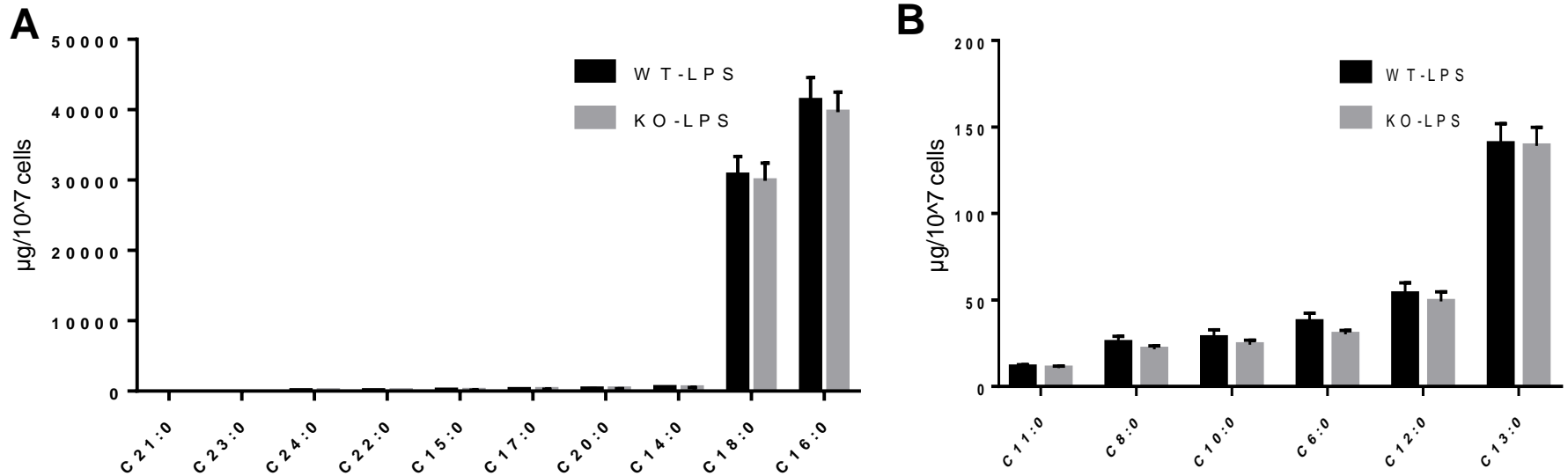


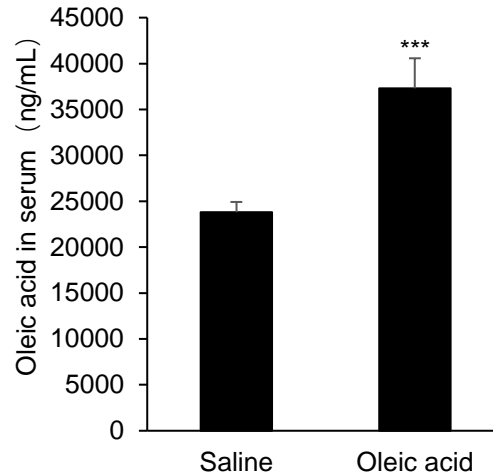
Supplementary Figure 1. FABP5 deficiency decreases LPS-induced pro-inflammatory response of bone marrow-derived macrophages.

(A) TNFα levels in the supernatants of WT and FABP5KO BMDMs with or without LPS stimulation for 6h were measured by enzyme-linked immunosorbent assay. (B) TNFα expression in F4/80⁺CD11b⁺ cells in WT and FABP5KO BMDMs with or without LPS stimulation for 6h was measured by flow cytometry. Data are representative of three independent experiments. Data are presented as mean ± S.D. (n=3). *p < 0.05, ***p < 0.001, Student's t test.



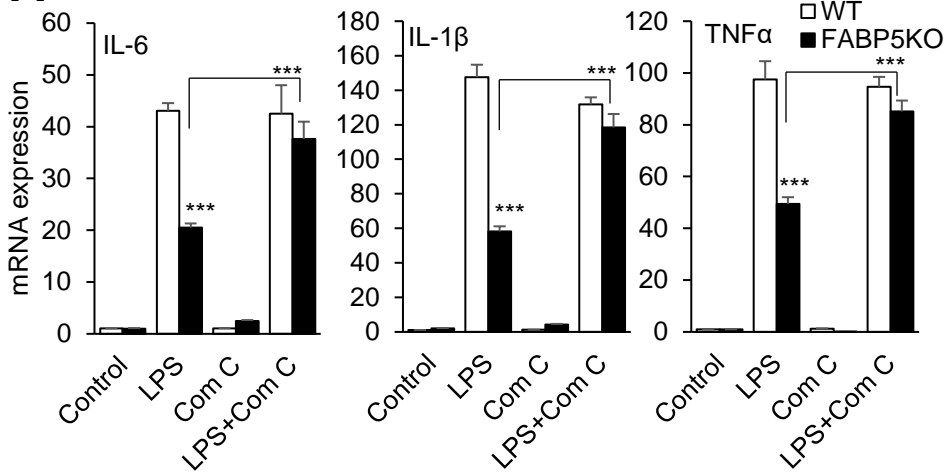
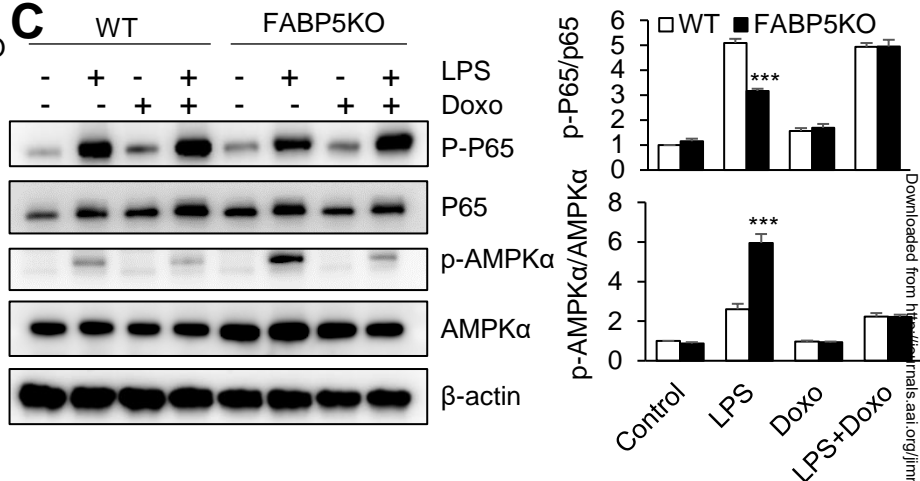
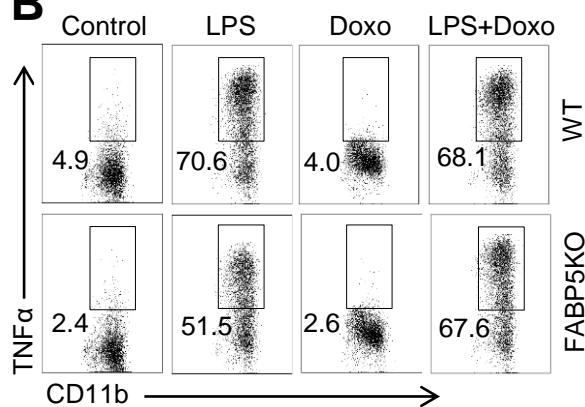
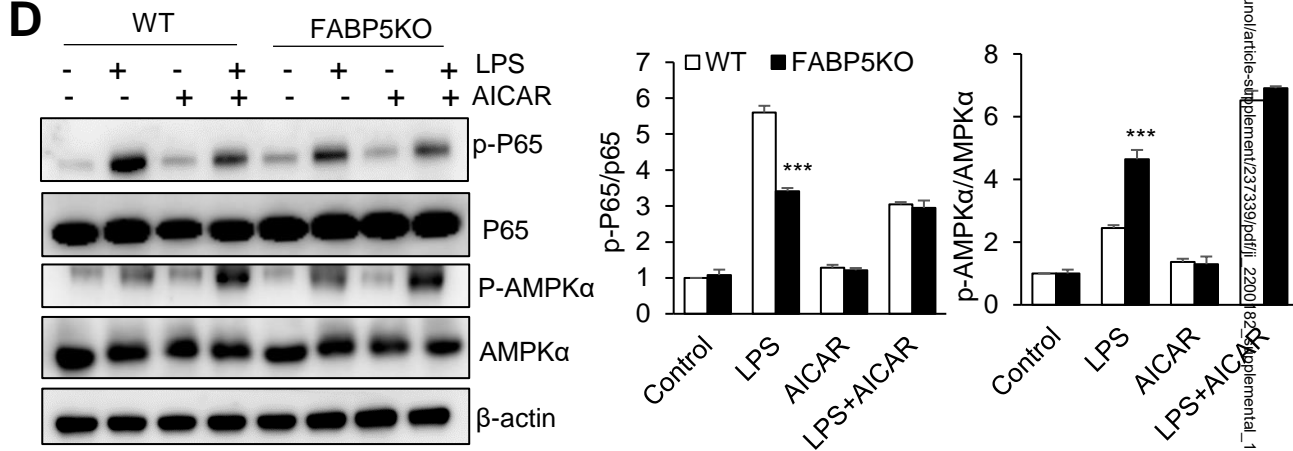
Supplementary Figure 2. FABP5 deficiency does not affect medium- and long-chain saturated fatty acids

(A) Concentrations of long-chain saturated fatty acids between WT and FABP5KO BMDMs with LPS stimulation for 6h. These samples were measured by GC-MS. (B) Concentrations of medium-chain fatty acids between WT and FABP5KO BMDMs with LPS stimulation for 6h. These samples were measured by GC-MS. Data are presented as mean \pm S.D. (n=3).



Supplementary Figure 3. The serum levels of oleic acid was increased in mice treated with gavage of oleic acid.

The contents of oleic acid in the serum of intragastric oleic acid-treated or normal saline-treated mice were determined by GC-MS. Data are representative of three independent experiments. Data are presented as mean \pm S.D. (n=4). ***p < 0.001, Student's t test.

A**C****B****D**

Supplementary Figure 4. The cytokine expression and NF- κ B activation in macrophages after AMPK signaling pathway is chemically inhibited or activated.

(A) Real-time PCR showing the gene expression of TNF α , IL-6, and IL-1 β in WT and FABP5KO PEMs that were pretreated by Compound C (1 μ M) for 1hr and then stimulated with LPS for 6hrs. (B) Flow cytometry analysis of TNF α expression in WT and FABP5KO F4/80+CD11b+ PEMs that were pretreated by Doxorubicin(Doxo, 0.5 μ M) for 1h and then stimulated with LPS for 6hrs. (C) Immunoblot analysis of P65, p-P65, AMPK α and p-AMPK α protein in medium or oleic acid-treated PEMs that were pretreated by Doxo (0.5 μ M) for 1h and then stimulated with LPS for 6hrs (n=3). (D) Immunoblot analysis of P65, p-P65, AMPK α and p-AMPK α protein in medium or oleic acid-treated PEMs that were pretreated by AICAR (250 μ M) for 1hr and then stimulated with LPS for 6hrs (n=3). Data are representative of three independent experiments. Data are presented as mean \pm S.D. (n=3). **p < 0.01, ***p < 0.001, Student's t test.