

**Fig. S1.** Confirmation of the PGA purity. A. One-dimentional  $^1H$  NMR analysis of purified PGA was performed using Varian 400 MHz spectrometer. NMR analysis of purified PGA demonstrated a conventional peak pattern of γ-PGA with no additional peak, which indicates high purity of PGA. B. RAW 264.7 cells were stimulated for 24 h with 10 ng/ml P3C, 3 μg/ml LTA, and 100 μg/ml PGA aft er treatment with 200 μg/ml lipase for 12 h at 37  $^{\circ}$ C. TNF- $\alpha$  concentrations were measured by ELIS A. C. BMDMs from C57BL/6 and NOD2-KO C57BL/6 mice were stimulated with 100 μg/ml PGA for 24 h. Cell culture supernatants were collected and TNF- $\alpha$  concentrations were measured by ELI SA. Data are the mean values  $\pm$  S.D. of triplicate samples. Statistical significance was examined with t-test. \* P < 0.01 compared with each stimulated group. The results shown are representative of thr ee separate experiments. NS, not significant.