

Figure S1. Effects of PNU282987 on DSS-induced mice colitis were reversed by co-treatment with the  $\alpha 7$ nAChR antagonist MLA. MLA (1 mg/kg) was given to mice intraperitoneally 24 h before DSS and PNU282987 (3 mg/kg) were administered. Body weight was monitored every day (n=10). Data are expressed as the mean  $\pm$  SD of three independent experiments. \*\*P<0.01. DSS, dextran sulfate sodium; MLA, methyllycaconitine citrate; PNU, PNU282987.

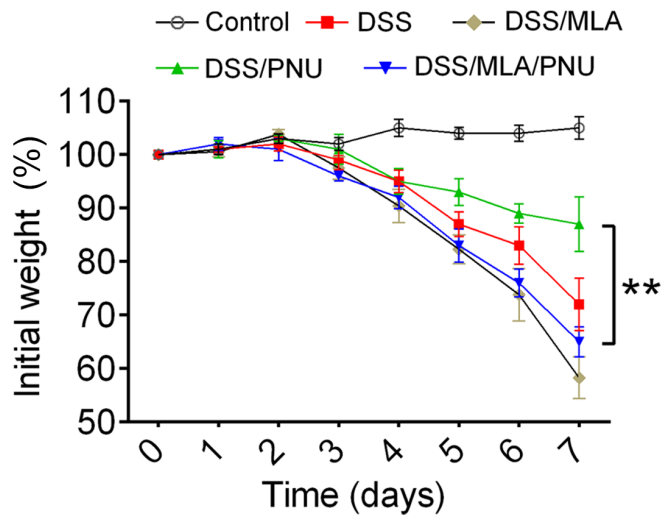


Figure S2. Colonic macrophages isolation method. Intestinal lamina propria cells were incubated with CD45-Pacific Blue, CD11b-FITC and F4/80-PE antibodies at room temperature in dark for 30 min, after washing twice with PBS, cells were resuspended in PBS at  $1 \times 10^6$  cells/ml. (A) Colonic macrophages were sorted from CD45 positive cells, CD11b and F4/80 double positive gates by BD FACSAria™ III (BD Biosciences). (B) Sorted cells were then analysed by BD FACSCalibur™ (BD Biosciences) to ensure that the purity of CD11b and F4/80 double positive macrophages was  $>85\%$ .

