

**Supplementary Figure S1:** (A) The mRNA expression of xanthine oxidase in kidneys and intestine. (B) The xanthine oxidase activity in ileum and jejunum.

**Supplementary Figure S2:** Histopathological analysis of intestine tissues after H&E staining.

**Supplementary Figure S3:** Representative immunofluorescence images showing ABCG2 expression (red) and SLC2A9 expression (green) in colon, ileum and jejunum. Nuclei were stained with DAPI (blue).

**Supplementary Figure S4:** HK-2 and Caco-2 cells were transfected with *SIRT1* siRNA or scrambled siRNA for 48 h. Cells were then pretreated with or without bergenin for 2 h, followed by incubation with 8 mg/dL UA for another 10 h. Representative western blots showing ABCG2, SLC2A9, SIRT1 and PPAR $\gamma$  protein levels.