

Supplemental Figure S1. (A and B) The mean ratio of CD4 or CD8 positive lymphocyte in spleen from the treated mice 14 days after immunization or the normal B6 mice (No EAE) for negative control. (**C and D**) Intracellular staining of IFN- γ and IL-17A from spleen- derived CD4⁺T cells from each treatment group. Each symbol represents an independent experiment. (**E**) The Average body weight (BW) change in the experiment shown in Fig. **2A**. (**F** - **J**) Mice were immunized with 50 µg MOG₃₅₋₅₅ peptide and injected i.p. with anti CD4 antibody coated nlg- KN-93 or control nlg. Seven days after the immunization, the part of single cells from the draining lymph nodes (dLN) were analyzed by flow cytometry (**F** - **H**) and 5 × 10⁵ cells of these were stimulated for 72 hours with various concentrations of MOG₃₅₋₅₅. followed by ELISA (**I and J**). The frequencies of IFN- γ (**G**) and IL-17A (**H**) producing CD4⁺T cells in dLN are shown. Data are from one experiment representative of two independent experiments (n=4 per group) (**F**). The average concentrations of IFN- γ (**I**) and IL-17A (**J**) in the supernatants determined by ELISA are shown. Results are representative of two independent experiments (n=4 per group) (**F**). The average concentrations of IFN- γ (**J**) and IL-17A (**J**) in the supernatants determined by ELISA are shown. Results are representative of two independent experiments (n=4 per group) (**F**). The average have an independent experiment shown in Fig. **2G**. Error bars represent the mean ± SEM. *P < 0.05, **P < 0.01, *** P < 0.001 by 1way ANOVA(**H** - **J**) or 2way ANOVA(**E and K**) with Bonferroni's post- test.



Supplemental Figure S2. (**A**) The picture of spleens from each treatment group at 16 weeks of age. (**B**) The scatter blots for weight of spleen from the mice treated with each indicated treatment. (**C** - **E**) Anti-CD4 antibody-coated nlg- KN-93 had no effect on the distribution of T cell subsets in the peripheral blood of MRL/lpr mice. The mean ratio of CD4⁺, CD8⁺ or double negative T cells treated with free KN-93 (10µg/week/mouse), anti CD4 antibody coated nlg- empty (CD4- nlg- empty) and CD4- nlg- KN-93 (10µg of KN93/week/mouse) analyzed by Flow cytometry biweekly. (**F** - **H**) The mean ratio of CD4⁺ and/or CD62L⁺ cells in CD4⁺ T cells in peripheral blood of each treatment group using flow cytometry. (**I**) Mean ratio of CD25⁺ CD4⁺ T cells in peripheral blood in each group biweekly within the observation periods. (**J**) Mean ratio of both CD25⁺ and FOXP3⁺ cells in CD4⁺ T cells in spleen at 16 week-age mice treated with indicated drugs. (**K** - **M**) The mean histological score of glomerular injury, tubular damage, and perivascular lymphocyte infiltration on kidneys from the indicated treatment groups. Error bars represent the mean ± SEM. Representative data of 3 independent experiments are shown (n=4-6 mice per group). * P < 0.05, ** P < 0.01 by 1way ANOVA with Bonferroni's post-test.