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Supporting Information

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Affinity maturation of antibodies requires integrity of the adult thymus

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Supporting Information figures:

Figure 1S: Measurement of T cell receptor (TCR) excision circles (TREC). Figure depicts the number of TRECs per 100 nanogram (ng) of genomic DNA in mice lacking the thymus (T), 5 weeks after surgery, and in age matched controls (C) by real time PCR. Control mice had an average of 721 TRECs per 100 ng of DNA while mice lacking the thymus had less than 117 per 100 ng DNA which is the detection limit of the assay. The two groups differed significantly by paired T test analysis (p=0.0028, two-tailed).

Figure 2S: Number of B cells in the spleens of athymic (T), sham-operated (S) or nonmanipulated control (C) mice, 5 weeks and 10 weeks after surgery. Numbers were calculated by multiplying the respective percentage as defined in a flow cytometry dot plot analysis with specific CD19, CD21 and CD23 monoclonal antibodies, by the total number of white blood cells (WBC). No significant differences were found between groups of similar age.

Figure 3S: Number of CD4+, CD25+, Foxp3+ (Treg) cells in the spleens of athymic (T), shamoperated (S) or non-manipulated control (C) mice, 5 weeks and 10 weeks after surgery. Numbers were calculated by multiplying the respective percentage as defined in a flow cytometry dot plot analysis with specific CD4, CD25 and Foxp3 monoclonal antibodies, by the total number of white blood cells (WBC). Groups compared by T test analysis. Statistically significant differences were denoted by an asterisk and indicate P < 0.05.



Supporting Information Figure 1



CD19+CD21+CD23-

Supporting Information Figure 2

CD19+CD21+CD23+



Supporting Information Figure 3