Supplement

Figure S1

Masson's trichrome staining of HIV-1 mice with or without UUO. All at 37 days of age. (X 200)

(A) Wild-type control littermate mice without UUO. (B) Sham-operated kidney of HIV-1 transgenic mice. (C) Obstructed kidney of HIV-1 transgenic mice with UUO. (D) Contralateral kidney of HIV-1 transgenic mice with UUO.

Collagen expression in the glomerulus of obstructed kidneys (C), albeit somewhat higher than that of wild-type control littermates without UUO (A), was markedly attenuated from the level of contralateral (D) or sham-operated (B) kidneys. A contrasting pattern was seen in interstitial collagens. Thus, collagen expression was diffusely increased in the interstitium of the obstructed kidney of HIV-1 mice with UUO (C), whereas in non-obstructed kidneys (B, D), interstitial collagen expression was focal and only around sclerotic glomeruli and dilated tubules.

Figure S2

UUO protected nephrin staining at a later phase in NEP25 mice.

(A) To determine the time window of ureteral obstruction that exerts protective effect on nephrin staining, NEP25 mice were injected with LMB2 (2.5 ng/g BW) on day 0, subjected to UUO (n=5) or sham operation (n=5) on day 1, and analyzed on day 4. NEP25 mice without UUO showed focal tubular casts, but glomerular morphology remained essentially intact.

Nephrin staining was mildly downregulated, with the median nephrin index of 3.95 (0-8 scale). In NEP25 mice with UUO, the median nephrin index was 4.11 in the obstructed kidney and 3.98 in the contralateral kidney, indicating that UUO had no impact on podocyte injury at this early time point.

(B) NEP25 mice were injected with LMB2 (2.5 ng/g BW) on day 0, subjected to UUO (n=5) or sham operation (n=5) on day 4, and analyzed on day 8. Nephrin staining was well preserved in obstructed kidneys.

These data collectively indicate that ureteral obstruction protected podocytes during the late phase of injury.

Figure S1

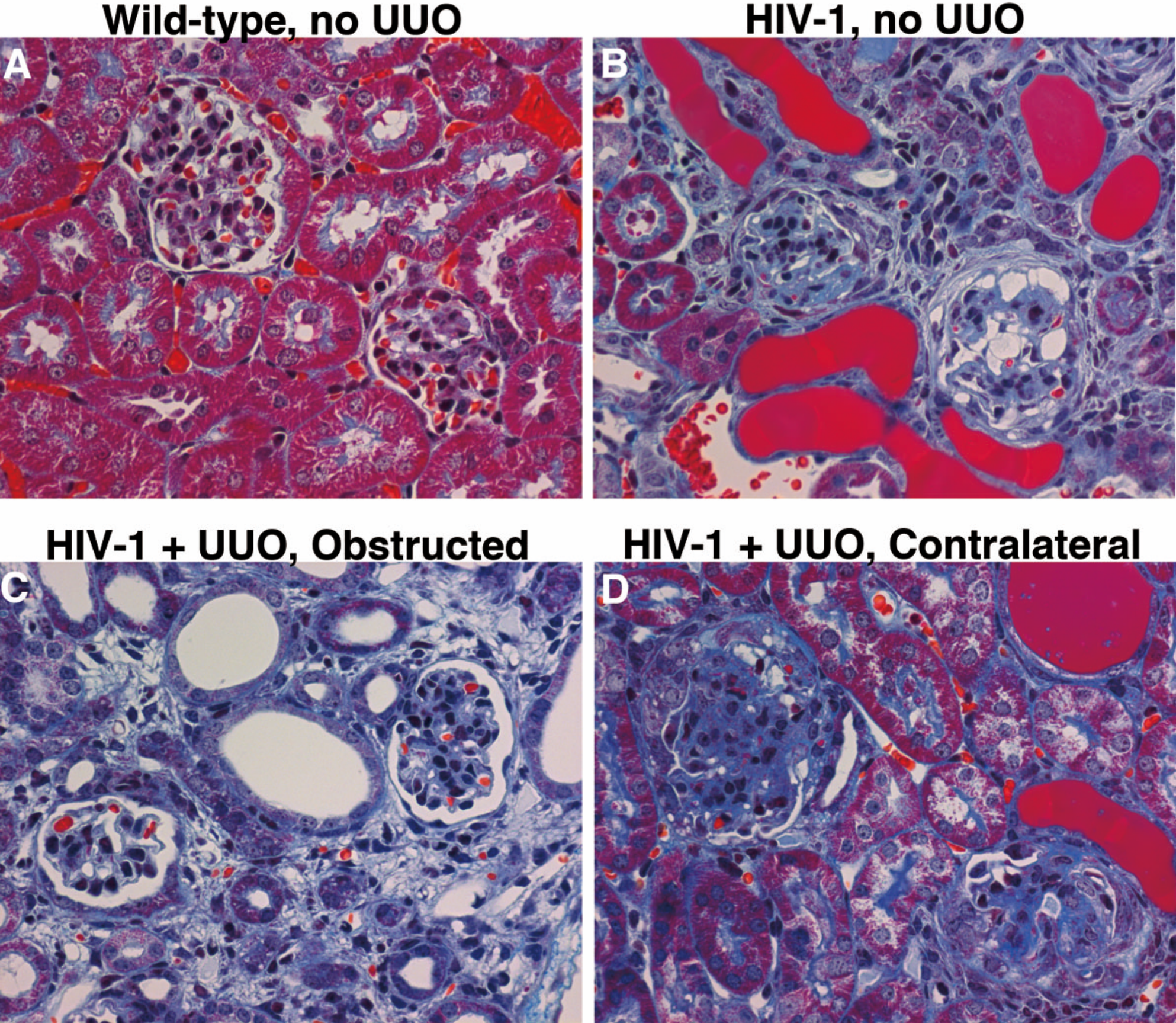
Wild-type, no UUO
A
HIV-1, no UUO
B
HIV-1 + UUO, Obstructed
C
HIV-1 + UUO, Contralateral
D

Figure S2
(Nephrin Staining Index)