

European Journal of Immunology

Supporting Information
for

DOI 10.1002/eji.201646760

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**MHC class II alleles associated with Th1 rather than Th17 type immunity drive
the onset of early arthritis in a rat model of rheumatoid arthritis**

Supporting information

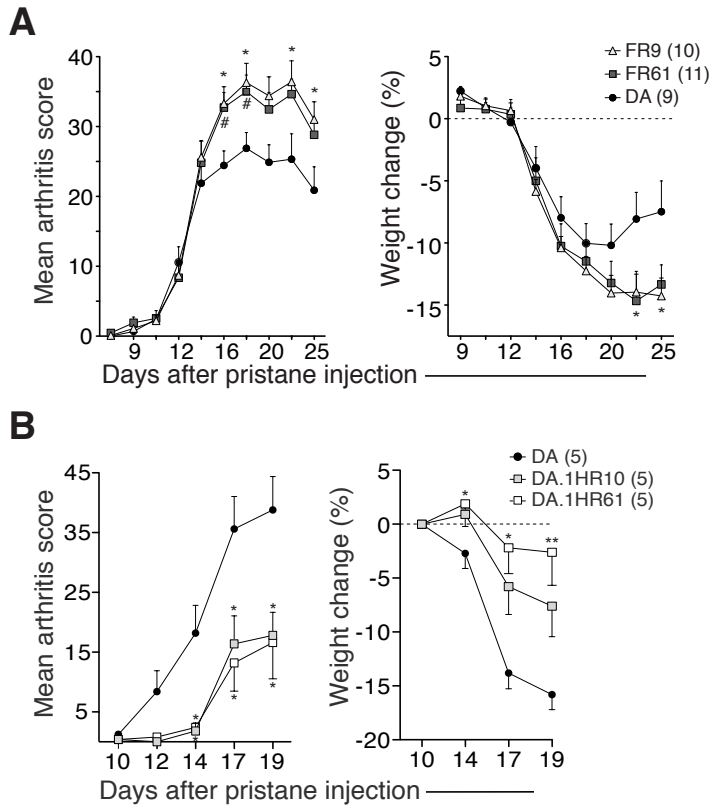


FIGURE S1. Evaluation of PIA in new MHCII congenic strains, DA.1FR61 and DA.1HR10. **(A)** The development of PIA in DA.1FR61 was compared to its parental congenic strain, DA.1FR9, and to DA. Arthritis clinical scores (left) and weight change (in % vs. day of disease onset, right) is shown; #, significant ($P < 0.05$) DA vs. DA.1FR61; *, significant ($P < 0.05$) DA vs. DA.1FR9. **(B)** Arthritis clinical scores and weight change in pristane immunized DA.1HR10, DA.1HR61 and DA; * $P < 0.05$. All statistic comparisons in **(A)** and **(B)** were determined by Mann-Whitney; $n = 5-11$ per group as indicated in figure.

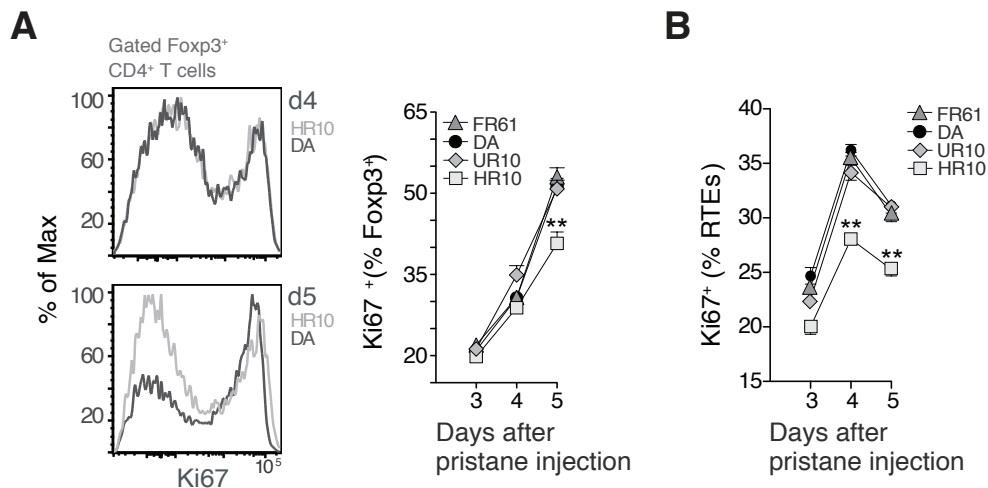


FIGURE S2. Proliferation of Foxp3⁺ Tregs and recent thymic emigrants (RTEs) in dLNs after pristane administration. **(A)** Histograms show representative expression of Ki67 in CD4⁺ Foxp3⁺ Tregs from DA (blue) and DA.1HR10 at day 4 and 5 after pristane administration. Adjacent line chart shows summarized data from all strains. **(B)** Corresponding data (as shown in A) for RTEs (CD90⁺ CD4⁺ T cells) in pristane dLNs. **(A-B)** n = 5 per group; ** P<0.01 (by Mann-Whitney).

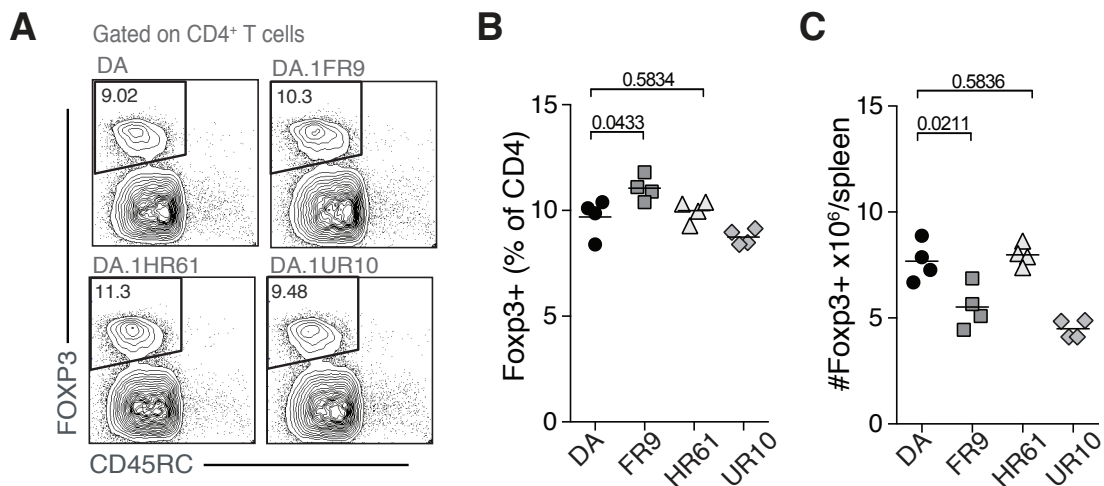


FIGURE S3. Variation in Foxp3⁺ Tregs in naive MHCII-congenic rats does not correlate with disease susceptibility. **(A)** Representative counter plots of CD4 T cells in spleen of naive rats. Summarized data in **(B)** show frequencies of Tregs among CD4 T cells, and in **(C)** total number of Tregs per spleen. P-values depicted in graphs were determined by Mann-Whitney (n=4 per strain).

Target	Forward Primer (5')	Reverse Primer (3')
<i>IFN-γ</i>	ATTCATGAGCATCGCCAAGTTC	TGACAGCTGGTGAATCACTCTGAT
<i>IL-17A</i>	CTCAGACTACCTCAACCGTTCC	GTGCCTCCCAGATCACAGAAG
<i>IL-22</i>	ATGCAGGAGGTGGTGCCTTTCC	TCACCGCTGATGTGACAGGGG
<i>IL-4</i>	GCAACAAGGAACACCACGG	AAGCACGGAGGTACATCACGT
<i>IL-6</i>	TAGTCCTTCTACCCCACTTCC	TTGGTCCTTAGCCACTCCTTC
<i>T-bet</i>	CTGGAGCCCACTGGATGCGA	GACTGCAGGACGATCATCTGGGTC
<i>GATA3</i>	TTGCAACGCCTGCGGACTCT	TCCTCGCTGCTGACAGCCTTC
<i>STAT3</i>	CAGGAGGGCAGTTTGAGTCGCT	CGGGGAGGTAGCACACTCCG
<i>IL-21</i>	GGCTGCCTGCTAAGAGGACAGG	CACAGGAAGGGCATTAGCCATGTG
<i>ROR-γt/Lingo4</i>	TAAGGGCTGAGGCACCCGCT	CCAGTCCAAGGCAGTGGCTTCTC
<i>TNFα</i>	GACCCTCACACTCAGATCATCTTCT	TGCTACGACGTGGGCTACG
<i>IL-2</i>	CAAGCAGGCCACAGAATTGA	CCGAGTTCATTTCCAGGCA
<i>Beta Actin</i>	GGGAAATCGTGCGTGACATT	GCGGCAGTGGCCATCTC
<i>GUSB</i>	CAAGGCGTCAACAAGCAT	CCTCCGAGTAGGGATAGTGG
<i>Arbp</i>	GCTTCATTGTGGGAGCAGACA	CATGGTGTTCTTGCCCATCAG

Table S1. Primers for quantitative PCR.