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Supplemental information

STING is an intrinsic checkpoint inhibitor that restrains the T_H17 cell pathogenic program

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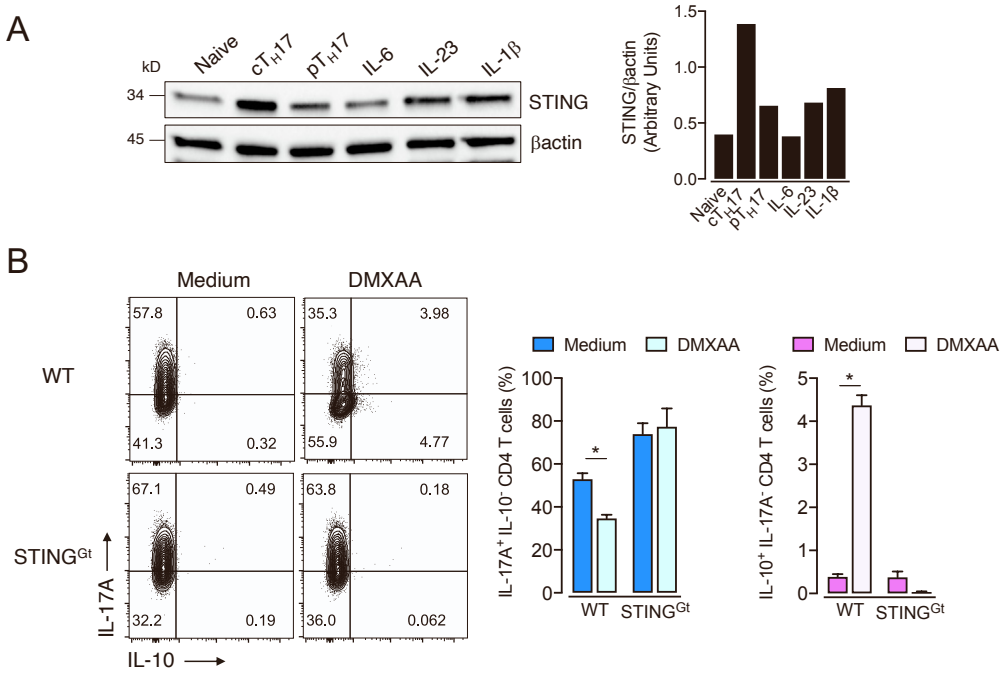

Figure S1. STING expression is supported by the combination of IL-6 and TGFβ and a point mutation in STING phenocopies the effects observed with STING-deficient T_H17 cells. Related to Figure 2. (A) STING protein levels were evaluated in CD4 T cells cultured under cT_H17 or pT_H17-conditions or in the presence of rmIL-6, rmIL-23 and rmIL-1β alone for 72 h by immunoblot analysis. βactin was used as the loading control. (B) Naive CD4 T cells from WT or $STING^{Gt}$ mice were differentiated into cT_H17 cells in the presence of 10 μM DMXAA for 72 h, followed by flow cytometric analysis ($n = 3$). Data are representative of two independent experiments and shown as mean ± SEM. *$P < 0.05$ as determined by two-way ANOVA (B) followed by Tukey's post hoc test.

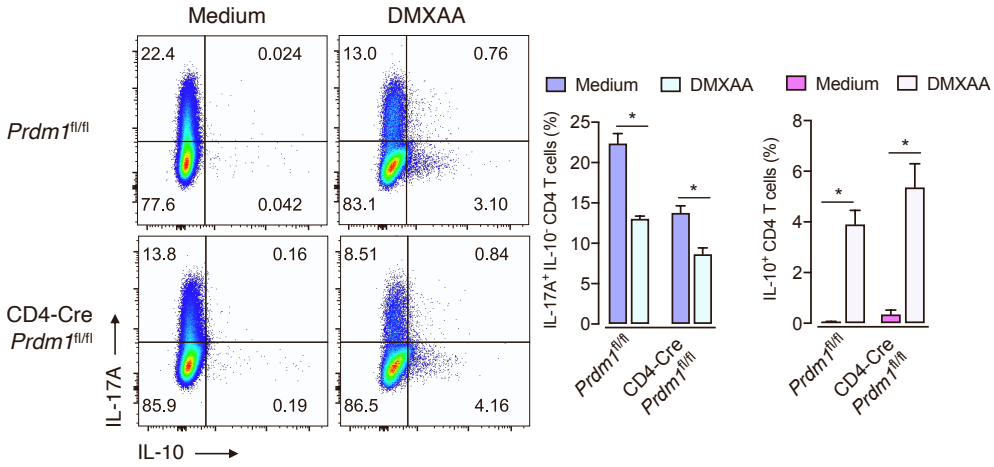

Figure S2. Blimp-1 is not required for STING-induced IL-10 production in T_H17 cells. Related to Figure 3. Naive CD4 T cells from WT (*Prdm1*$^{fl/fl}$) and Blimp-1-deficient (CD4-Cre *Prdm1*$^{fl/fl}$) mice were cultured under cT_H17-polarizing conditions in the presence or absence of 10 μM DMXAA for 72 h, followed by flow cytometric analysis (n = 3-5). Data are representative of two independent experiments and shown as mean ± SEM. *P < 0.05 as determined by two-way ANOVA followed by Tukey's post hoc test.

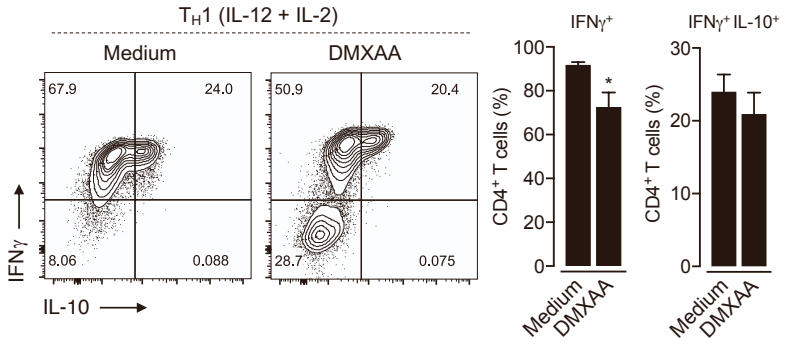

Figure S3. STING activation does not alter IL-10 expression in T_H1 cells. Related to Figure 3. Naive CD4 T cells were cultured under T_H1-skewing conditions in the presence or absence of 10 μM DMXAA for 72 h, followed by flow cytometric analysis (n = 3). Data are representative of two independent experiments and shown as mean ± SEM. *P < 0.05 as determined by two-tailed Student's t-test.

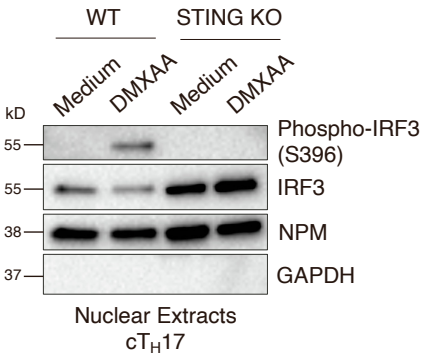

Figure S4. Active IRF3 is localized in the nuclear compartment of T_H17 cells in a STING-dependent manner. Related to Figure 4. WT or STING-deficient naive CD4 T cells were differentiated into cT_H17 cells for 72 h in the presence or absence of 10 μM DMXAA and collected for nuclear fraction separation. Phospho-IRF3 and IRF3 levels were analyzed by immunoblot analysis. Nucleophosmin (NPM) was used as nuclear loading control. Data are representative of two independent experiments.