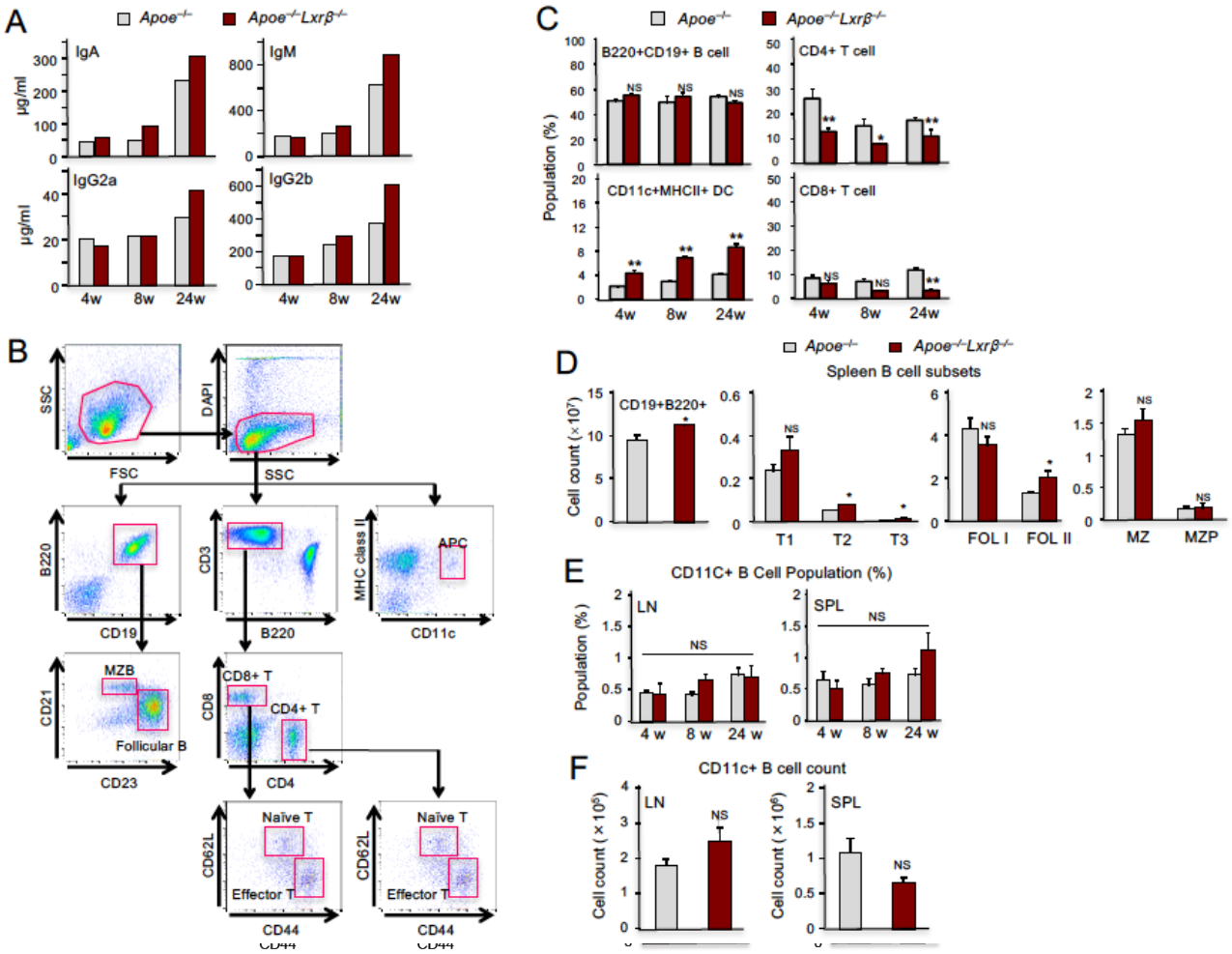

Figure S1. Related to Figure 1. Immune dysfunction in *Apoe-/-Lxrβ-/-* mice. (A) Elevated levels of total immunoglobulins in the plasma of *Apoe*$^{-/-}$*Lxrβ*$^{-/-}$ mice. Plasma samples were pooled from 4-6 mice. **(B)** Gating strategy used for phenotyping lymph node and spleen (Muppidi et al., 2011). **(C)** Expanded CD11^{+} MHC class II^{+} APC populations and decreased T cell populations in spleens of *Apoe*$^{-/-}$ and *Apoe*$^{-/-}$*Lxrβ*$^{-/-}$ mice. **(D)** Cell counts of the indicated cell populations in spleen of *Apoe*$^{-/-}$ and *Apoe*$^{-/-}$*Lxrβ*$^{-/-}$ mice analyzed by flow cytometry. **(E)** Percentages of CD11^{+} B cells were gated in CD19^{+} B220^{+} cells by flow cytometry. **(F)** Cell counts of CD11^{+} B cells gated in CD19^{+} B220^{+} cells by flow cytometry. N=4-6 per group. Statistical analysis was performed with Student's t test. *$p < 0.05$, **$p < 0.01$, NS, not significant. Error bars represent means +/- SEM.

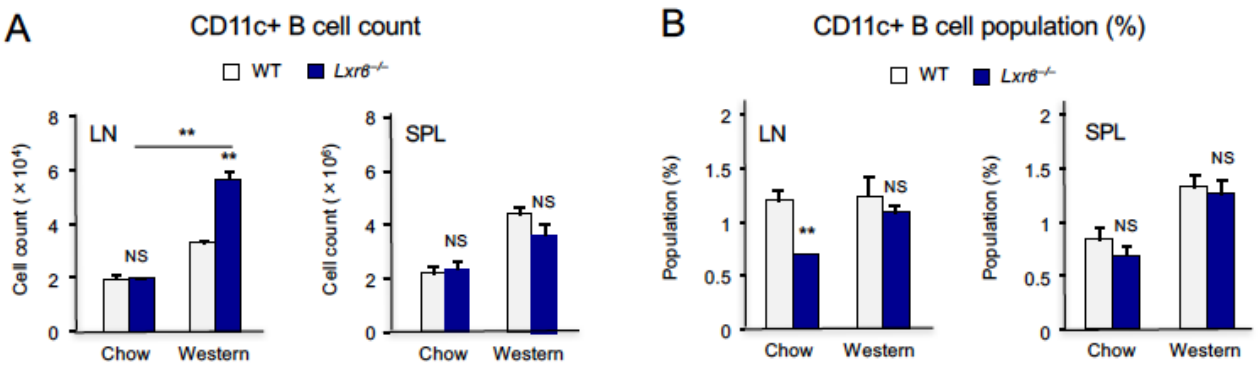

Figure S2. Related to Figure 2. Cell counts and percentages of CD11c$^+$ B cells gated in CD19$^+$ B220$^+$ cells by flow cytometry. N=4-6 per group. Statistical analysis was performed with Student's t test. $^{**}p < 0.01$, NS, not significant. Error bars represent means +/- SEM.

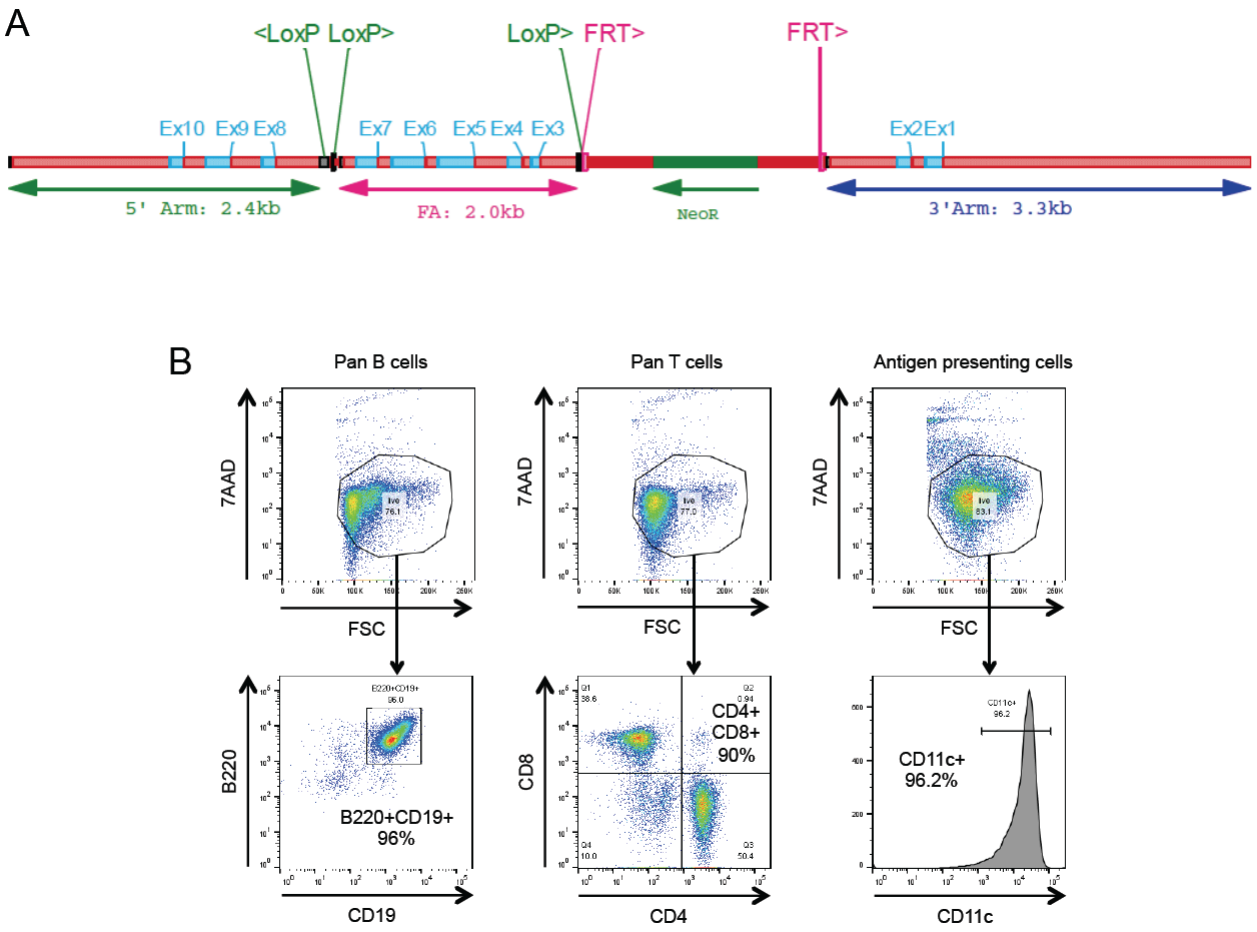

Figure S3. Related to Figure 5. Analysis of cell type-selective *Lxrβ*-deficient mice. (A) Targeting strategy for the generation of conditional *Lxrβ* knockout mice. **(B).** The purity of pan B cells, pan T cells and CD11c+ APCs isolated from wild-type spleen was determined by flow cytometry.

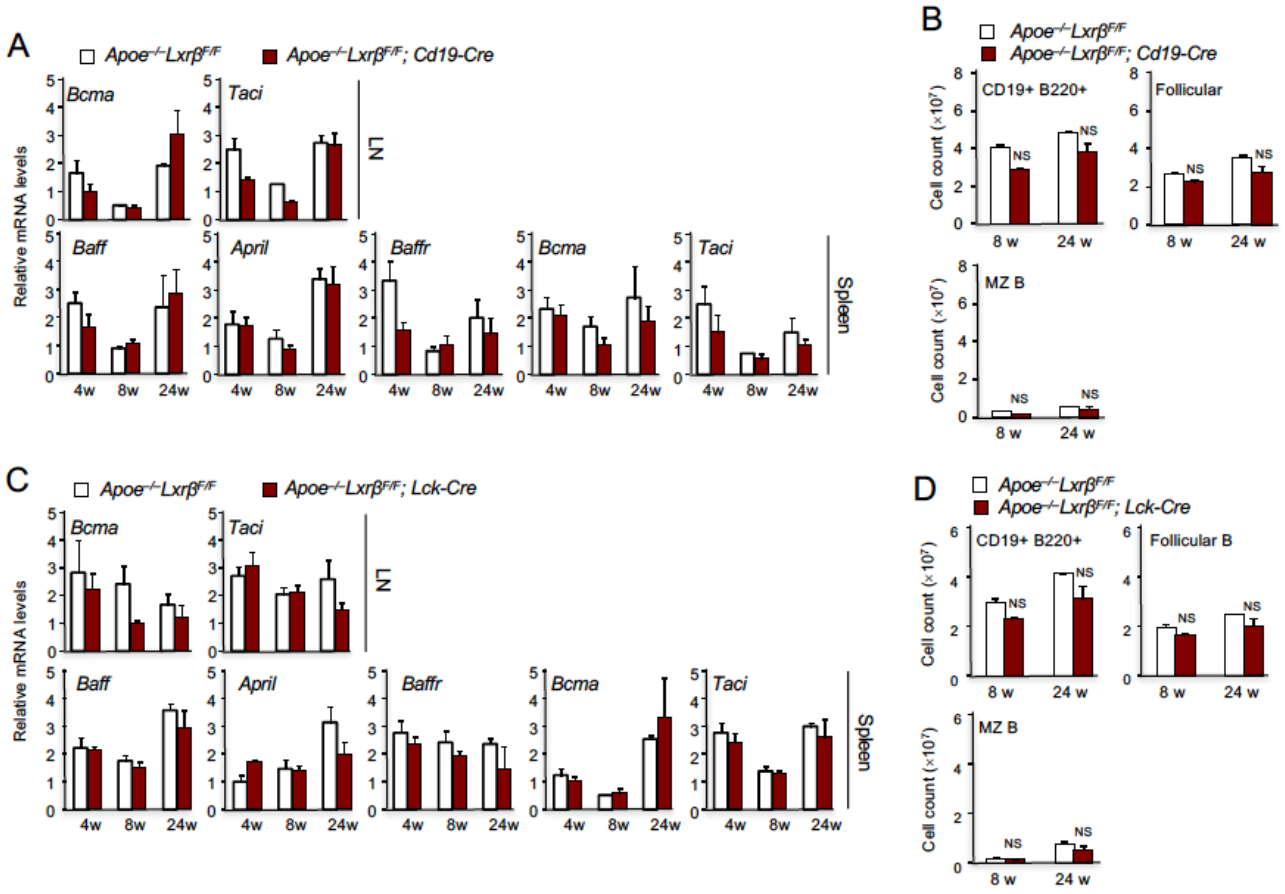

Figure S4. Related to Figure 5. Gene-expression in T- and B-cell selective *Lxrβ* knockout mice. Gene expression in lymph node and spleen of *Lxrβ*$^{F/F}$ and *Lxrβ*$^{F/F}$; *Cd19-Cre* mice **(A)** and *Lxrβ*$^{F/F}$; *Lck-Cre* mice **(C)** was analyzed by real-time PCR. Cell counts of indicated cell population in spleen of *Lxrβ*$^{F/F}$ and *Lxrβ*$^{F/F}$; *Cd19-Cre* mice **(B)** and *Lxrβ*$^{F/F}$; *Lck-Cre* mice **(D)** analyzed by flow cytometry. N=4-5 per group, $*p < 0.05$, NS, not significant. Error bars represent means +/- SEM.

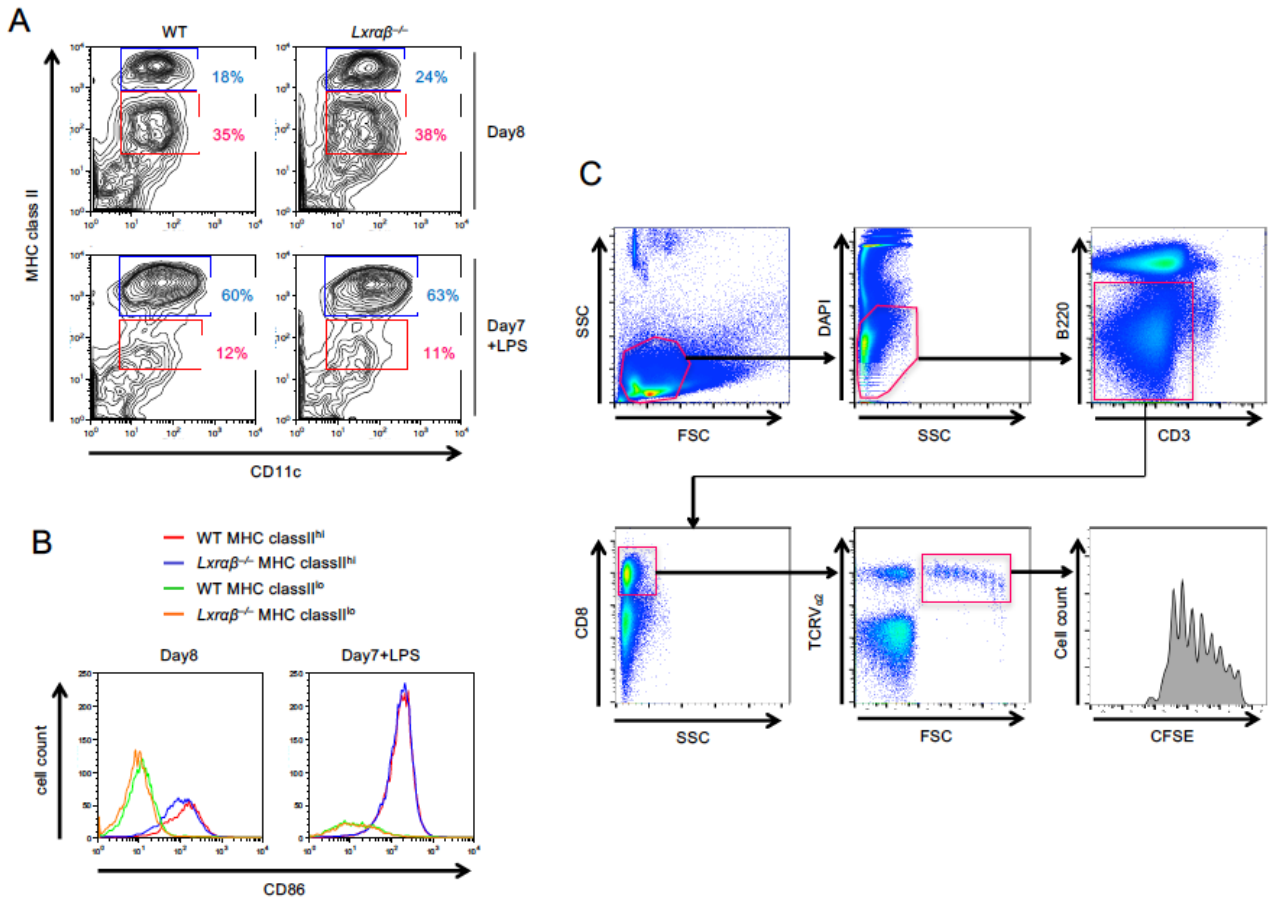

Figure S5. Related to Figure 6. Differentiation and activation of dendritic cells *in vitro* is not affected by LXR deficiency. **(A)** Bone marrow cells from wild-type and *Lxrαβ*$^{-/-}$ mice were differentiated into dendritic cells with GM-CSF. The CD11c^{+}MHC classII^{mid} and CD11c^{+}MHC classII^{hi} populations were analyzed by flow cytometry on day 8 after the differentiation (upper) or 24 hours after stimulation with 2 mg/ml LPS starting on day7 (bottom). **(B)** CD86 expression CD11c^{+}MHC class II^{mid} and CD11c^{+}MHC class II^{hi} populations in was determined by flow cytometry. **(C)** Gating strategy used for the *in vivo* T cell priming assay.

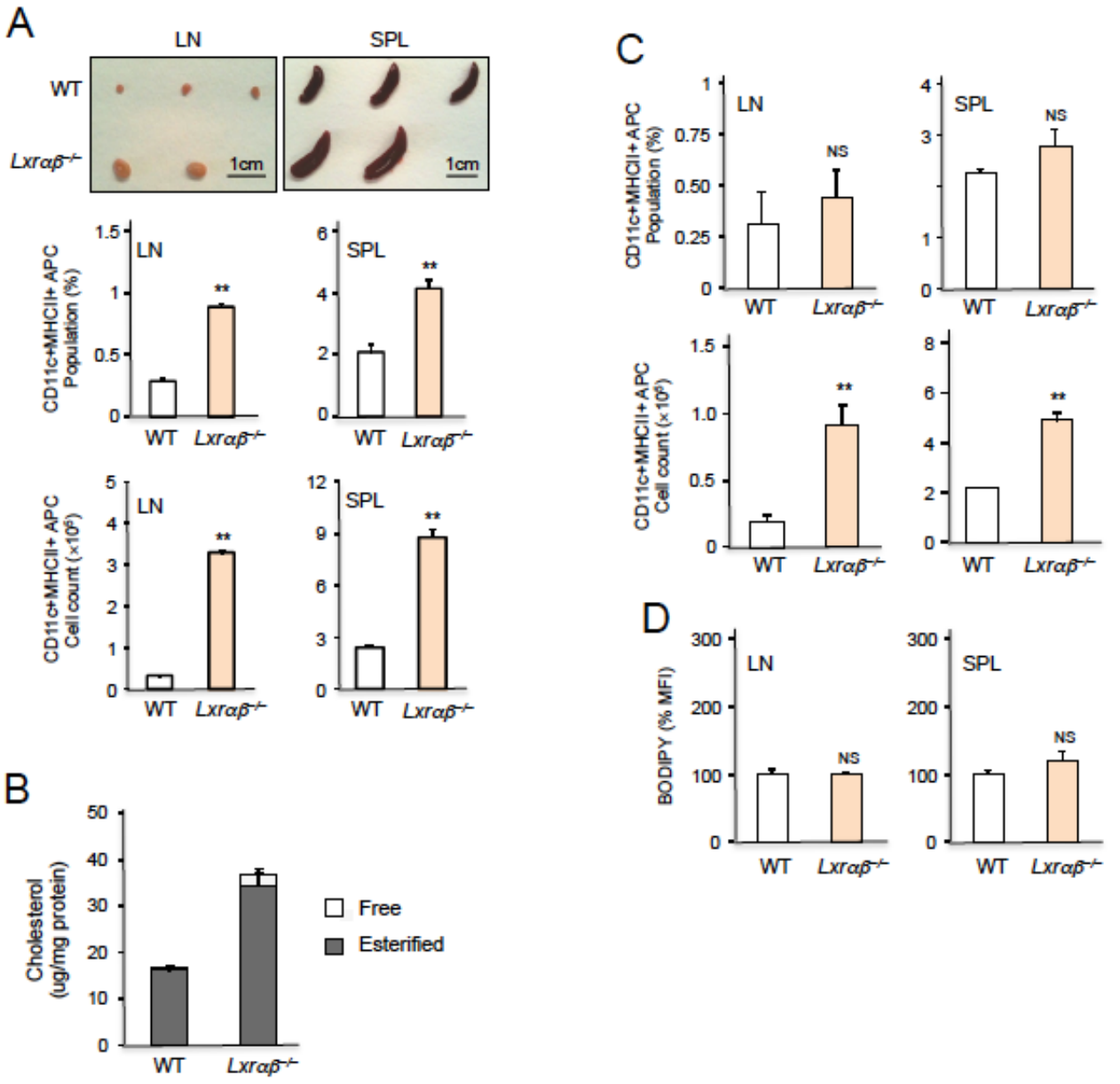

Figure S6. Related to Figure 6. Antigen presenting cell function in LXR-deficient mice. (A) Gross morphology of lymph node and spleen (upper), percentages (middle) and cell counts (bottom) of CD11c^{+}MHC class II^{+} cells in lymph node and spleen of wild-type and *Lxrαβ*$^{-/-}$ mice fed Western diet for 12 weeks analyzed by flow cytometry. (**B**) Quantitation of free and esterified cholesterol in CD11c^{+} APCs from wild-type or *Lxrαβ*$^{-/-}$ mice fed Western diet for 12 weeks **(C)** Percentages and cell counts of the CD11c^{+}MHC class II^{+} APC population in lymph node and spleen of wild-type and *Lxrαβ*$^{-/-}$ mice fed standard chow analyzed by flow cytometry. **(D)** Lipid content in CD11c^{+} cells was analyzed by staining cells from lymph node and spleen of wild-type and *Lxrαβ*-/- mice fed standard chow with BODIPY. MFI in CD11c^{+} cell population was determined by flow cytometry.

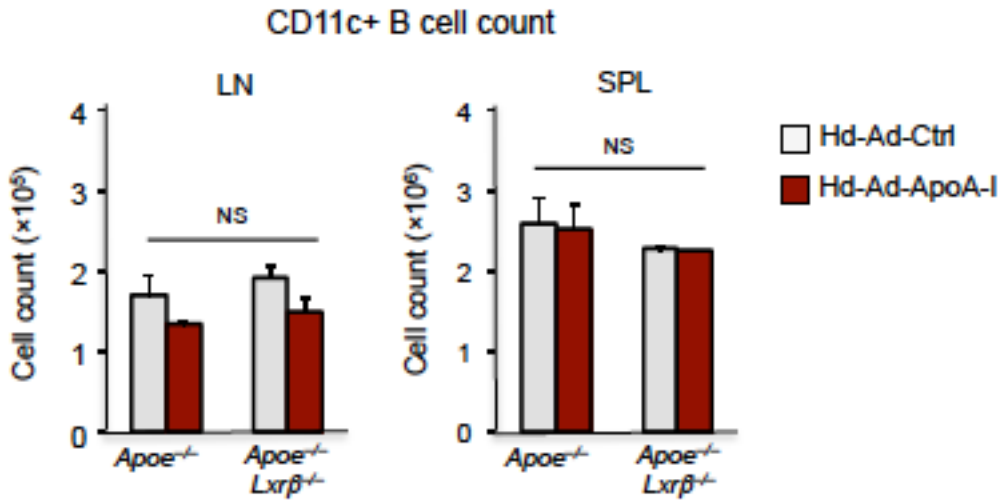

Figure S7. Related to Figure 7. CD11c$^+$ B cells in ApoE/LXR-deficient mice expressing vector control or ApoA-I. Cell counts of CD11c$^+$ cells gated in CD19$^+$ B220$^+$ cells by flow cytometry. N=5 per group. Statistical analysis was performed with Student's t test. NS, not significant. Error bars represent means +/- SEM.