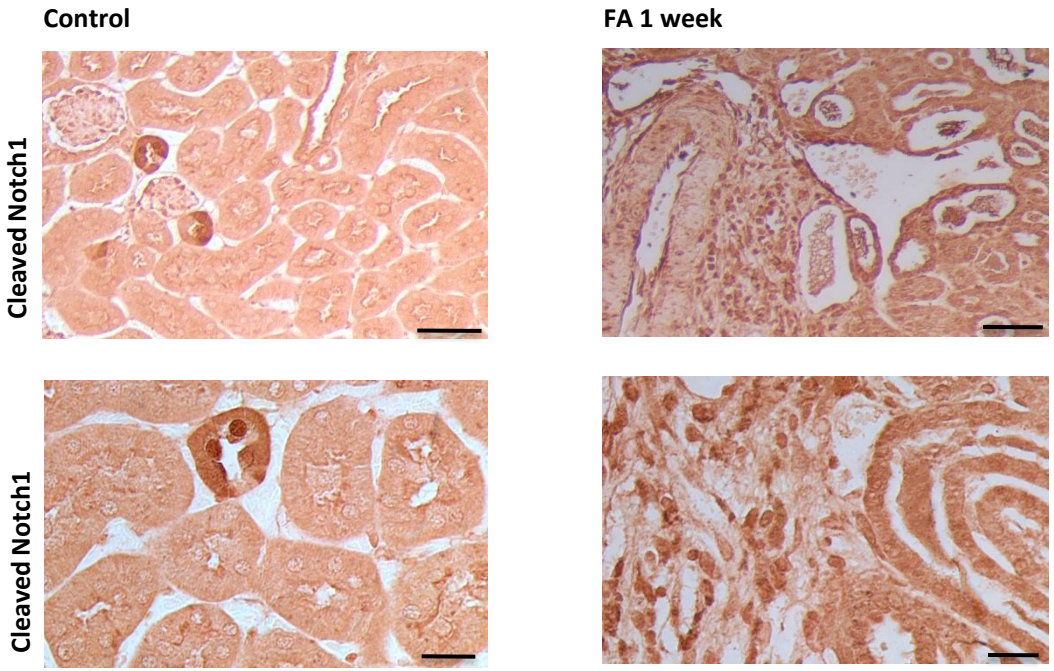
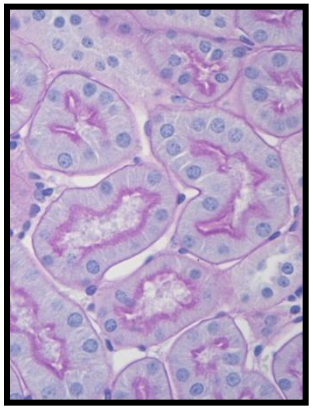
Supplemental Figure 1



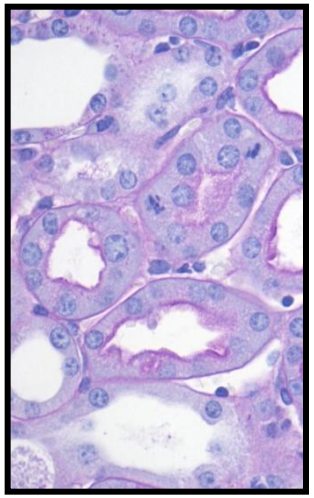
Supplemental Figure 1. **Increased Expression of Notch Pathway in Kidneys of FA treated mice**
Immunohistochemistry study of kidney sections from FA injected mice with the antibody against cleaved Notch1 in control and 1 week after treatment. There is an increased expression of ICN1 in the tubular epithelial as well as interstitial cells of FA-treated kidneys when compared to controls. Scale bars: 50 µm (top) and 20 µm (bottom)

Supplemental Figure 2A



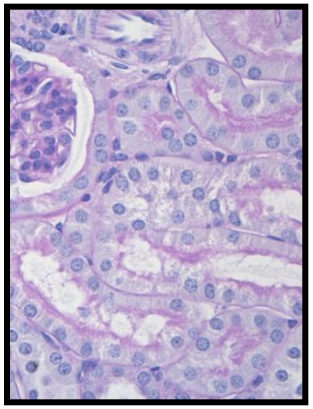
Hamar 0

No injury & no damage



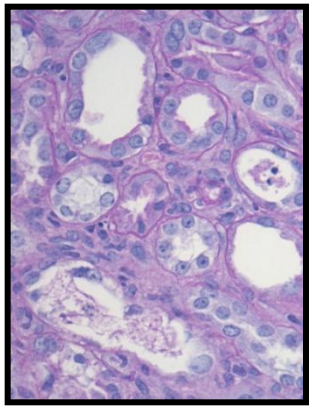
Hamar 1

Mild damage with rounding,
swelling of epithelial cells,
mild dilatation of tubular lumens



Hamar 2

Moderate damage with
flattened epithelial cells, dilatation
of tubular lumens,
loss of brush borders

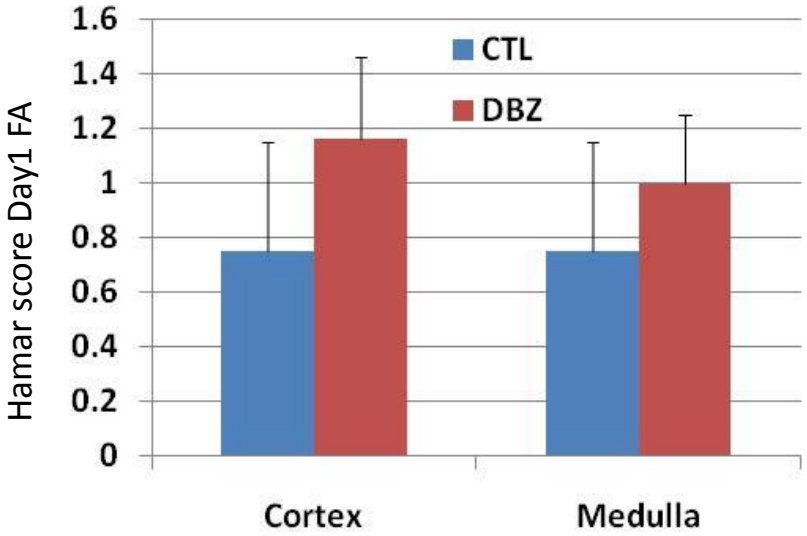


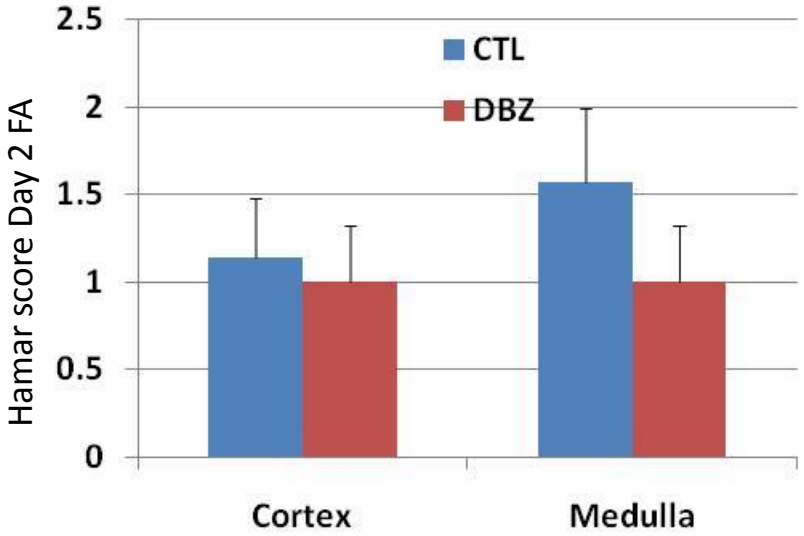
Hamar 3

Severely damaged tubules
with necrosis, denudation of
basement membranes or
calcification

Supplemental Figure2A. Tubular damage was evaluated using the Hamar Score. Representative images from PAS stained kidney sections with damage score (Hamar) 0-3.

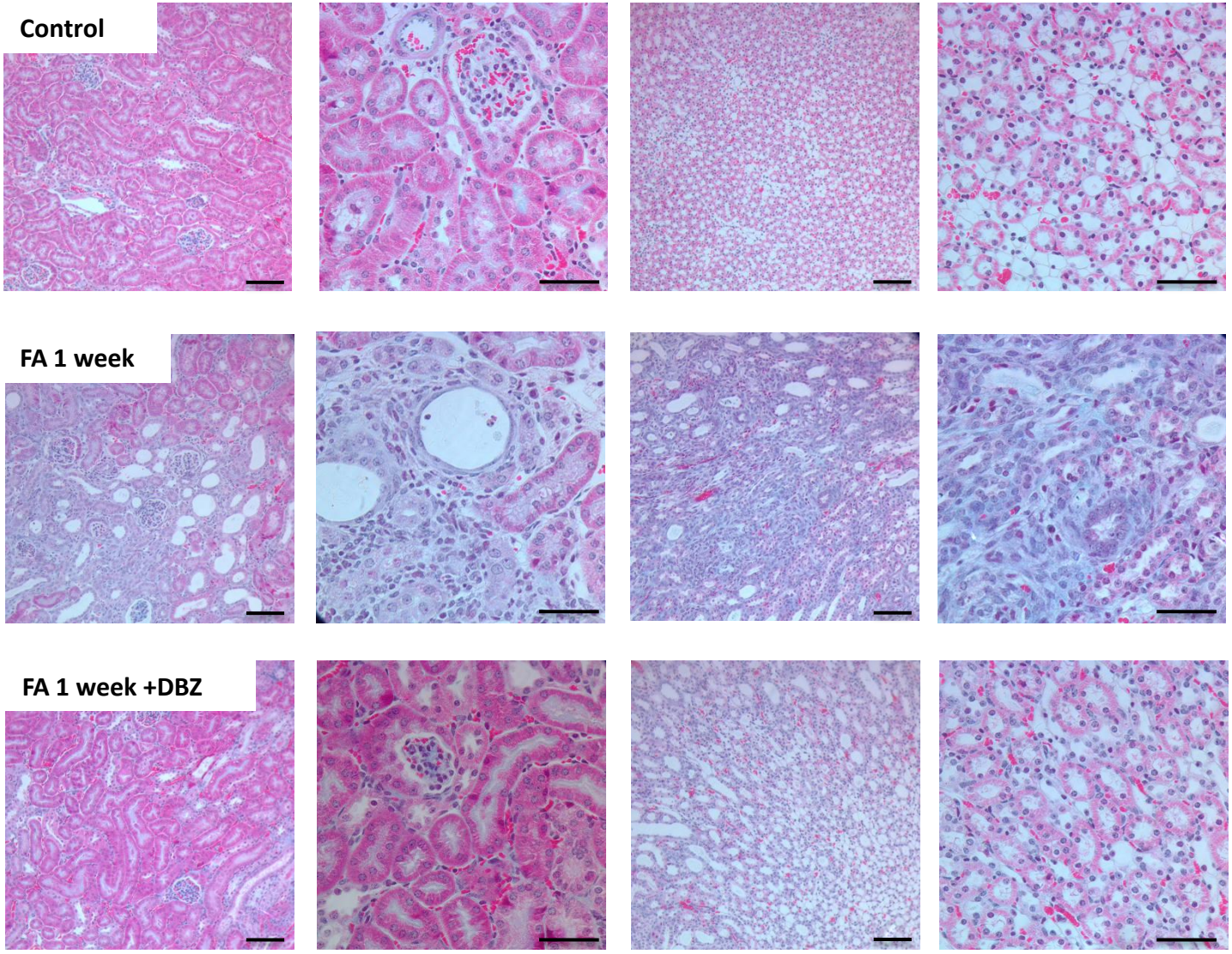
Supplemental Figure2B





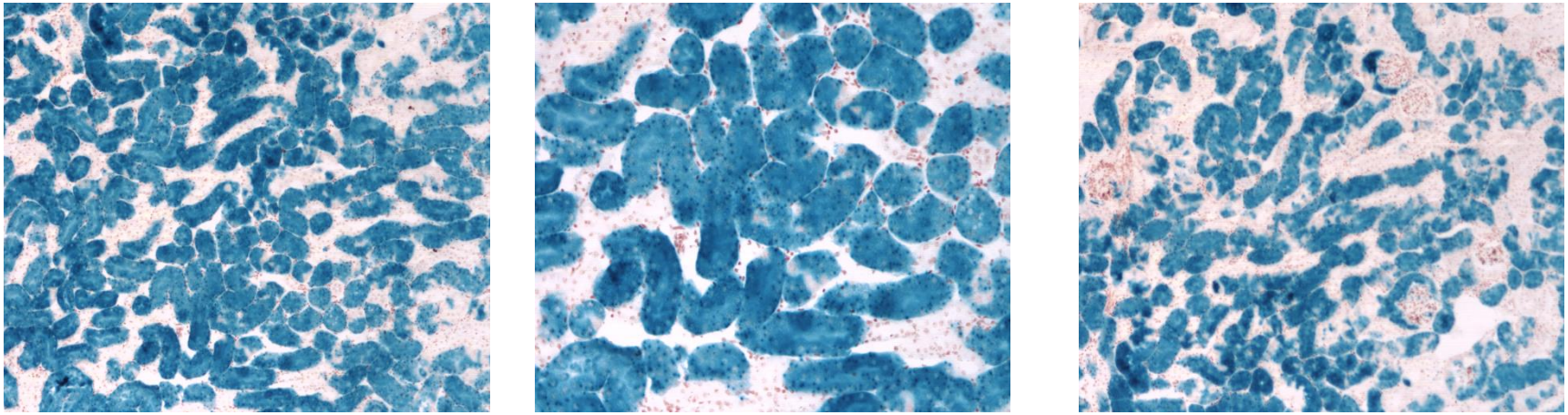
Supplemental Figure2B. Average tubular damage score in the cortex and medulla 1 and 2 days following FA injection. There was increase in tubular damage (normal score is 0), but there was statistical difference bethween sham and DBZ treated kidneys, indicating that DBZ did not decrease kidney damage in FA injected animals

Supplemental Figure 3



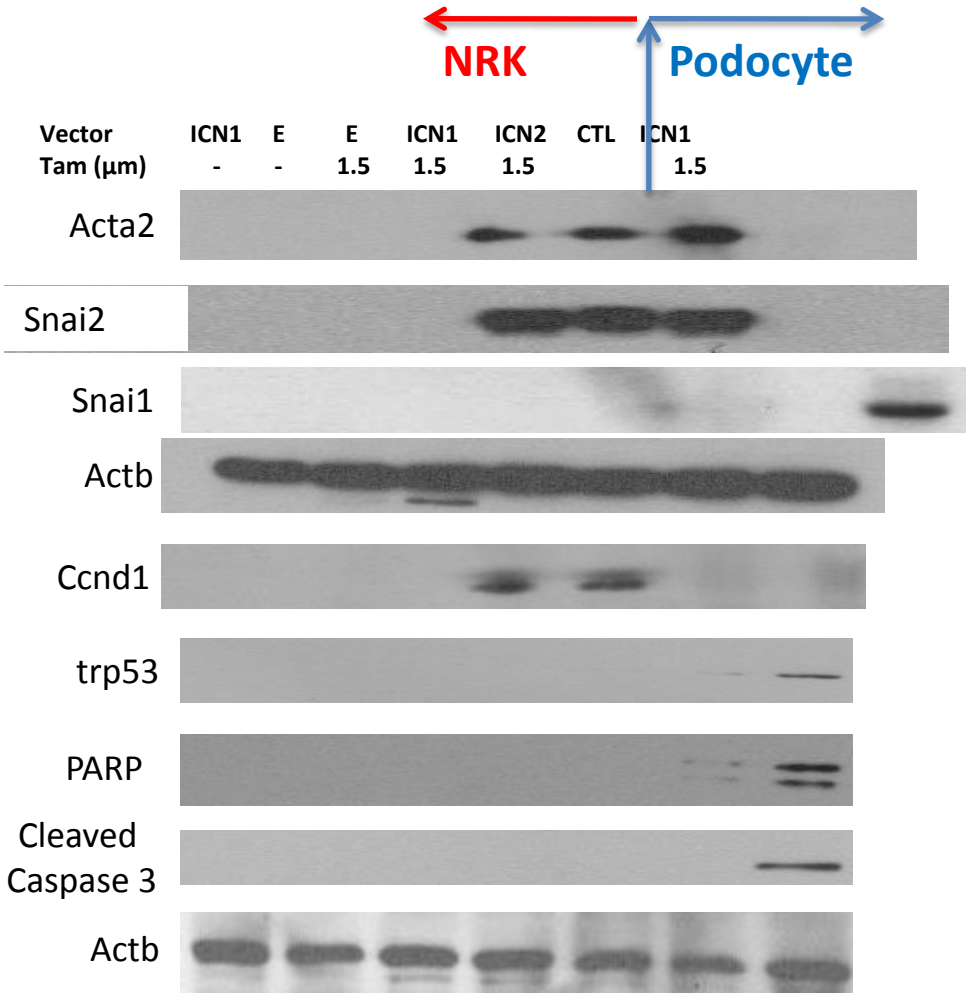
Supplemental Figure3. Representative images of trichome stained kidney sections of control (sham injected) FA injected and FA+DBZ injected kidneys 1 week after FA injection. Note the significant tubular damage and fibrosis after FA injection and the markedly improved histology in the presence of DBZ. Scale bars: 100 µm (first and third column), 50 µm (second and fourth column).

Supplemental Figure 4



Supplemental Figure4. **PEPCK-Cre expression in the kidney.**
Representative images of 5′-Bromo-4-chloro-3-indolyl-β-d-galactopyranoside (Xgal) stained kidney tissue sections from a PEPCK-Cre mouse mated to the ROSA-LacZ reporter mouse. Blue staining, cells that express PEPCK-Cre. Note that PEPCK-Cre is expressed in the renal cortex and outer medulla. Note the exclusive expression of the cre recombinase in the renal tubules.

For reviewers only--- Supplemental Figure 5



Supplemental Figure 5. **Expression of ICN1 and ICN2 in cultured tubular epithelial cells and podocytes**
Western blot of Acta2, Snai1, Snai2, Actb, Trp53, Parp1 (PARP) and cleaved caspase3 of cultured NRK cells and podocytes. NRK cells infected with MIGR/ICN1/EGFP (ICN1), MIGR/ICN2/EGFP (ICN2) or BMZ/EGFP retrovirus and treated with sham or tamoxifen (Tam, 1.5μM). Lysates were prepared from cells 48 hrs after treatment with 1.5 μM tamoxifen or sham. These are the full images of the western blots (including positive controls presented on Figure 6E).