Supplemental Figure 1. PINK1 and Parkin deficiency enhances kidney damage and fibrosis in adenine (AD) model. A) Western blot and densitometry analysis for MFN2, Parkin, and LC3 normalized to β-actin in the kidney from mice fed with control (Ctl, n = 3 per group) or adenine (AD, n = 5 per group) diet for 14 days. Data are mean ± SEM. *P< 0.05, **P<0.01 and ***P<0.001, analyzed by student’s unpaired 2-tailed t-test B) Hydroxyproline content in the kidney from Pink1+/+ and Pink1−/− mice fed with Ctl (n = 4 per group) or AD (n = 5 per group) diet for 28 days. C) Weight of kidney from Pink1+/+ and Pink1−/− mice (n = 5 per group) fed with Ctl or AD diet for 28 days. D) Circulating chemokine CCL2 levels in the plasma samples obtained from Pink1+/+ and Pink1−/− mice (n = 4 per group) fed with Ctl or AD diet for 28 days were determined by ELISA.
**Supplemental Figure 1E**

**E** Western blot and densitometry analysis for the expression of fibronectin (FN), Collagen-I (Col-I), CD206, and Galectin-3 (Gal-3) normalized to GAPDH on kidney from *Prkn*<sup>+/+</sup> and *Prkn*<sup>−/−</sup> mice fed with control (Ctl, n = 3 per group) or adenine (AD, n > 5 per group) diet for 14 days. Data are mean ± SEM. *P< 0.05, **P<0.01 and ***P<0.001, analyzed by one-way ANOVA (B, C, D, E).
Supplemental Figure 1F and 1G

**F**

Flow cytometric data showing the numbers galectin-3 (Gal-3) F4/80+ cells in the kidney from wild type (n = 6 per group) Pink1−/− (n = 6 per group) and Prkn−/− (n = 3 per group) mice 28 days after control (Ctl) or adenine (AD) diet. The Gal-3+ F4/80+ cells were gated on CD45+ SSC low cells (not shown).

**G**

Flow cytometric data showing the numbers of TGF-β1 F4/80+ cells in the kidney from wild type (n = 4 per group), Pink1−/− (n = 4 per group) and Prkn−/− (n = 3 per group) mice 28 days after Ctl or AD diet. The TGF-β1+ F4/80+ cells were gated on CD45+ SSC low cells (not shown).

The data are representative of three independent experiments and are mean ± SEM. *P<0.05, **P<0.01 and ***P<0.001, analyzed by one-way ANOVA (B-G).

**Supplemental Figure 1.** F and G) PINK1 and Parkin deficiency enhances kidney damage and fibrosis in adenine (AD) model. **F** Flow cytometric data showing the numbers galectin-3 (Gal-3)+ F4/80+ cells in the kidney from wild type (n = 6 per group) Pink1−/− (n = 6 per group) and Prkn−/− (n = 3 per group) mice 28 days after control (Ctl) or adenine (AD) diet. The Gal-3+ F4/80+ cells were gated on CD45+ SSC low cells (not shown). **G** Flow cytometric data showing the numbers of TGF-β1+ F4/80+ cells in the kidney from wild type (n = 4 per group), Pink1−/− (n = 4 per group) and Prkn−/− (n = 3 per group) mice 28 days after Ctl or AD diet. The TGF-β1+ F4/80+ cells were gated on CD45+ SSC low cells (not shown). The data are representative of three independent experiments and are mean ± SEM. *P<0.05, **P<0.01 and ***P<0.001, analyzed by one-way ANOVA (B-G).
Supplemental Figure 2. Loss of PINK1 amplifies frequency of circulating Ly6C\textsuperscript{low} monocytes in experimental kidney fibrosis. A and B) Quantitative flow cytometric analysis showing the numbers of CD45+ mononuclear cells (A) and F4/80+ CD45+ phagocytic population (B) in the kidney from PINK1\textsuperscript{+/+} and PINK1\textsuperscript{-/-} mice 7 days after sham (n = 4 per group) or UUO (n = 3 per group) surgery. C and D) Flow cytometric analysis showing the numbers of circulating Ly6C\textsuperscript{high} CD11b+ (C) and Ly6C\textsuperscript{low} CD11b+ (D) cells gated from CD45+ cells (not shown) from the peripheral blood from PINK1\textsuperscript{+/+} and PINK1\textsuperscript{-/-} mice after 7 days of sham (n = 3 per group) or UUO (n = 5 and 3 per group) surgery. Data are shown as mean ± SEM. ***P<0.001, analyzed by one-way ANOVA.
Supplemental Figure 3. Parkin deficiency promotes frequencies of circulating Ly6C\textsuperscript{low} monocytes in experimental kidney fibrosis. **A** and **B** Quantitative flow cytometric data showing the numbers of CD45+ mononuclear cells (A) and F4/80+ CD45+ phagocytic population (B) in kidney from Prkn\textsuperscript{+/+} and Prkn\textsuperscript{-/-} mice (n = 4 per group) after 7 days of sham or UUO surgery. **C** and **D** Flow cytometric analysis showing the numbers of circulating Ly6C\textsuperscript{high} CD11b+ (C) and Ly6C\textsuperscript{low} CD11b+ (D) cells gated from CD45+ cells (not shown) from the peripheral blood from Prkn\textsuperscript{+/+} and Prkn\textsuperscript{-/-} mice after 7 days of sham (n = 2 per group) or UUO (n = 4 per group) surgery. Data are mean ± SEM. *P<0.05, and **P<0.01 analyzed by one-way ANOVA.
**Supplemental Figure 4.** Isolation of macrophages from kidney. **A**) Schema showing the isolation of macrophages from mouse kidney cells using Ficoll-Hypaque density gradient centrifugation followed by CD115 positive selection through magnetic-activated cell sorting (MACS). **B**) Isolation of macrophages from human kidney using density gradient centrifugation and subsequently MACS cell separation protocol using CD68 positive selection.