

Cell Line	Autoantibody Reactivity	TRAV	TRAJ	TRBV	TRBJ
13C2	PL2-3	6-2	15	19 (6)	2-4
1B9	PL2-3	6-7	65	17 (9)	2-1
1E12	PL2-3	4D-4	48	1	2-4
13E6	PL2-3	6-6	12	19	1-3
16E2	PL2-3	21	56	13-2	2-4
1F8	Y2:Sm	6-4	18	19	1-4
1G1	Y2:Sm	12	39	13-2	2-7
		15	37		
2D1	Y2:Sm	12D-2	42	13-2	2-5
		6-4	43		

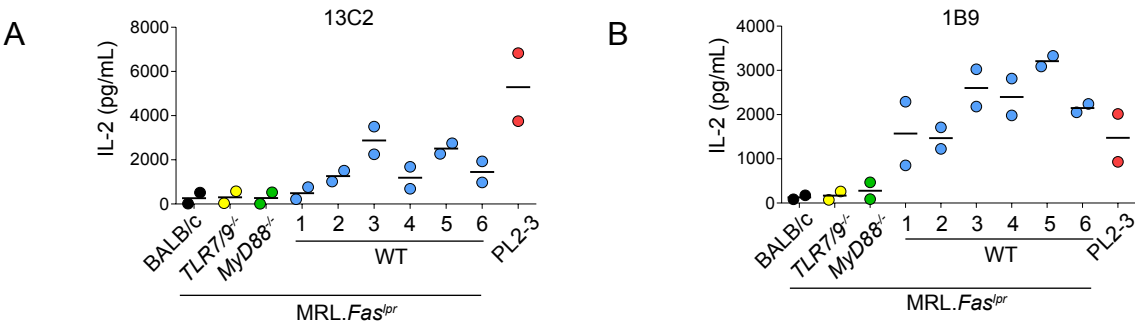
Supplemental Table 1. TCR sequencing from clonal T cell lines

Rearranged TCR genes were sequenced from cDNA generated from each T cell line using V family-specific primers. The gene segments for final clonal lines are shown here using the standardized IMGT numbering system. The original names used throughout the paper are indicated in parentheses.

Antibody	V _H	D _H	J _H	V _L	J _L	Strain	Reference	Stimulatory for 13C2?	Stimulatory for 1B9?
PL2-3	J558	SP2-C+ FL16	4	9	4	MRL/+	Supp. Ref. 1	Yes	Yes
PL9-2	S107	FL16.1+SP2-C	4	4/5	4	MRL	Supp. Ref. 2	Yes	No
PL9-3	J558	SP2.2+ FL16	4	4/5	2	MRL	Supp. Ref. 2	Yes	No
PL9-9	J558	SP2.2+ FL16	4	4/5	2	MRL	Supp. Ref. 2	Yes	No
PR1-3	7183	FL16.1				MRL/lpr	Supp. Ref. 2	No	No
LG4-1	Q52	SP2	3	19/28	4	MRL/lpr	Supp. Ref. 3	No	No
PA1	Q52	FL16.2	4	8	5	Drug-induced A.SW mice	Supp. Ref. 4	No	No
PA4	7183	SP2	3	1/2	2	Drug-induced A.SW mice	Supp. Ref. 5	Yes	No
8D8						MRL/lpr	Supp. Ref. 6 ad 7	Low	Low
MRA12	J558	SP2	4	2	4	MRL/lpr	Supp. Ref. 8	No	No
LG2-1	J558	SP2.2+SP2+FL16.1	2	21	5	MRL/lpr	Supp. Ref. 9	No	No
LG2-2	J558	SP2.9	2	1	4	MRL/lpr	Supp. Ref. 9	No	No
Ha310	Q52	DST4	1			Yaa	unpublished	Yes	Yes
BWR4	J558	DQ52	2	4	4	NZBxNZW	Supp. Ref. 10	Yes	Yes
Y2	J558	DSP2	2	5	1	MRL/lpr	Supp. Ref. 11	Yes	No
2G7	S107	DSP2	4	21	2	MRL/lpr	Supp. Ref. 12	No	No

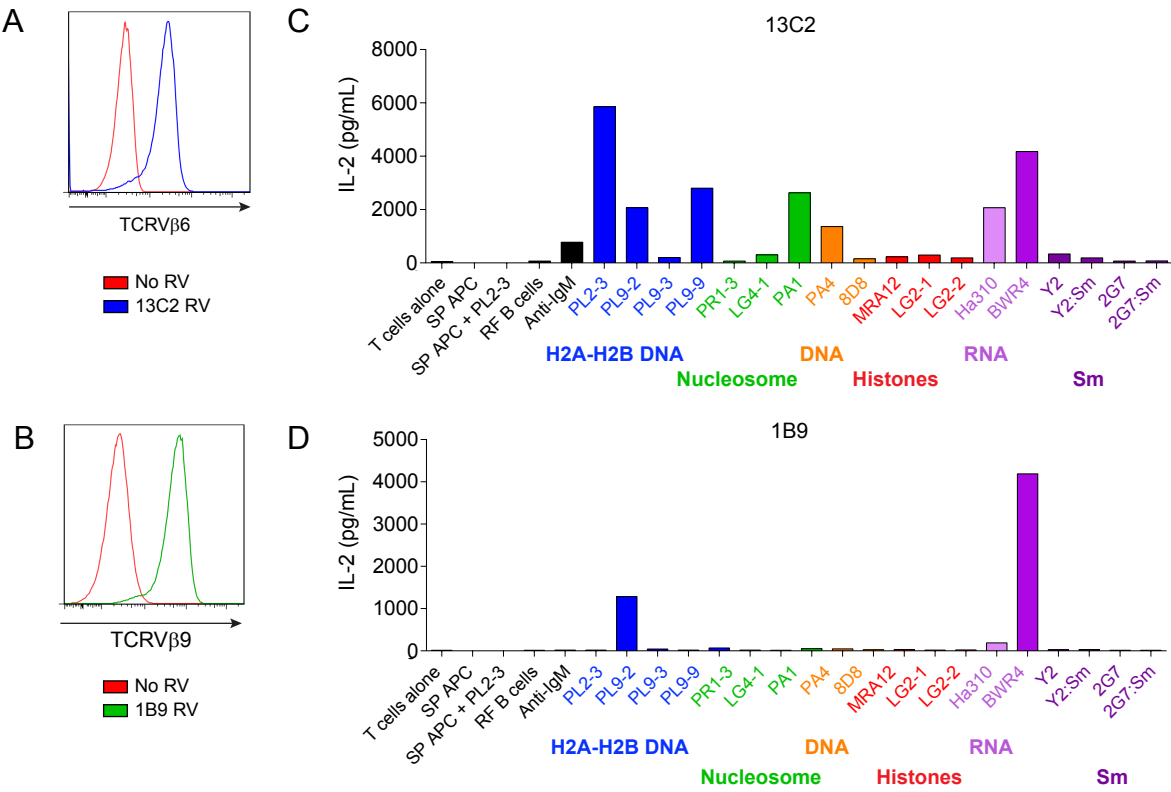
Supplemental Table 2. AutoAb Panel Gene Segments

A summary of sequencing results for the antibodies used for *in vitro* stimulation.

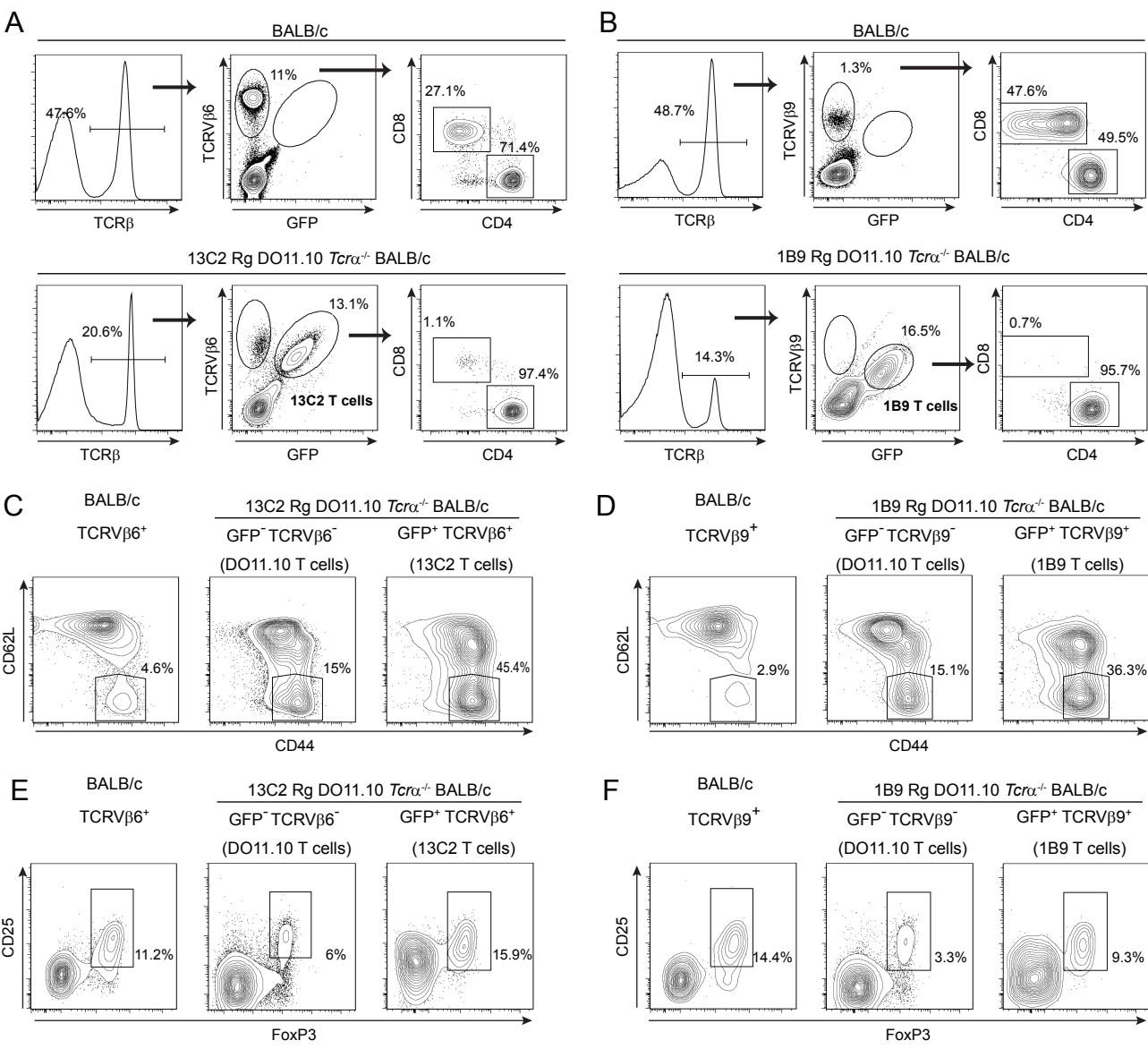


Supplemental Figure 1. ICs from MRL lupus serum stimulate 13C2 and 1B9

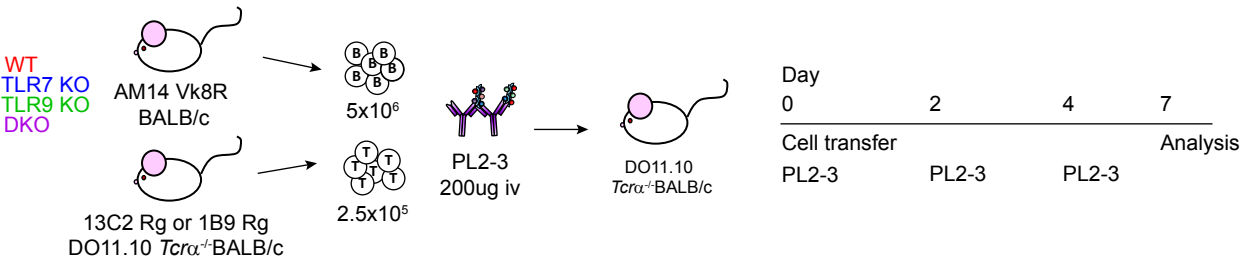
13C2-TCR (A) and 1B9-TCR (B) 4G4 T cells were cultured with AM14 B cells and PL2-3 or serum from mice of the indicated genotypes. IL-2 in culture supernatant was measured 18 hours later. Data are from 2 independent experiments, bar indicates mean.



Supplemental Figure 2. Retrogenic13C2 and 1B9 T cells are positively selected into the CD4 T cell compartment
Specific TCRVβ surface staining of CD4+ TCR- 4G4 hybridoma T cells transduced with RV-encoding the rearranged 13C2 TCR (A) or 1B9 TCR (B) compared to no RV controls. 13C2-TCR (C) and 1B9-TCR (D) 4G4 cells were cultured with AM14 B cells or SP APCs as indicated in the presence the indicated antibody. IL-2 in culture supernatant was measured 18 hours later by ELISA. Representative of two independent experiments.



Supplemental Figure 3. Retrogenic 13C2 and 1B9 T cells are positively selected into the CD4 T cell compartment
 Representative flow cytometry plots as indicated of (A) BALB/c (upper) or 13C2 Rg (lower) splenocytes and (B) BALB/c (upper) or 1B9 Rg (lower) splenocytes. Cells are first gated as live. (C and E) Representative flow cytometry plots as indicated of BALB/c or 13C2 Rg splenocytes. (D and F) Representative flow cytometry plots as indicated of BALB/c or 1B9 Rg splenocytes. Data are shown as mean from 1 experiment, with a total of 4 BALB/c mice, 8 13C2 Rg mice, and 8 1B9 mice.



Supplemental Figure 4. IC-specific T cells partially bypass the requirement for intrinsic TLR signaling in the AM14 in vivo response
Experimental Design for Figure 10.

Supplemental References

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