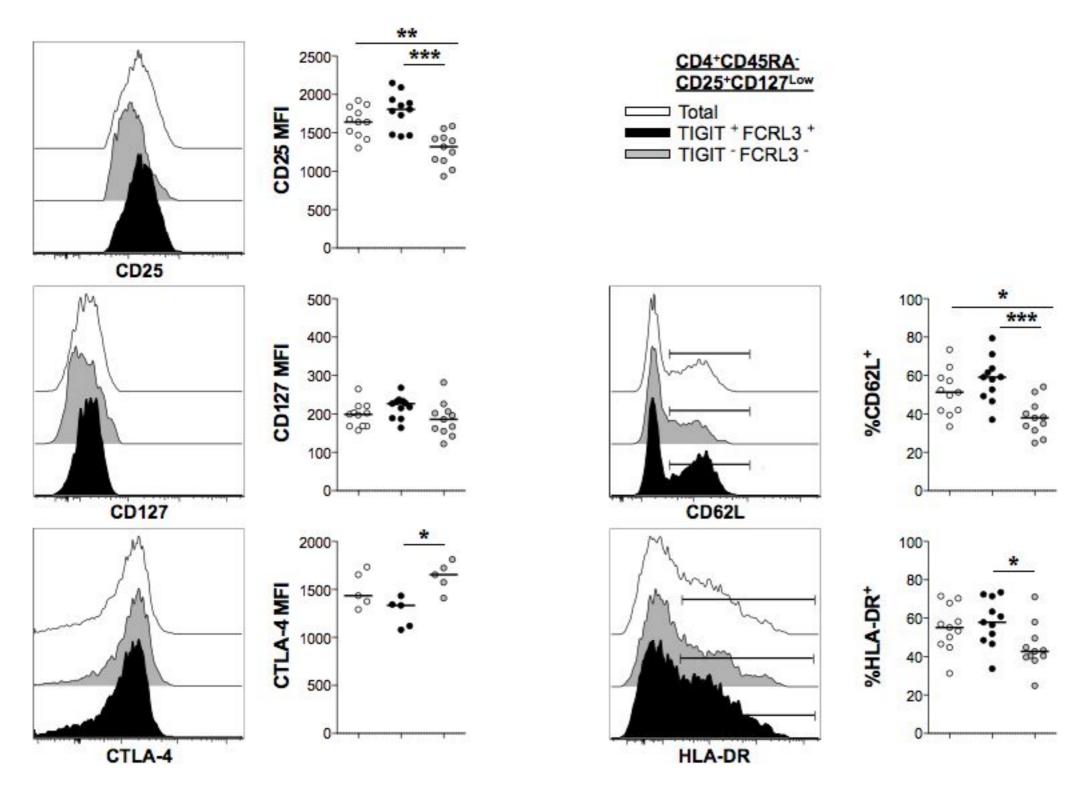


Figure S2. Analysis of the expression of Treg-associated molecules on TIGIT+FCRL3+ vs. TIGIT-FCRL3- Treg cells. PBMCs from healthy subjects were analyzed ex vivo by flow cytometry. Shown are representative FACS plots as well as the combined analysis of marker expression on Treg subsets of 11 healthy donors. Statistical analysis was done with the one-way ANOVA followed by Tukey's post-test

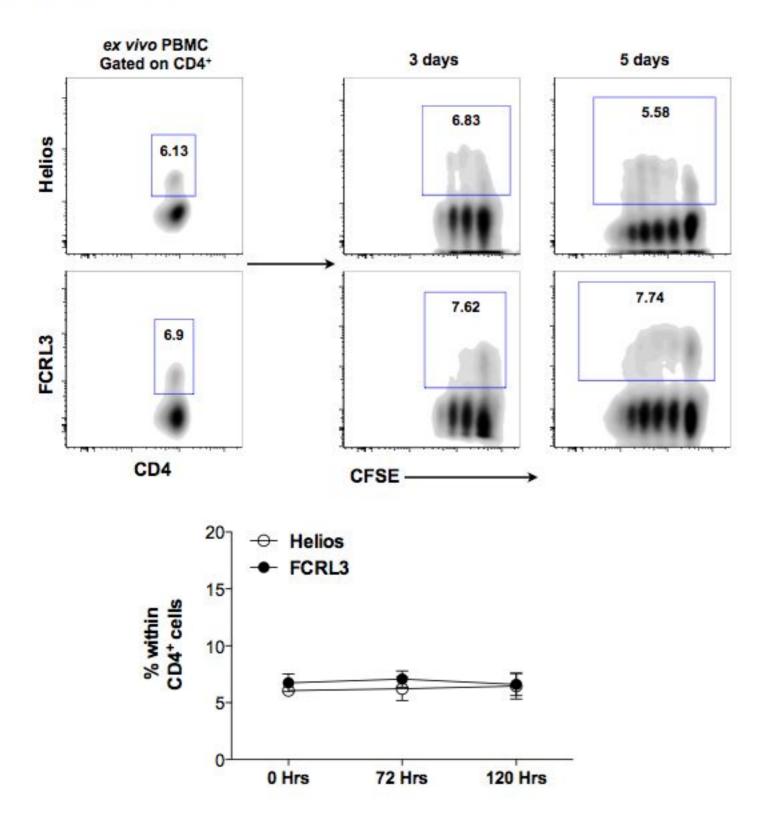
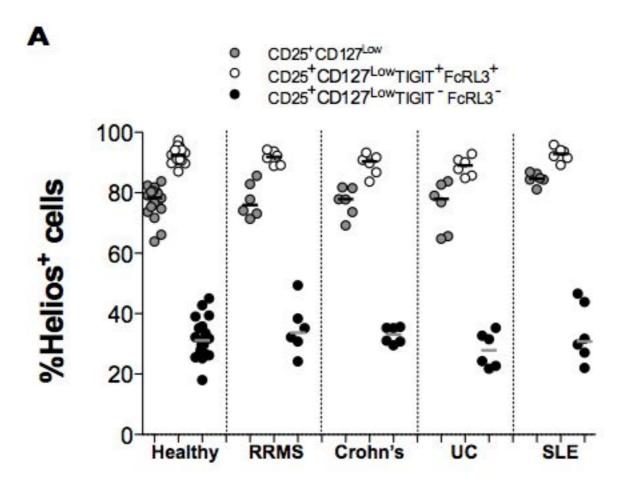


Figure S3. Helios and FCRL3 are not induced on Tconv upon in vitro activation of PBMC. Whole PBMC from 3 healthy individuals were labeled with CFSE and stimulated with anti-CD3/anti-CD28-coated beads at a ratio of 2 beads: 1 cell for 5 days. Shown is the expression of Helios and FCRL3 on CD4+ cells at day 0, 3 and 5.



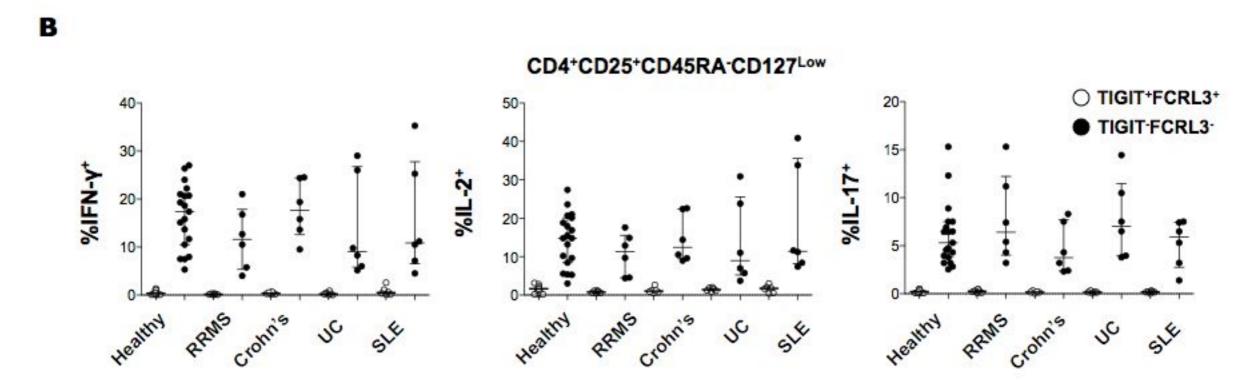


Figure S4. Phenotype and cytokine production in TIGIT+FCRL3+ vs. TIGIT-FCRL3- Treg cells of healthy and autoimmune donors. PBMCs from untreated patients with relapsing-remitting multiple sclerosis (n=6), Crohn's disease (n=6), ulcerative colitis (n=6), and treated systemic lupus erythematosus (n=6; SLEDAI-2k >6) and their age and sexmatched healthy controls (n=19) were analyzed by flow cytometry directly ex vivo (A) or after incubation with PMA (25 ng/ml), ionomycin (1 μg/ml) and GolgiStop for 4hrs (B). Shown is A) the percentage of Helios-expressing cells in TIGIT/FCRL3-identified Treg subsets, and B) the frequency of cytokine-producing cells in the indicated subsets.