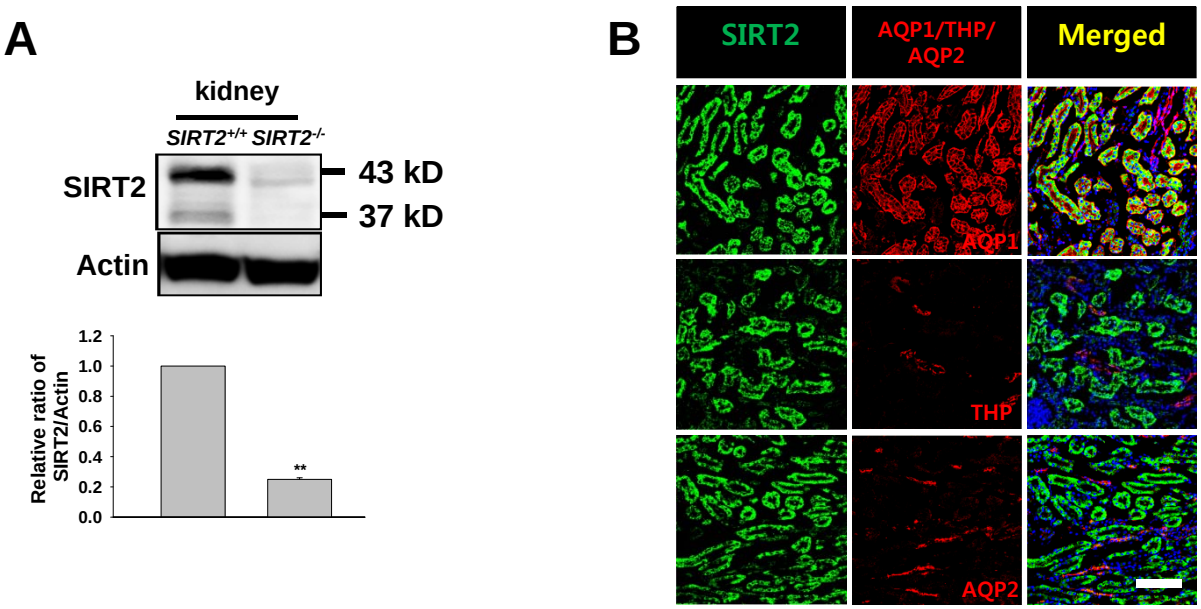
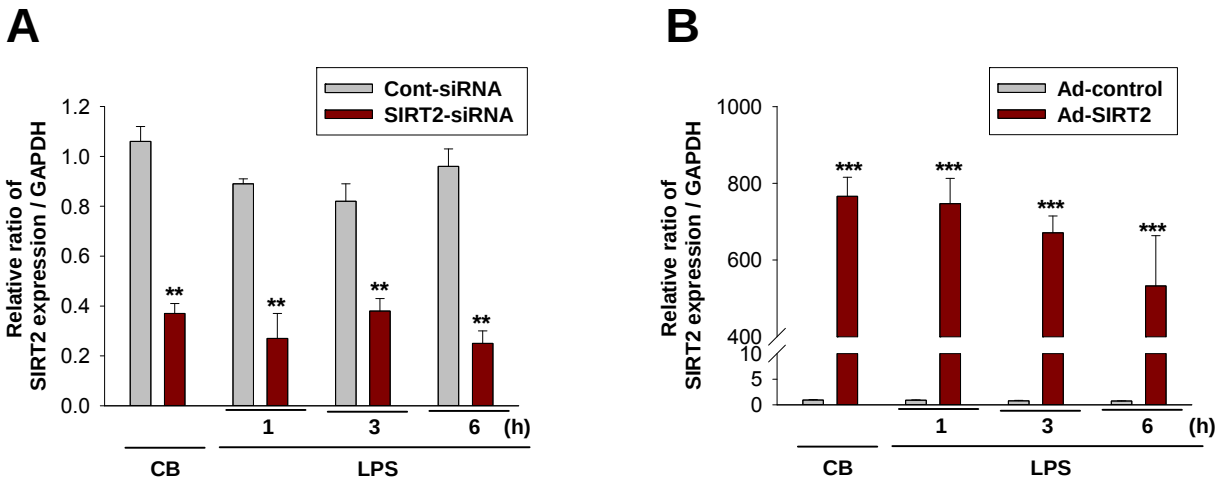
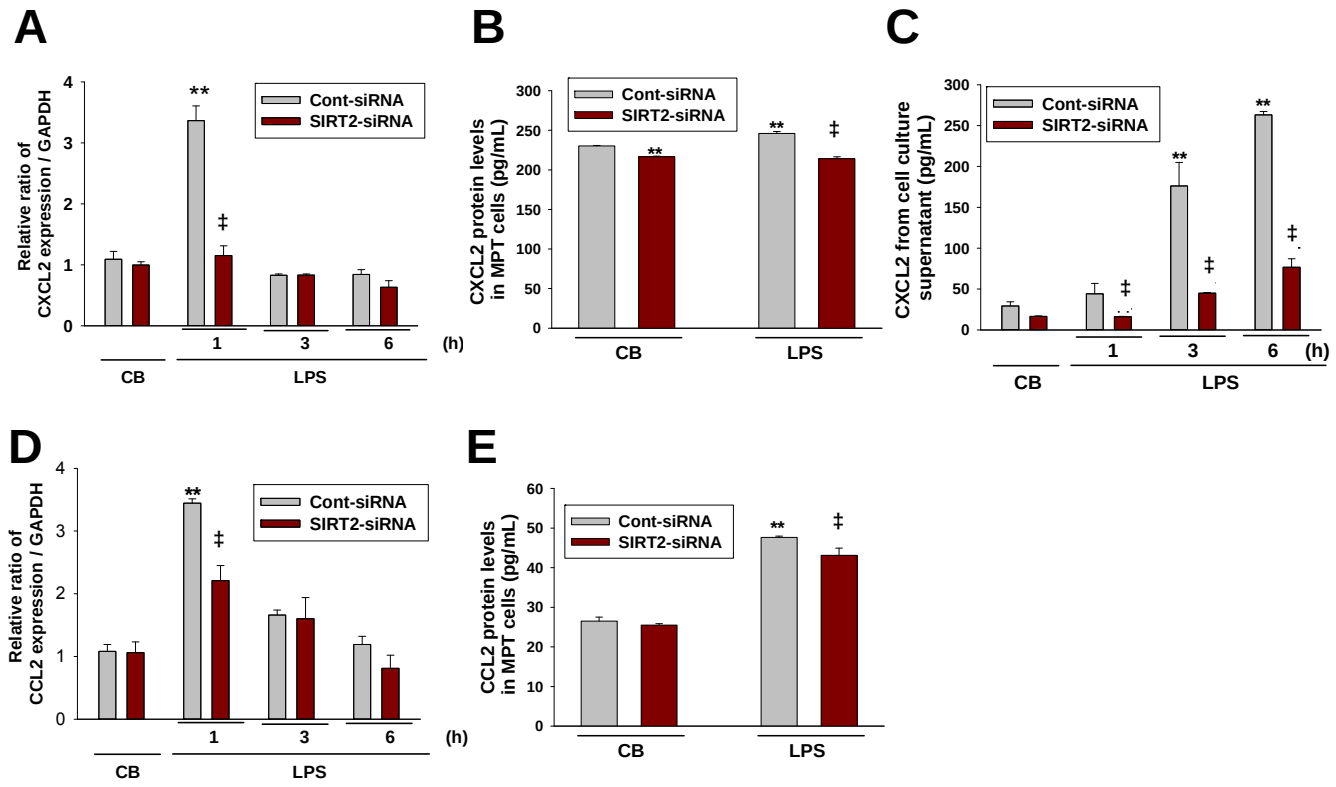


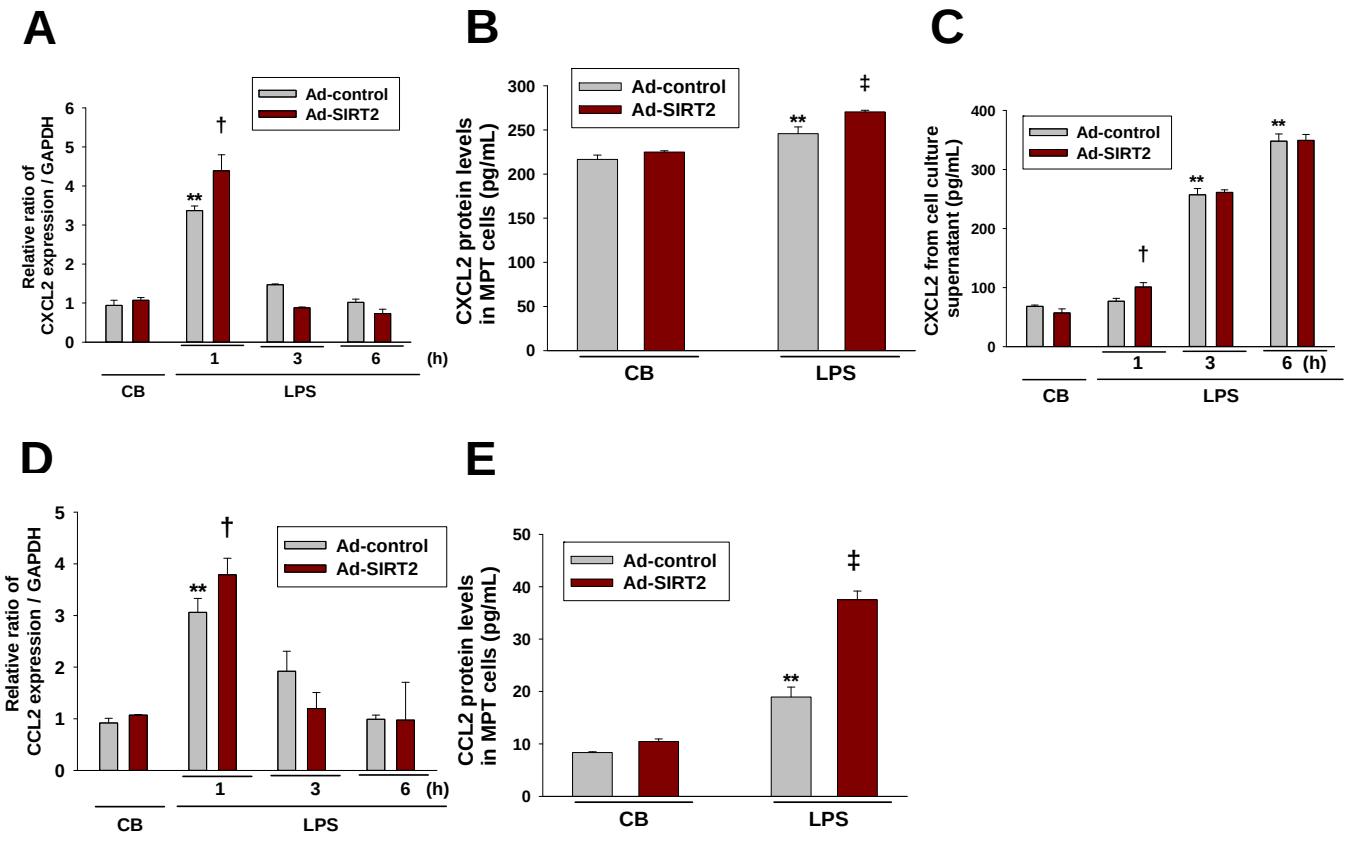

**Supplemental figure 1.** (A) Western blot analysis of SIRT2 in the kidney of *Sirt2*$^{+/+}$ and *Sirt2*$^{-/-}$ mice. Samples containing 10 μg of protein were subjected to electrophoresis and then analyzed by Western blot with antibody against SIRT2. Experiments were repeated three times (n = 5). Relative protein level of SIRT2 was normalized to β-actin (Actin). Note that SIRT2 protein was dramatically decreased in SIRT2-deficient (*Sirt2*$^{-/-}$) mice compared to SIRT2 wild-type (*Sirt2*$^{+/+}$) mice. (B) Immunofluorescence findings of SIRT2, aquaporin (AQP) 1, Tamm–Horsfall glycoprotein (THP) and AQP2. AQP1, THP and AQP2 were used as a proximal tubular epithelial, a thick ascending limb of the loop of Henle and a collecting duct marker, respectively. Normal mouse kidneys were coimmunostained with SIRT2, AQP1, THP and AQP2 antibody. Note that SIRT2-positive renal tubule cells were observed and costained with AQP1. Scale bar = 100 μm




**Supplemental figure 2.** Analysis of SIRT2 mRNA expression by qRT-PCR in MPT cells after treatment with SIRT2-siRNA or control-siRNA (A) and SIRT2 overexpressing (Ad-SIRT2) or control adenovirus (Ad-control) (B). Fold changes of SIRT2 mRNA expression are relative to control buffer (CB)-treated MPT cells. Bars represent the means±SD from 4 independent experiments. **, $P < 0.01$ versus MPT cells treated with control-siRNA in each time; ***, $P < 0.001$ versus MPT cells treated with Ad-control.




**Supplemental figure 3.** Effect of small interfering RNA-targeting SIRT2 (SIRT2-siRNA) and control-siRNA (Cont-siRNA) on CXCL2 and CCL2 expression in MPT cells. (A and D) CXCL2 and CCL2 mRNA expression analysis by quantitative real-time reverse transcription-PCR in MPT cells after treatment with SIRT2-siRNA or Cont-siRNA at 1, 3 and 6 h after LPS treatment. Fold changes of CXCL2 expression are relative to control buffer (CB)-treated MPT cells. Bars represent the means±SD from 3 independent experiments. (B and E) CXCL2 and CCL2 protein levels of MPT cells after transfected with SIRT2-siRNA or Cont-siRNA were measured by ELISA at 3 h after LPS treatment. (C) CXCL2 protein levels from cell culture supernatant after transfected with SIRT2-siRNA or Cont-siRNA were measured by ELISA at 1, 3 and 6 h after LPS treatment. Bars represent the means±SD from 4 independent experiments. **, $P < 0.01$ versus MPT cells treated with CB plus Cont-siRNA; ‡, $P < 0.01$ versus MPT cells treated with LPS plus Cont-siRNA.




**Supplemental figure 4.** Effect of SIRT2-overexpressing adenovirus (Ad- SIRT2) or control-adenovirus (Ad-control) on CXCL2 and CCL2 expression in MPT cells. (A and D) CXCL2 and CCL2 mRNA expression analysis by quantitative real-time reverse transcription-PCR in MPT cells after treatment with Ad-SIRT2 or Ad-control. Fold changes of CXCL2 expression are relative to control buffer (CB)-treated MPT cells. (B and E) CXCL2 and CCL2 protein level in MPT cells after transfected with Ad-SIRT2 or Ad-control were measured by ELISA at 3 h after LPS treatment. (C) CXCL2 protein levels from cell culture supernatant after transfected with Ad-SIRT2 or Ad-control were measured by ELISA at 1, 3 and 6 h after LPS treatment. Bars represent the means±SD from 4 independent experiments. **, $P < 0.01$ versus MPT cells treated with CB plus Ad-control; †, $P < 0.05$ versus MPT cells treated with LPS plus Ad-control; ‡, $P < 0.01$ versus MPT cells treated with LPS plus Ad-control