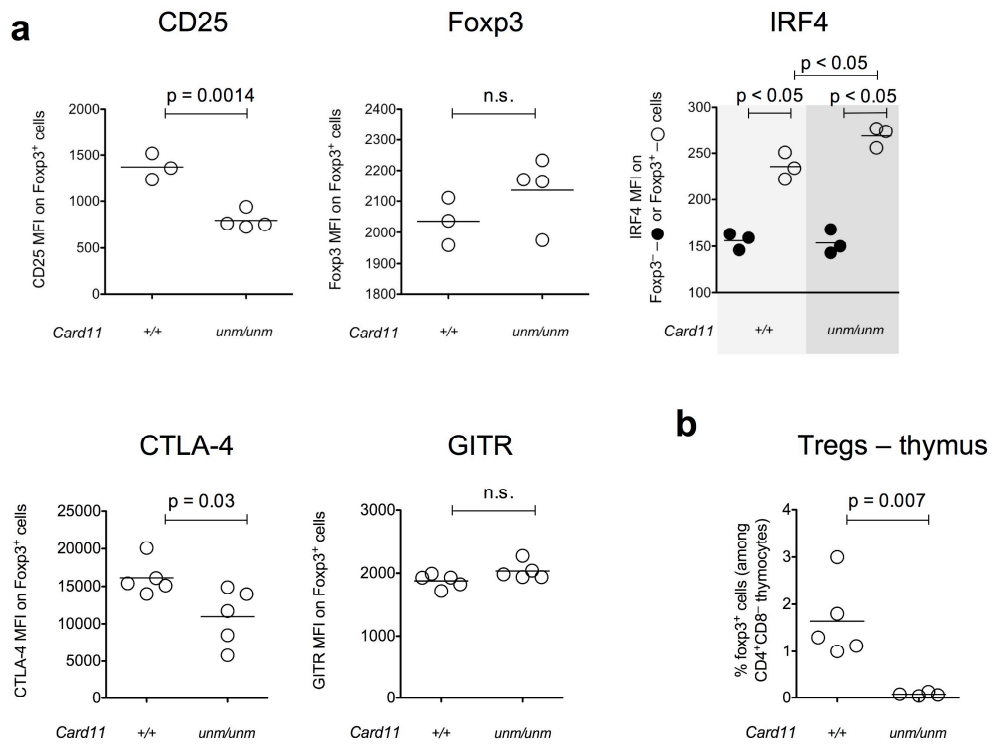
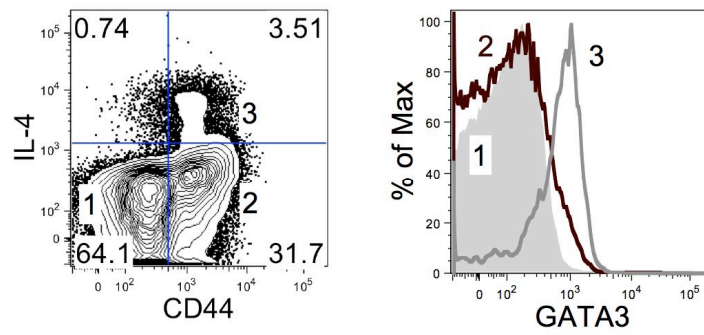


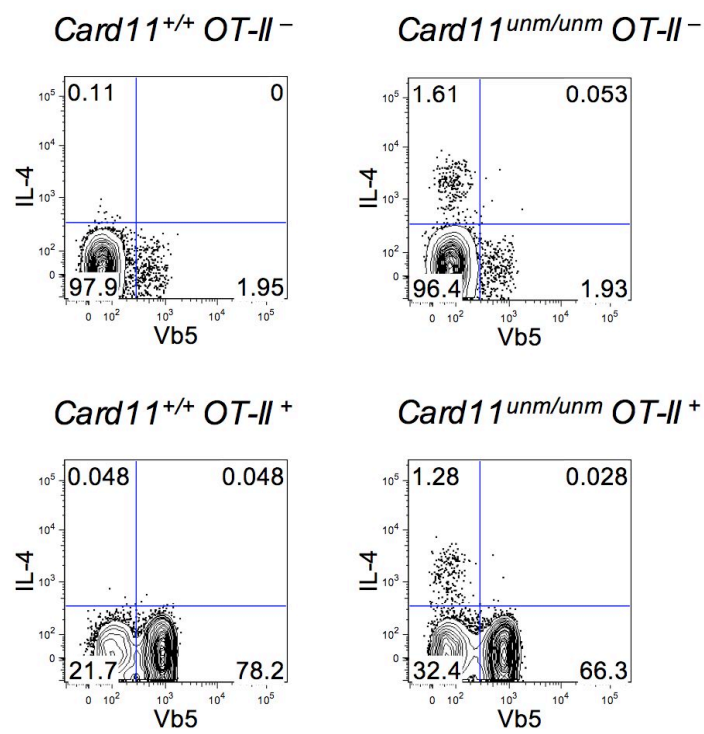
**Supplementary Figure 1 (a)** Plotted MFIs of CD25, Foxp3, IRF4, CTLA-4 and GITR on lymph node Foxp3<sup>+</sup> CD4<sup>+</sup> T cells from *Card11<sup>unm</sup>* or wild-type mice, measured by intracellular staining. **(b)** Frequency of Foxp3<sup>+</sup> cells among CD4<sup>+</sup>CD8<sup>-</sup> thymocytes from *Card11<sup>unm</sup>* or wild-type mice.



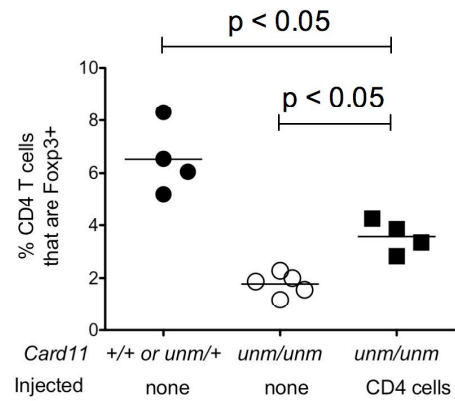
**Supplementary Figure 2** Expression of GATA3 on the CD44<sup>lo</sup>IL-4<sup>-</sup>, CD44<sup>hi</sup>IL-4<sup>-</sup> or CD44<sup>hi</sup>IL-4<sup>+</sup> CD4<sup>+</sup> T cell subsets (as indicated) from a *Card11<sup>umm</sup>* mouse, detected by *ex vivo* restimulation followed by intracellular cytokine staining.



**Supplementary Figure 3** IL-4 production by CD4<sup>+</sup> T cells from non-transgenic or OT-II TCR transgenic *Card11<sup>unm</sup>* or control mice, detected by *ex vivo* restimulation followed by intracellular cytokine staining. Cells expressing the transgenic TCR are Vβ5<sup>+</sup>.



**Supplementary Figure 4** Reconstitution of the Foxp3<sup>+</sup> population in *Card11<sup>unm</sup>* mice following wild-type CD4<sup>+</sup> T cell transfer. Percentage of Foxp3<sup>+</sup> cells among lymph node CD4<sup>+</sup> T cells from *Card11<sup>unm</sup>* mice that were either untreated or injected i.v. with 10<sup>6</sup> sorted CD4<sup>+</sup> T cells from a Ly5a donor 10 weeks prior.



**Supplementary Figure 5 (a, b)** Dilution of CFSE and production of IFN $\gamma$  and IL-4 by wild-type or *Card11<sup>unm/unm</sup>* cells after culture of sorted naïve CD4<sup>+</sup> splenocytes under Th0, Th1 or Th2 polarising conditions for five days. **(c)** Dilution of CFSE and production of IL-17 by wild-type or *Card11<sup>unm/unm</sup>* cells after culture of sorted naïve CD4<sup>+</sup> splenocytes under Th0 or Th17 polarising conditions for three days. **(d)** Quantitation of the percentage of cytokine-producing cells at the endpoint of the Th1, Th2 or Th17 cultures (3 individual mice per genotype).

