## Supplementary figures

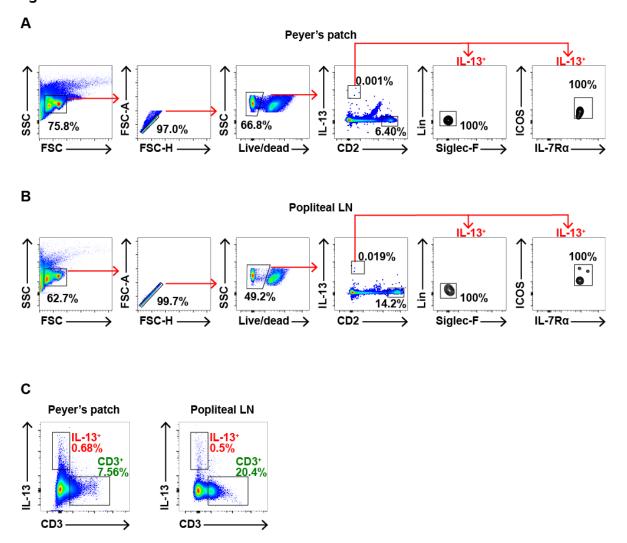
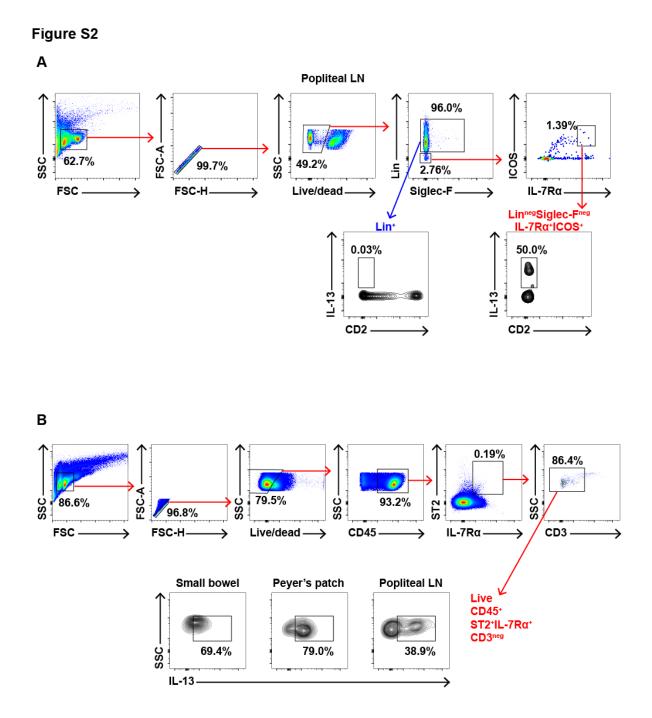
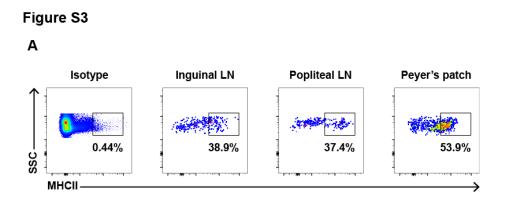


Figure S1

**Figure S1. Specificity of IL-13<sup>+</sup> cells for ILC2s.** (A-B) Flow cytometry plots showing proportions of ILC2s (Lin<sup>neg</sup>Siglec-F<sup>neg</sup>IL-7R $\alpha^+$ ICOS<sup>+</sup>) in CD2<sup>neg</sup>IL-13<sup>+</sup> cell populations in (A) PP and (B) popliteal LN. (C) Flow cytometry plots showing proportions of IL-13<sup>+</sup> cells and CD3<sup>+</sup> cells, gated on live cells, in PP and popliteal LN.

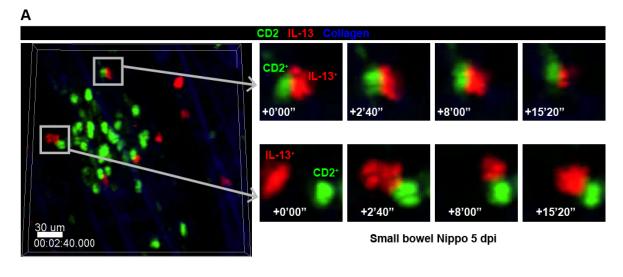


**Figure S2. IL-13 expression by ILC2s.** (A) Flow cytometry plots showing proportions of IL-13-expressing cells in ILC2 and lineage-positive cell populations. (B) Flow cytometry plots showing proportions of IL-13-expressing ILC2s (CD45<sup>+</sup>ST2<sup>+</sup>IL-7R $\alpha$ <sup>+</sup>CD3<sup>neg</sup>) in mucosal and lymphoid tissues.



**Figure S3. MHCII expression by ILC2s.** (A) Flow cytometry plots showing expression of MHCII by ILC2s (ST2<sup>+</sup>IL-7R $\alpha$ <sup>+</sup>CD3<sup>neg</sup>IL-13<sup>+</sup>) in lymphoid organs at baseline.





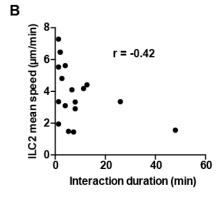


Figure S4. ILC2s interact with T cells in small bowel mucosa following helminth infection. (A) Intravital examples of interactions between IL-13<sup>+</sup> ILC2s and CD2<sup>+</sup> T cells in the small bowel mucosa, Nippo 5 dpi; scale bar 30  $\mu$ m, Z 16  $\mu$ m. (B) Graph showing relationship between ILC2 mean migration speed and ILC2-T cell interaction duration, Spearman correlation r = -0.42, *p* = 0.08.

## Supplementary movies

**Movie S1. PP ILC2s show altered size and movement following helminth infection.** Intravital movies of ILC2s, without and with cell tracks, in PP uninfected and *N. brasiliensis* (5 dpi); scale bar 50 µm, Z 48 µm, movies at 10 fps.

Movie S2. ILC2s occasionally and briefly interact with T cells in PP at baseline. Intravital example of ILC2-T cell interaction in uninfected PP; scale bar 20  $\mu$ m, Z 48  $\mu$ m, movie at 3 fps.

Movie S3. Popliteal LN ILC2s show dynamic changes following type 2 inflammation. Intravital movies of ILC2s with cell tracks in popliteal LN following PBS treatment or *S. mansoni* egg challenge (1 dpi); scale bar 50  $\mu$ m, Z 40  $\mu$ m, movies at 10 fps.

Movie S4. ILC2s occasionally and briefly interact with T cells in popliteal LN at baseline. Intravital example of ILC2-T cell interaction in PBS-treated popliteal LN; scale bar 20  $\mu$ m, Z 30  $\mu$ m, movie at 3 fps.

Movie S5. Small bowel ILC2s show dynamic changes following helminth infection. Intravital movie of ILC2s, without and with cell tracks, in small bowel mucosa following *N*. *brasiliensis* infection (5 dpi); scale bar 50  $\mu$ m, Z 30  $\mu$ m, movie at 10 fps.

Movie S6. ILC2s interact with T cells in small bowel mucosa following helminth infection. Intravital examples of ILC2-T cell interactions in small bowel mucosa following *N. brasiliensis* infection (5 dpi); scale bar 30  $\mu$ m, Z 26  $\mu$ m, movie at 5 fps.