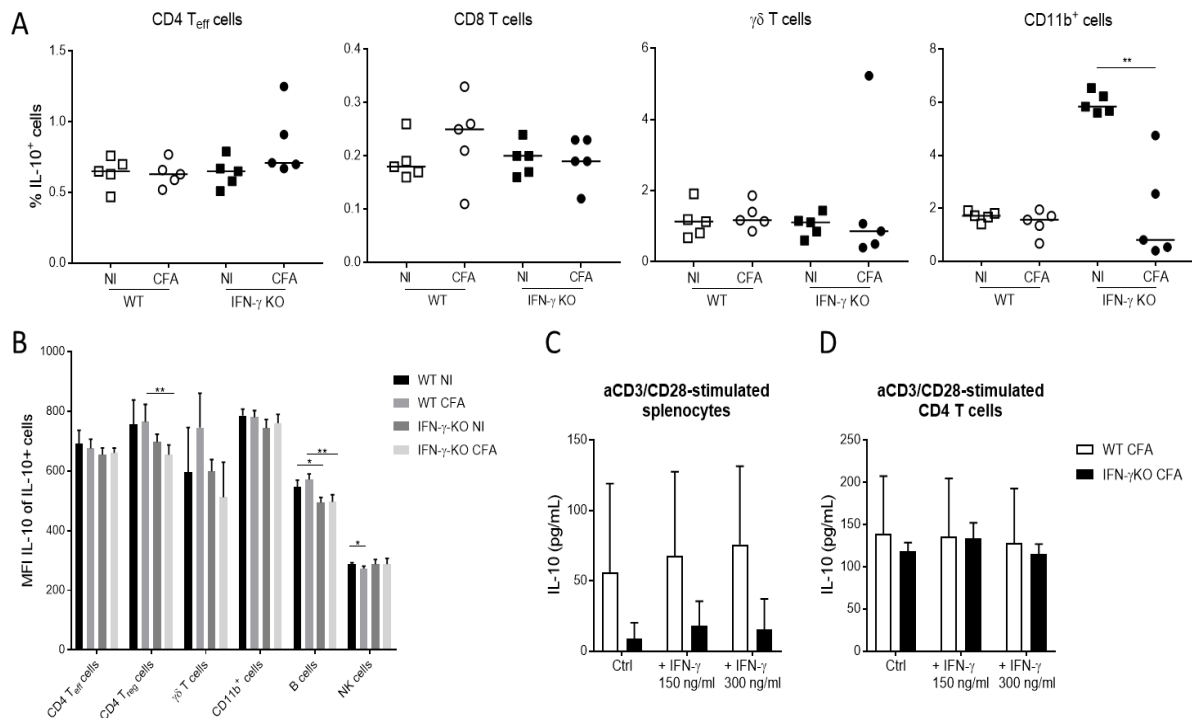
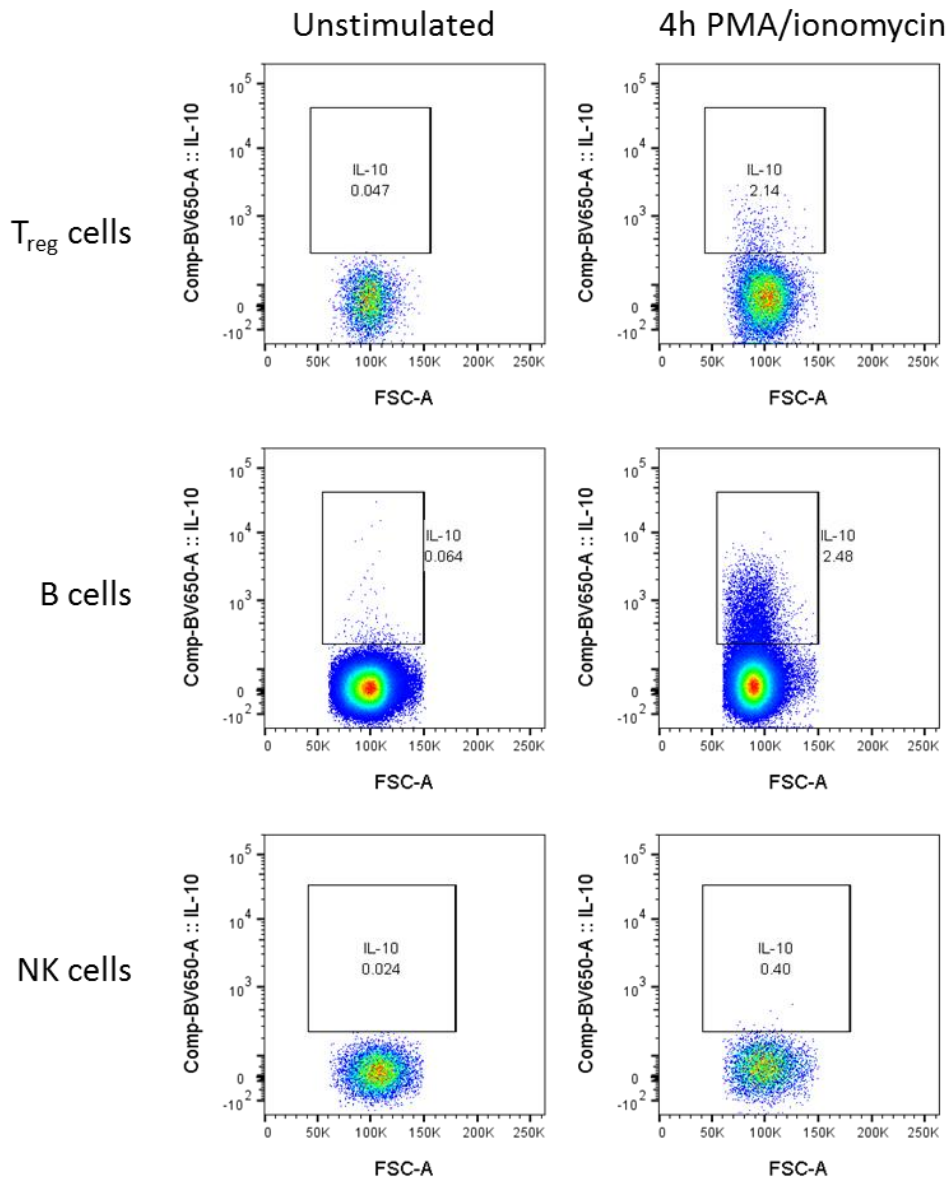


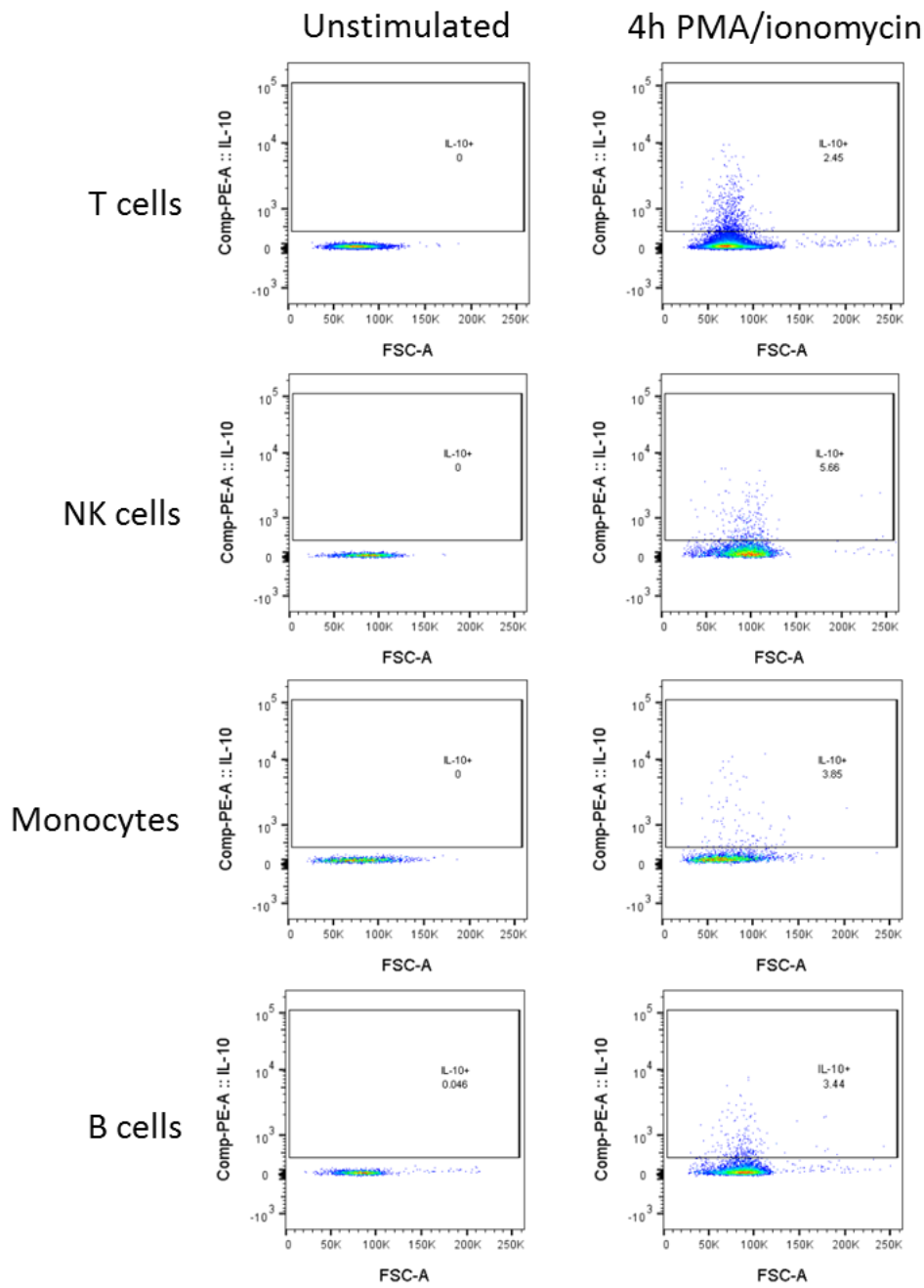
Supplementary material



Supplementary Figure 1. (A) IL-10 protein production measured in the spleen by intracellular flow cytometry in CD4⁺ T_{eff} cells (CD3⁺ CD4⁺ Foxp3⁻), CD8⁺ T cells (CD3⁺ CD8⁺), $\gamma\delta$ T cells (CD3⁺ Foxp3⁻ $\gamma\delta$ TCR⁺) and CD11b⁺ cells from CFA-challenged WT mice (open circles) and IFN- γ KO mice (black circles) at day 21 post immunization, and NI littermates (squares). Data show the percentage IL-10⁺ cells in the specific cell populations. (B) Median fluorescence intensity (MFI) of IL-10 within IL-10⁺ cells was determined in CD4⁺ T_{eff} cells (CD3⁺ CD4⁺ Foxp3⁻), CD4⁺ T_{reg} cells (CD3⁺ CD4⁺ Foxp3⁺), $\gamma\delta$ T cells (CD3⁺ Foxp3⁻ $\gamma\delta$ TCR⁺), CD11b⁺ cells, B cells (CD3⁻ CD19⁺) and NK cells (CD3⁻ CD122⁺ CD49b⁺) in naïve and CFA-injected WT and IFN- γ KO mice. Total splenocytes (C) and enriched splenic CD4⁺ T cells (D) were stimulated with anti-CD3/CD28-antibodies (aCD3/CD28) in the absence or presence of IFN- γ (150 ng/ml or 300 ng/ml) for 72h, followed by analysis of IL-10 production in the supernatant by ELISA. Dots represent individual mice, with median. Bars show median with range, n = 5. Results are representative for 2 (A, B) or 1 (C, D) independent experiments. * p < 0.05; ** p < 0.01; Kruskal-Wallis followed by Mann-Whitney U test.



Supplementary Figure 2. Representative flow cytometry dot plots for intracellular detection of IL-10 in murine T_{reg} cells (CD3⁺ CD4⁺ Foxp3⁺), B cells (CD3⁻ CD19⁺) and NK cells (CD3⁻ CD122⁺ CD49b/DX5⁺). Cells were stimulated for 4h in the presence of PMA, ionomycin and brefeldin A, followed by intracellular staining. Unstimulated cells were used as a gating control.



Supplementary Figure 3. Representative flow cytometry dot plots for intracellular detection of IL-10 in human T cells ($CD3^+$), NK cells ($CD3^- CD56^+$), monocytes ($CD14^+$) and B cells ($CD19^+$). Cells were stimulated for 4h in the presence of PMA, ionomycin and brefeldin A, followed by intracellular staining. Unstimulated cells were used as a gating control.

Supplementary Table I: Patient characteristics

	Active sJIA			Inactive sJIA	
	plasma	PBMCs	sort	plasma	PBMCs
Male/Female No.	5,13	3,2	1,2	4,7	3,2
Age, median (range) in years	4,5 (1-16)	3 (1-12)	5 (3-12)	6 (2-16)	3 (2-13)
Clinical features					
Active arthritis	18/18	5/5	3/3	1/11	0/5
Fever	18/18	5/5	3/3	0/11	0/5
Rash	14/18	5/5	3/3	0/11	0/5
Lymphadenopathy	2/18	1/5	0/3	1/11	0/5
Hepato- or splenomegaly	6/18	1/5	0/3	0/11	0/5
Laboratory features					
WBC count (x10⁹/l)	20,72 (4,77-30,3)	22,74 (20,69-30,23)	22,74 (20,75-30,23)	7,82 (3,67-22,85)	7,82 (5,25-22,85)
Neutrophil count (x10⁹/l)	15,4 (2,9-27)	18,1 (14,4-26,9)	18,1 (16,4-26,9)	2,7 (1,3-15)	2,7 (1,3-12,5)
RBC count (x10¹²/l)	3,82 (2,86-4,92)	3,89 (3,15-4,11)	4,07 (3,89-4,11)	4,56 (4,12-4,91)	4,37 (4,12-4,64)
Hemoglobin (g/dl)	10,2 (7,3-12,9)	10,6 (7,9-11)	10,9 (10,6-11)	12,4 (9,9-13,1)	12,5 (9,9-12,9)
Platelet count (x10⁹/l)	547,5 (210-894)	578 (380-757)	438 (380-578)	342 (172-759)	369 (280-759)
C-reactive protein (mg/l)	110 (25,1-341,6)	163 (103,4-208,8)	116,7 (103,4-169,7)	0,3 (0,3-12,3)	0,3 (0,3-2,9)
Aspartate transaminase (U/ml)	31 (14-51)	25 (14-31)	22,5 (14-31)	29 (19-43)	28 (19-43)
Alanine transaminase (U/ml)	15,5 (3-38)	10 (7-15)	8 (7-13)	16 (9-27)	21 (13-27)
Lactate dehydrogenase (U/ml)	370 (196-607)	237 (207-373)	290 (207-373)	267 (193-435)	265 (193-317)
Ferritin (µg/l)	865 (49-4469)	975 (476-3959)	513 (476-2425)	ND	ND
Treatment					
NSAID	8/18	3/5	2/3	2/11	0/5
Oral corticosteroids	2/18	0/5	0/3	2/11	2/5
Methotrexate	2/18	0/5	0/3	5/11	2/5
Anti-IL-1	3/18	0/5	0/3	1/11	0/5
Anti-IL-6	0/18	0/5	0/3	6/11	4/5

For age and laboratory features, median with minimal and maximal values are given. NSAID = non-steroidal anti-inflammatory drugs