

Supplementary Figures

Figure S1. Gross anatomical photos of kidneys from control and CKD mice.

In contrast to kidneys from control mice (A), kidneys from CKD mice are visually distinct and identifiable by their pale color (B). Shown are representative examples (indexed #1-6). Compared to the cage housing a control mouse (C), the cage that houses a CKD mouse remained wet possibly due to proteinuria (D). (E) The CKD model mouse also lost weight gradually after adenine was added to the diet. Traces show group averages and error bars indicate standard deviations. $n=5$ per group.

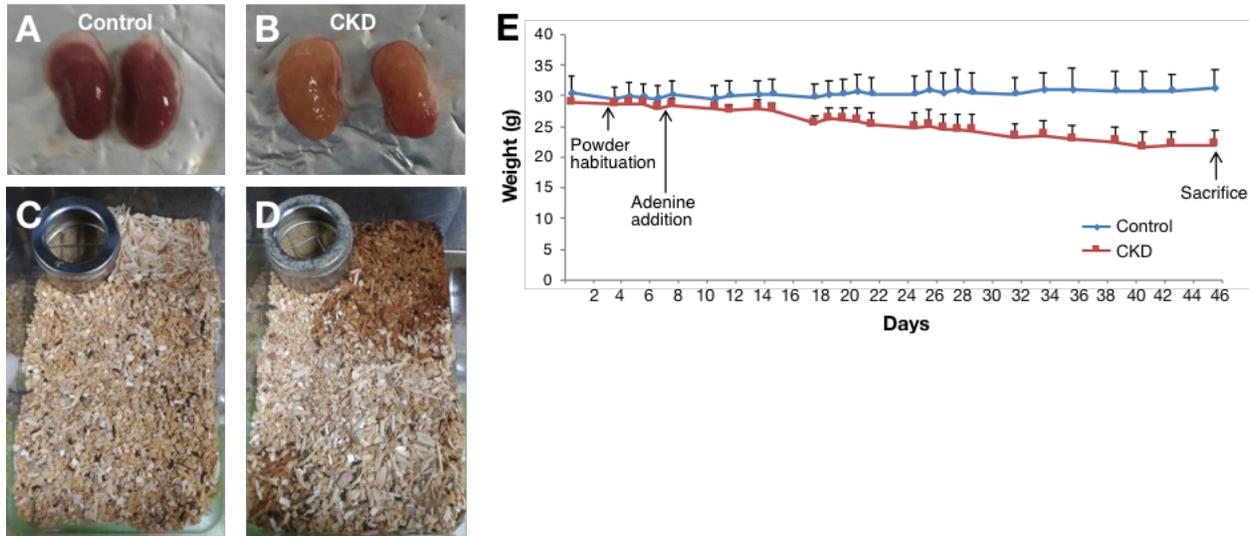
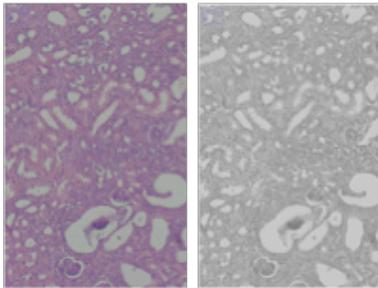


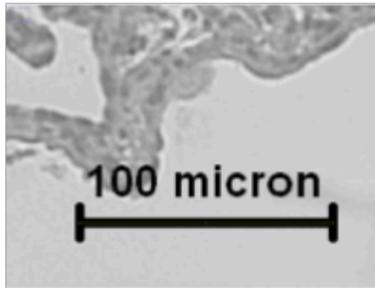
Figure S2. Example of the histological image analysis process.

These panels explain the process of histological quantification from a CKD kidney example. After the image was converted to grayscale (A), the size was calibrated to the pre-calibrated scale bar stamped on the image (B), affected glomeruli were identified (C), and length and area were measured (E-F) using ImageJ. Shown is a kidney section from a CKD mouse (#1-10). For details, see the subsection “Thin-section micrograph of kidney and histological analysis” in Materials and Methods. Scale bars indicate 100 μ m for 10x images and 10 μ m for 40x, respectively.

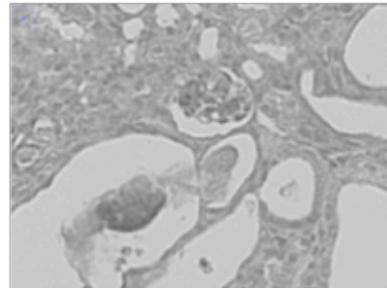
A Conversion to grayscale



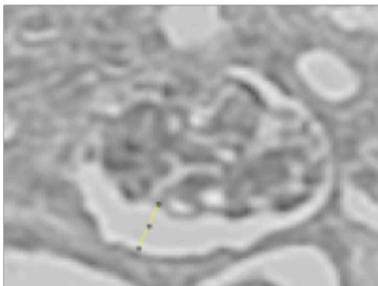
B Size calibration



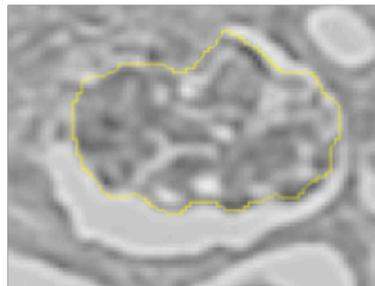
C Identification of glomerulus



E Bowman's capsule thickness



F Glomerular tuft area



G Proximal tubular lumen area

