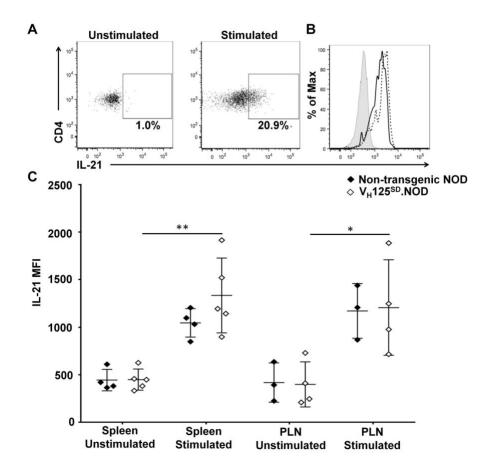


1 Supplemental Fig. 1. B cell responses to mitogens are not impaired by the presence of the VDJH

2 targeted transgene.

Splenocytes from non-transgenic NOD or V_H125^{SD}.NOD mice were cultured with LPS, anti-IgM, or anti-3 4 CD40, and proliferation was assessed using CellTrace[™] Violet labeling. (A) Summary of proliferative responses for non-transgenic NOD (black bars) and V_H125^{SD}.NOD (open bars) mice after 48h. Mean 5 6 percentage of dividing, live B220+CD19+ cells is shown (n=3 for each genotype, error bars denote SD, p7 = 0.5, paired two-tailed t test). (B) Summary of CD86 MFI for non-insulin-binding (black bars) and 8 insulin-binding (open bars) B cells in V_H125^{SD}.NOD mice after culture with LPS, anti-IgM, anti-CD40, 9 or anti-CD40 and IL-4. Cells were gated on B220+CD19+ live lymphocytes. Histogram represents the mean of a minimum of three mice from five total experiments. Error bars denote SD. 10



Supplemental Fig. 2. IL-21 production is comparable between non-transgenic NOD and V_H125^{SD}.NOD mice.

Splenocytes from V_H125^{SD}.NOD or non-transgenic NOD mice were cultured with or without 13 14 anti-CD3 and soluble anti-CD28 prior to intracellular cytokine staining for IL-21. (A) Representative dot plot of IL-21+ CD4 T cells from V_H125^{SD}.NOD mice without stimulation 15 16 (left panel) and after stimulation with anti-CD3/anti-CD28 (right panel). Cells are gated on 17 CD4+ live lymphocytes. (B) Comparison of IL-21 production by Non-transgenic (solid line) and V_H125^{SD}.NOD (dotted line) CD4 T cells compared to unstimulated V_H125^{SD}.NOD (tinted gray) 18 19 CD4 T cells. Histogram is representative of ≥ 3 mice for each genotype. (C) Summary of IL-21 MFI for CD4 T cells from the spleen and PLNs of non-transgenic NOD (closed diamonds) and 20 V_H125^{SD}.NOD (open diamonds) mice. Each point represents an individual mouse. ***p*<0.01, 21 22 *p < 0.05, one-way ANOVA with Tukey's multiple comparisons test.