

Supporting Information

Beavis et al. 10.1073/pnas.1112722108

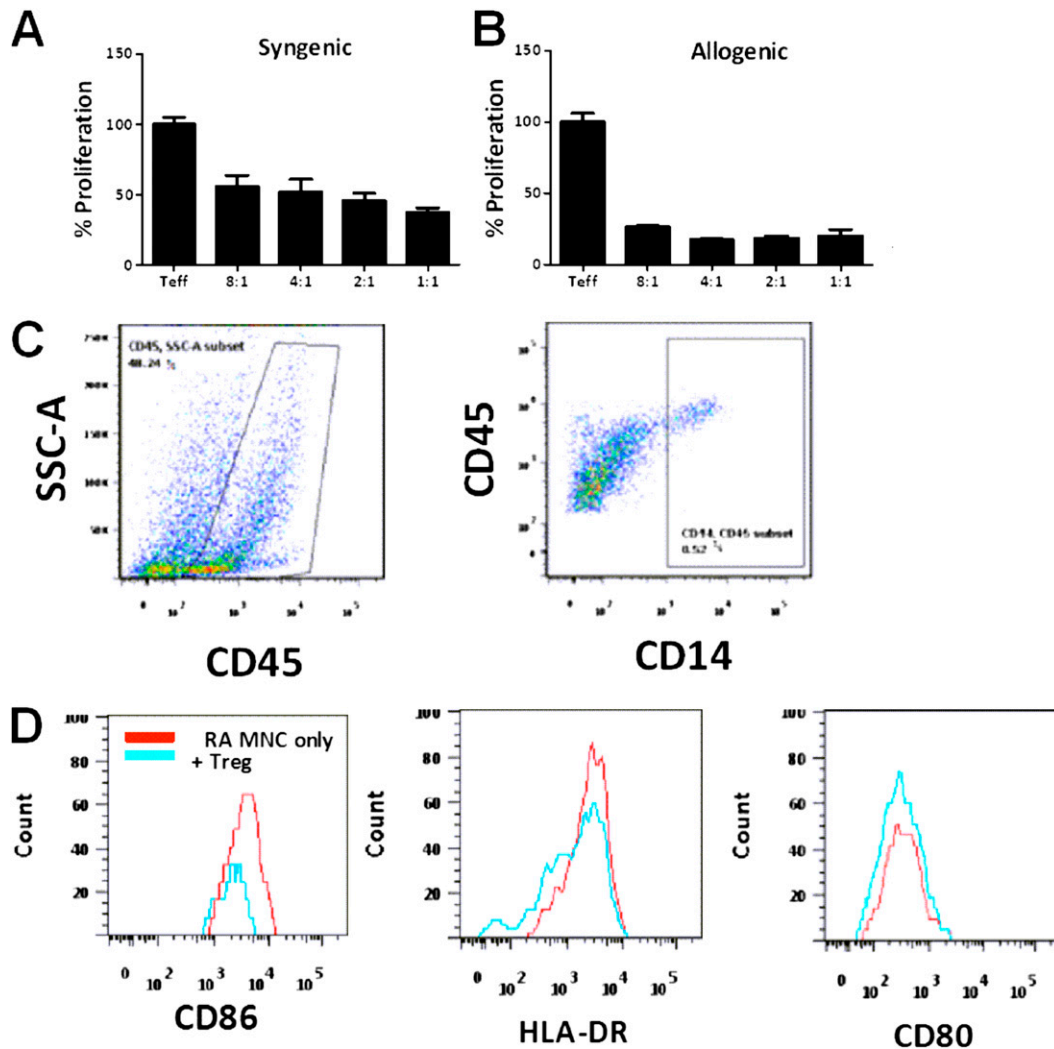


Fig. S1. Regulatory T cells used in the rheumatoid arthritis synovial mononuclear cell (RA MNC) cultures are capable of suppressing both syngenic and allogenic T effector cells (Teffs). CD4⁺CD25⁺ regulatory T cells (Tregs) isolated from the peripheral blood of healthy donors were co-cultured with 1×10^5 syngenic (A) or allogenic (B) CD4⁺CD25⁻ Teffs isolated from the peripheral blood in the presence of 1 μ g/mL soluble anti-CD3 and 5×10^4 irradiated antigen presenting cells (APCs) for 72 h. Cells were pulsed with 0.5 μ Ci 3H-thymidine for the last 18 h of culture. Ratios indicate the proportion of Teff:Treg. Data from a representative donor are shown as mean \pm SD of triplicate cultures and normalized to the proliferation of Teffs cultured alone. In a separate experiment in which the addition of peripheral blood CD4⁺CD25⁺ Tregs to RA mononuclear cell (MNC) cultures resulted in inhibition of TNF- α production, it was determined whether the phenotype of the synovial CD14⁺ (macrophage) population was modulated. Phenotyping was performed by flow cytometry on the CD14⁺ subset of the CD45⁺-gated RA MNC population (C) and expression of CD86, HLA-DR, and CD80 was determined in RA MNC macrophages alone (red bars) and in those RA macrophages co-cultured with activated Tregs (blue bars) (D).

Table S2. Patient demographics showing age, sex, and duration of disease

Patient no.	Age (y)	Sex	Duration (y)	RhF	ESR	Joint	DMARD	TNF blockers
1	69	F	1	Positive	33	Wrist	Yes	No
2	79	F	5	Positive	56	NA	Yes	No
3	67	F	12	Positive	21	Knee	Yes	No
4	66	F	2	NA	NA	Hip	Yes	No
5	31	M	1	Negative	Normal	Knee	Yes	No
6	27	M	10	Positive	85	Knee	Yes	Yes
7	59	F	NA	Positive	80	Knee	Yes	Yes
8	46	M	13	Positive	13	Wrist	Yes	No
9	49	F	NA	NA	NA	Knee	Yes	No
10	67	F	25	Positive	NA	Knee	Yes	No
11	49	F	NA	Positive	21	Knee	Yes	No
12	54	F	NA	NA	NA	Hip	Yes	No
13	64	M	NA	NA	NA	Wrist	Yes	No

Demographics for all rheumatoid arthritis (RA) clinical synovial samples used in this study. All patients had RA. Where available, rheumatoid factor status and erythrocyte sedimentation rate were obtained. Joint indicates source of synovial material. DMARD indicates more than one drug for >12 mo; TNF blockers refer to anti-biological therapy >12 mo. NA, not available.