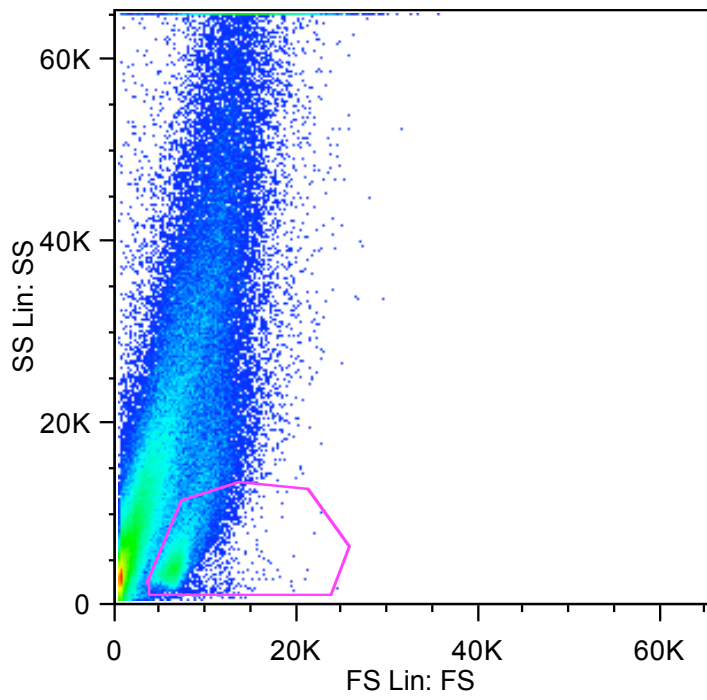


**Figure S1.** Detection methods used in *G. lamblia* H3 infection model. **(A)** Video (10x) of duodenal tissue homogenate of RP: *G. lamblia* challenged mouse on 8 dpi showing motile trophozoites juxtaposed to the mucosal fragments. **(B)** IFA-staining (Merifluor) of pooled cecal homogenate in 10% formalin at 1:100 dilution of 3 RP: *G. lamblia* challenged mice 8 dpi. Scale bar = 50 microns. **(C)** Screen shot of *G. lamblia* 18S qPCR of standard curve dilutions (10<sup>6</sup>-10<sup>2</sup>) *G. lamblia* H3 cysts spiked into pooled mouse pellets of uninfected mice. Quantification of *G. lamblia* parasites in samples from infected mice was derived by determining the quantification of DNA in each sample divided by the weight of the original stool/tissue (grams) prior to sample extraction. **(D)** H&E section of duodenal epithelium 64 days post-infection at 100x with *G. lamblia* trophozoite in ventral orientation (arrow) (visible are the ventral discs and one nucleus) next to a mucus-secreting goblet cell. Note the smooth eosinophilic staining of the parasite and the more basophilic staining of the mucus. Scale bar = 5 microns.



**Figure S2.** Representative flow cytometry gating strategy on lamina propria leukocytes as forward versus side-scatter.

## Supplementary Table

Target gene	cDNA library catalogue gene	Primer Name	Primer Sequence (5'-3')
HGPRT	cDNANM_013556.2	murHPRT1-32F	GCAAATACGAGGAGTCCTGTTGA
		murHPRT1-132R	TCATAGAAGGTTTCATGCAAAAAGC
$\beta$ -actin	cDNANM_007393	ActB-157F	GCTCCTCCTGAGCGCAAGT
		ActB-257R	TCATCGTACTCCTGCTTGCTGAT
TNF- $\alpha$	cDNANM_009395	Tnfaip1_F121	GCAACTCTGATGATCACCTGCTA
		Tnfaip1_R220	TCCCAATGACATCCTTGATG
CXCR1 (IL8/KC)	cDNANM_178241	Cxcr1_F134	CTGGGTGAAGCCACAACAGA
		Cxcr1_R233	GCCCGTAGCAGACCAGCATA
IFN- $\gamma$	cDNANM_008337	lfng_F167	CTGGAGGAACTGGCAAAGG
		lfng_R269	GATGGCCTGATTGTCTTTCAAGA
IL12	cDNANM_008351	IL12a_F276	ACCCTGTGCCTTGGTAGCAT
		IL12a_R375	TGATCTGCTGATGGTTGTGATTC
IL17a	cDNANM_010552	IL17a_F296	ACCGCAATGAAGACCCTGAT
		IL17a_R395	ATGTGGTGGTCCAGCTTTCC
IL22	cDNANM_016971	IL22_F179	ACATCGTCAACCGCACCTTT
		IL22_R278	CTGACTCCTCGGAACAGTTTCTC
IL10	cDNANM_010548	IL10_F39	GGCAGCCTTGCAGAAAAGAG
		IL10_R138	CTGTACTGGCCCCTGCTGAT
IL5	cDNANM_010558	IL5_F52	GATGCTTCTGCACTTGAGTGTCT
		IL5_R151	CAGCTGTGTCAAGGTCTCTTTAC
IL4	cDNANR_027491	IL4_F387	GGCTTTTCGATGCCTGGATT
		IL4_R486	TTGCATGATGCTCTTTAGGCTTT

**Table S1:** Overview of gene targets primer sequences used for tissue cytokine mRNA assays. Primers were designed from the target sequences retrieved from the RefSeq Sequence Database (<http://www.ncbi.nlm.nih.gov/RefSeq/>), using the Primer Express 3.0 software (Applied Biosystems) and synthesized per the manufacturer (Invitrogen). F=Forward, R=Reverse