

**Supplemental Table 1.**

	D0		D3		D6		D9		D12		D15	
	WT	KO	WT	KO	WT	KO	WT	KO	WT	KO	WT	KO
Lymphocytes	9.83 ± 0.84	9.39 ± 1.00	4.10 ± 0.40	5.92 ± 0.70	12.04 ± 3.20	21.94 ± 7.29	20.54 ± 12.96	34.43 ± 21.01	18.52 ± 1.67	30.78 ± 17.12	10.15 ± 2.03	8.37 ± 2.74
Monocytes	0.15 ± 0.01	0.17 ± 0.01	0.31 ± 0.02	0.39 ± 0.07	0.27 ± 0.06	0.3 ± 0.08	0.31 ± 0.19	0.62 ± 0.29	0.27 ± 0.06	0.27 ± 0.08	0.1 ± 0.02	0.46 ± 0.19
Neutrophils	0.24 ± 0.08	0.71 ± 0.17	1.44 ± 0.06	2.35 ± 0.71	2.93 ± 0.37	3.74 ± 1.18	3.73 ± 0.46	6.03 ± 0.67	11.08 ± 3.90	17.10 ± 2.02	3.89 ± 0.49	13.61* ± 2.69
Red Blood Cells	10.89 ± 0.33	9.97 ± 0.22	9.99 ± 0.14	10.00 ± 0.58	10.01 ± 0.26	10.94 ± 0.97	7.28 ± 0.97	9.92 ± 0.28	3.94 ± 0.56	3.44 ± 0.68	3.66 ± 1.56	5.70* ± 1.29
Platelets	630.56 ± 31.44	632.75 ± 31.85	694.4 ± 54.51	602.00 ± 35.62	149.80 ± 24.66	273.80 ± 99.87	177.4 ± 46.21	124.40 ± 22.55	95.40 ± 11.99	152.60 ± 19.73	78.67 ± 10.41	191.60 ± 16.34

Complete Blood Cell counts of WT and miR-451<sup>-/-</sup> mice pre and post-infection. (mean ± SEM, N=4-5, \*P<0.05, 2-way ANOVA with Tukey posttest)

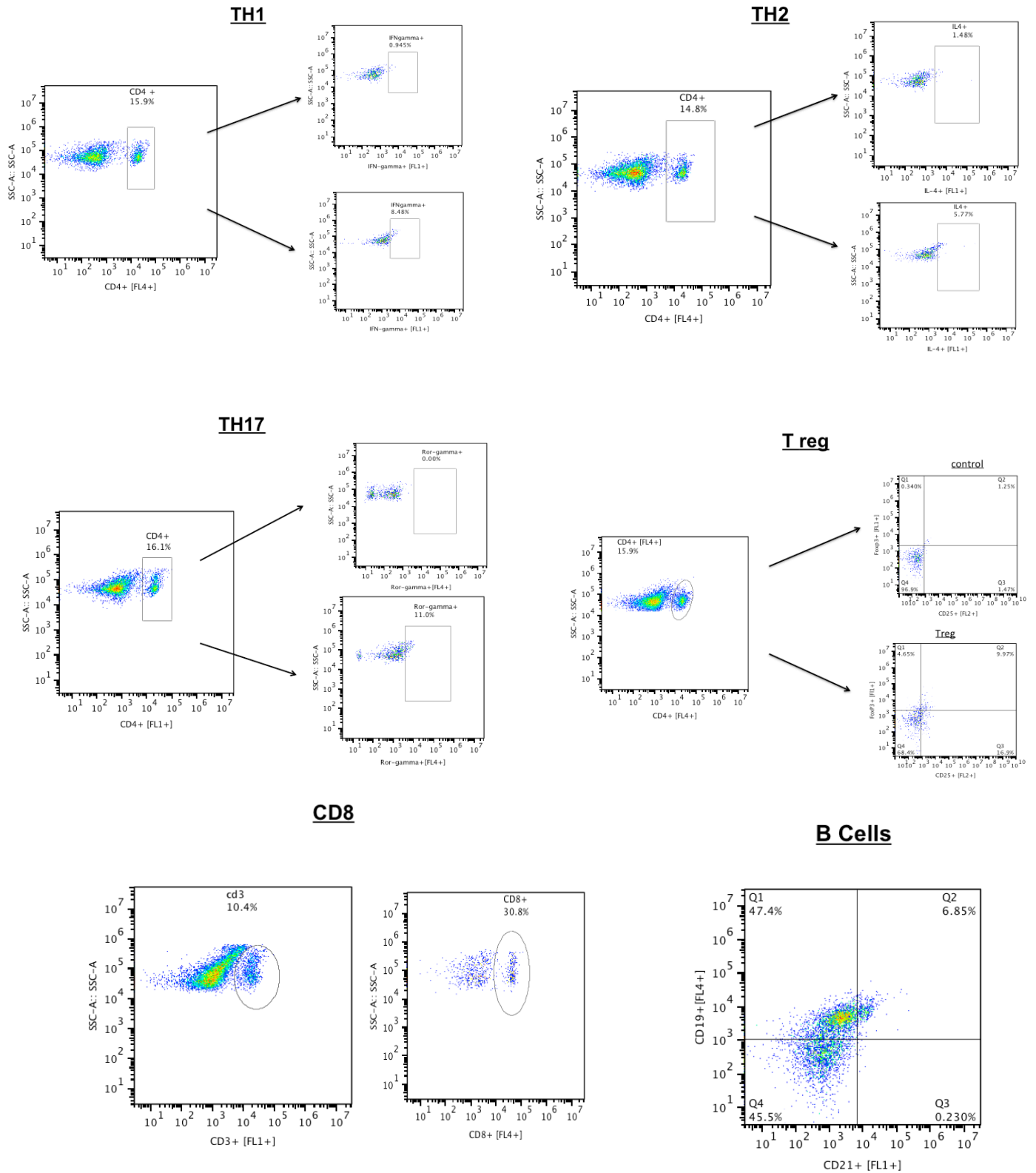


Figure S1. Representative gating for flow cytometry assessment of cell populations.

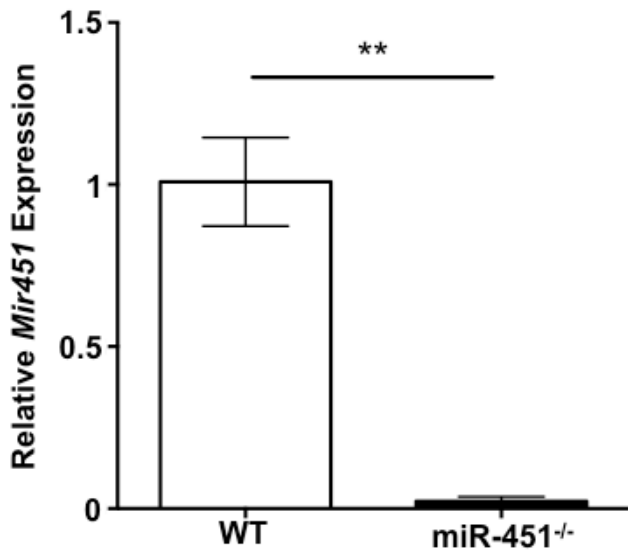


Figure S2. The expression of *Mir451* in WT and miR-451<sup>-/-</sup> CD4<sup>+</sup> T cells was determined relative to U6 and sno202 by qRT-PCR (N=3, \*P<0.01, unpaired t-test).

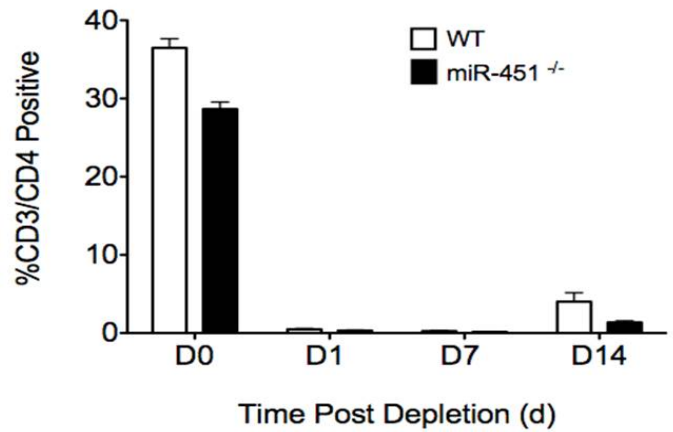


Figure S3. CD4<sup>+</sup> T-cell percentages pre- and post antibody depletion. Mice were treated with CD4 depleting antibody and percentages of CD4<sup>+</sup> cells were determined on multiple days by flow cytometry (N=8).

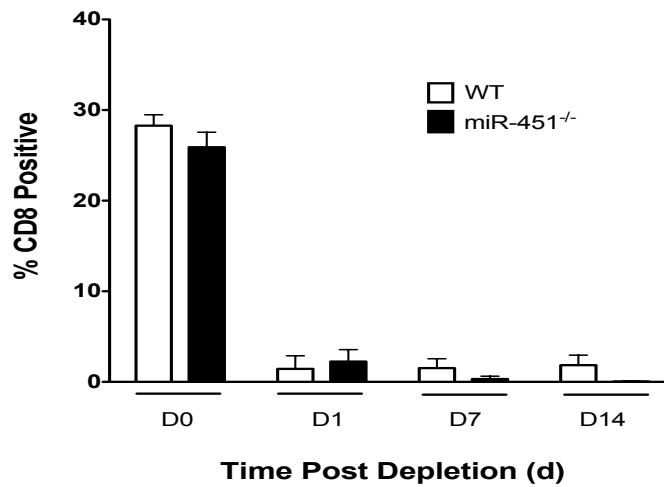


Figure S4. CD8<sup>+</sup> T-cell percentages post antibody depletion. Mice were treated with CD8 depleting antibody and the percentage of circulating CD8<sup>+</sup> cells determined on multiple days by flow cytometry (N=4-5).

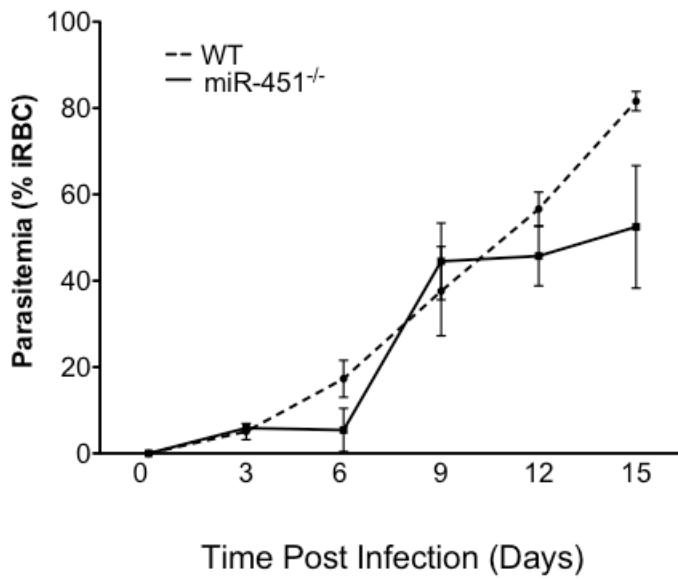


Figure S5. Control IgG has no effect on parasite clearance in WT and miR-451<sup>-/-</sup> mice (N=4).

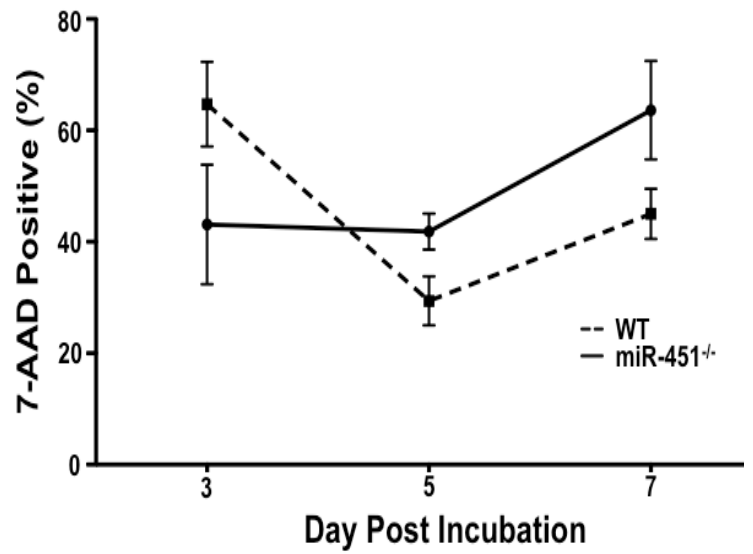


Figure S6. miR-451 inhibition has no effect on CD4<sup>+</sup> T-cell survival. WT and miR-451<sup>-/-</sup> CD4<sup>+</sup> T-cells were stimulated with anti-CD3 and anti-CD28 antibody and 7-AAD positive cells quantified by flow cytometry (N=4, representative of 2 independent experiments with similar results).