**Methods S1. Spleen cells culture procedure for cytokine analysis**

Spleen cells were adjusted to 1 × 106 cells/mL in RPMI 1640 culture medium supplemented with 10% FBS, 1% L-glutamate, 100 IU/mL penicillin, 0.1 mg/mL streptomycin, and 0.25 μg/mLamphotericin B. Cells were plated at a density of 5×105 cells/well in 24-well plates and were incubated with 2 μg/mL phytohemagglutinin (PHA; 0.5 mL/well) in a humidified incubator at 37°C with 5% CO2 for 48 h. After incubation, the supernatants were collected and stored at -20°C for further cytokine analysis.