**Supplemental figure 1**

(A) Western blot analysis shows that P2X7R expression in peritoneal macrophages is up-regulated in P2X4-deficient mice as compared to WT macrophages. Representative experiment of N=4. (B) Immunostaining of P2X7R in macrophages does not reveal any noticeable difference between WT and P2X4R-deficient macrophages. Scale bar is 20 µm. (C) 2 hours post carrageenan challenge, P2X7R expression was analyzed in paw tissue by western blotting. Inflammation has no effect on P2X7R expression, while a slight up-regulation of P2X7R expression is observed in P2X4R-deficient mice. N=2 animals per lane, two independent experiments. (D) Paw concentrations of IL-1β and IL-6 were analyzed in WT and P2X4R-deficient mice in control conditions or 24h post CFA-injection. CFA induces an equal increase of both cytokines in WT and P2X4R-deficient mice. (E) A-740003, a specific P2X7R antagonist completely abolishes ATP-induced YO-PRO-1 uptake in macrophages. Horizontal bar indicates perfusion of cells with ATP (1mM) alone or in the presence of 10 µM A-740003.
Supplemental figure 2. P2Y12R is not expressed in peritoneal macrophages. (A) Double immunostaining of P2Y12R (right column) and F4/80 (left column) was performed in peritoneal macrophages from WT mice (top row) and P2X4R-deficient mice (bottom row). (B) Immunostaining of P2Y12R expressed by microglial cells was performed in hippocampal brain slice as a positive control. Scale bar is 20µm.