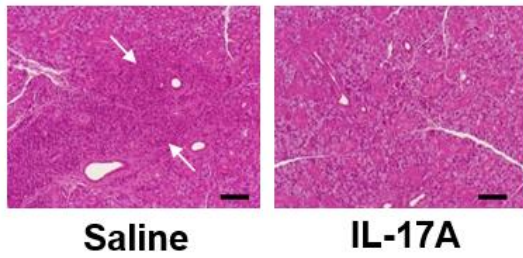


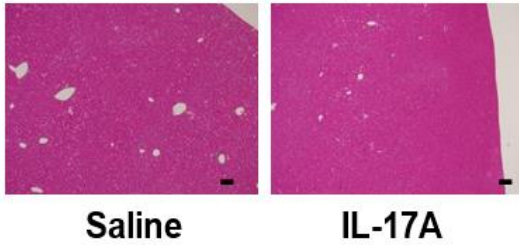
Figure S1. ELISPOT assay of IL-17A immunized mice. In the ELISPOT assay, splenocytes (10^6 cells per well) from IL-17A1- immunized mice at 12 weeks old were stimulated with 17A1 peptide, 17A2 peptide, recombinant mouse IL-17A (rIL-17A), HBc peptide, or PHA at $10 \mu\text{g/mL}$. The production of IFN- γ or IL-4 by splenocytes was detected as black spots. The splenocytes of six mice were tested in ELISPOT assay, respectively.

(a) submandibular grand



(b)

Liver



(c)

Spleen

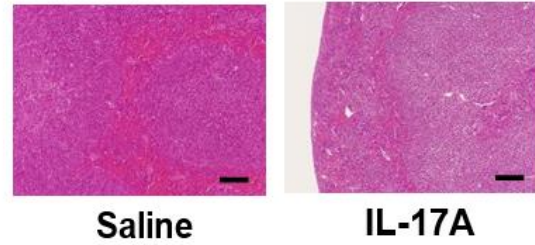


Figure S2. H&E staining of submandibular grand, liver and spleen from IL-17A vaccinated or saline-treated NZBWF1 mice. (a) H&E staining of submandibular grand section of the IL-17A vaccine group (right) and saline group (left). Submandibular sialadenitis was suppressed in the IL-17A vaccine group. White arrows indicate destruction of the normal structures of submandibular grand by dense lymphoid cell infiltration. Scale bar = 100 mm. (b, c). There was no evidence of any pathological changes in vaccinated NZBWF1 mice. (b) liver section, (c) spleen section in IL-17A vaccine group (right) and saline group (left). Scale bar = 100mm.

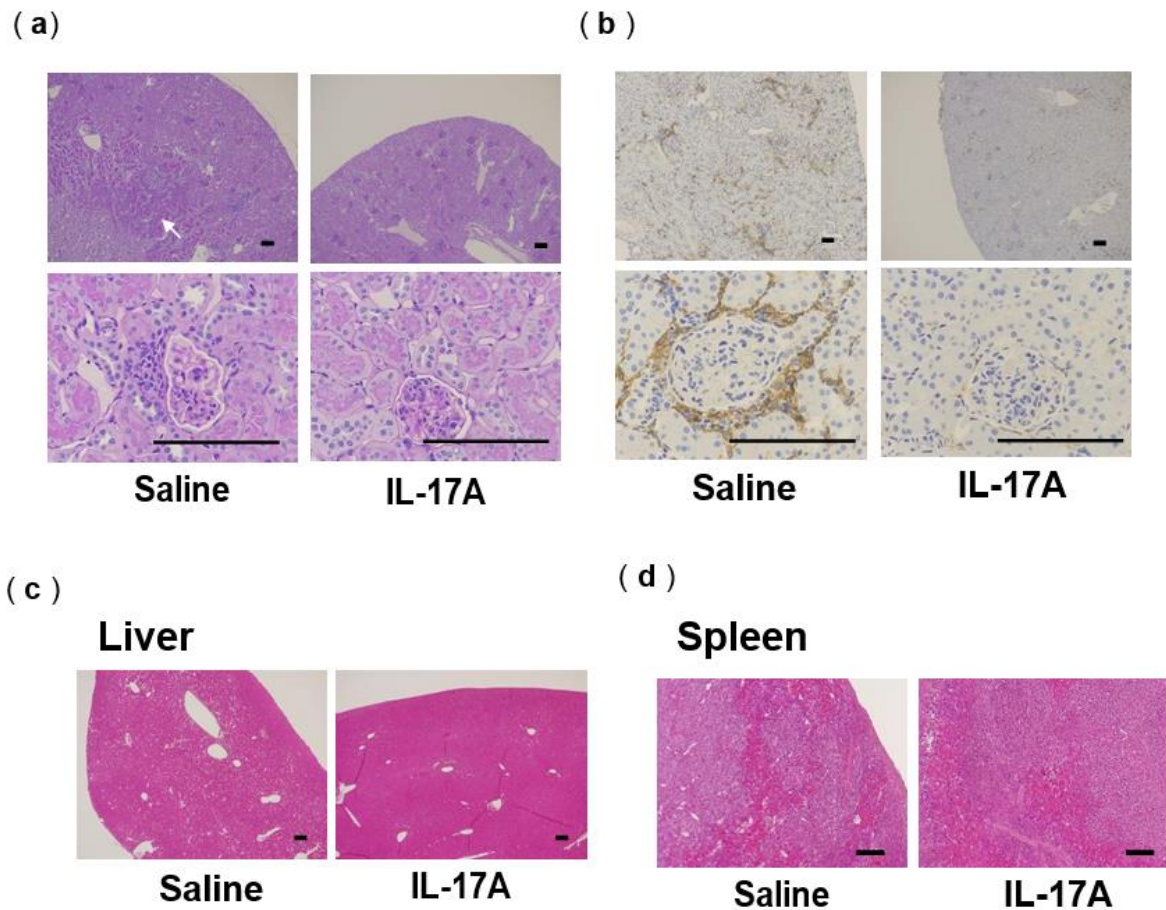


Figure S3. Pathological analysis of IL-17A vaccinated or saline-treated MRL/lpr mice. **(a)** PAS staining of kidney sections from the IL-17A vaccine group (right) and the saline group (left). Glomerulosclerosis and interstitial infiltration (white arrow) were suppressed in the IL-17A vaccine group. Scale bar=100 μm. **(b)** F4/80 immunostaining of kidney sections from the IL-17A vaccine group (left) and the saline group (right). Infiltration of macrophages was suppressed in the IL-17A vaccine group. Scale bar = 100 μm; **(c,d)** HE staining of liver and spleen section of IL-17A vaccine group (right) and saline group (left). There was no evidence of any pathological changes in tissue sections of vaccinated MRL/lpr mice. Scale bar = 100μm.

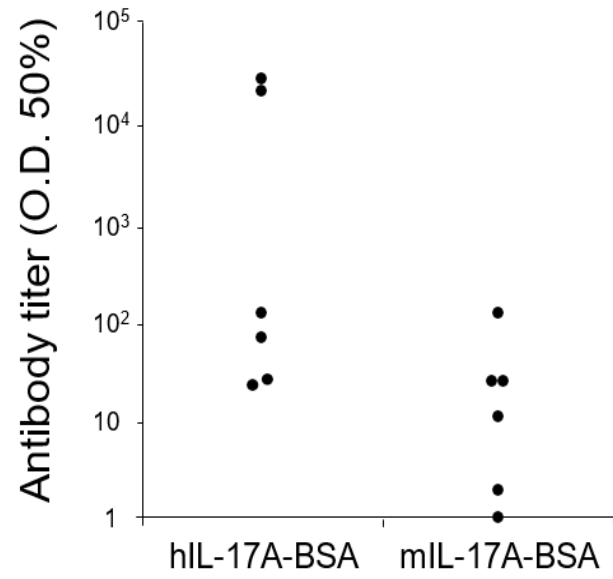


Figure S4. Evaluation of human IL-17A epitope. Balb/c female mice were immunized with pcDNA3.1-HBc- humanIL17A1 (human IL-17A) three times every two weeks. Anti- humanIL-17A1 epitope antibody was produced at 6 week after first vaccination (hIL-17A-BSA, left), and produced antibody cross-reacted weakly to mouseIL-17A1 epitope (mIL-17A-BSA, right).