## **Supporting Information**

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**Fig. S1.** Generation of type II collagen (CII)-specific T helper ( $T_H$ ) subsets. (A) Levels of mRNA *Tbx21*, *Rorc*, and *Bcl6* mRNA were measured by quantitative RT-PCR to define  $T_H$  subsets generated in vitro. (*B*) Specificity of  $T_H$  subsets for CII. In vitro-generated  $T_H$  subsets were incubated with different concentrations of chicken CII or OTII peptide for 48 h and pulsed with <sup>3</sup>H-thymidine for the last 18 h before proliferation assays were performed.



**Fig. S2.** Administration of anti-NKG2A F(ab)'2 and CIA. (*A*) Nondraining lymph node (nondLN) cells from treated or untreated mice (Fig. 4) were incubated with different concentrations of chicken CII for 48 h and pulsed with <sup>3</sup>H-thymidine for the last 18 h before proliferation assays were performed. (*B*) Numbers of GC B cells (IgM<sup>+</sup>Fas<sup>+</sup>B220<sup>+</sup>) from each organ (Fig. 4) are shown; no significant differences between isotype control and 20d5 F(ab)'2 treated groups. (*C*) Levels of intracellular IL-4 and IFN- $\gamma$  in CD4<sup>+</sup> T cells from nondLNs (Fig. 4) are shown. No significant differences in IL-4 and IFN- $\gamma$  levels were observed between isotype control and 20d5 F(ab)'2 treated groups. *n* = 5 (isotype control) and *n* = 4 [F(ab)'2]; Student's' *t* test: \**P* < 0.05.



**Fig. S3.** Enhanced NKG2D ligand expression does not account for differential susceptibility of  $T_H$  subsets.  $T_H$  subsets were stimulated with leukocyte activation mixture for 4 h before surface staining with anti-CD4, anti-BTLA, and NKG2D-Fc (revealed with goat anti-human APC) followed by intracellular staining with Abs to indicated cytokines. Levels of NKG2D-Fc-dependent fluorescence were measured for IFN- $\gamma^+$ , IL-10<sup>+</sup>, IL-17<sup>+</sup>, and BTLA<sup>+</sup> CD4 cells. Representative histogram overlays are shown with mean fluorescence intensity indicated.

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