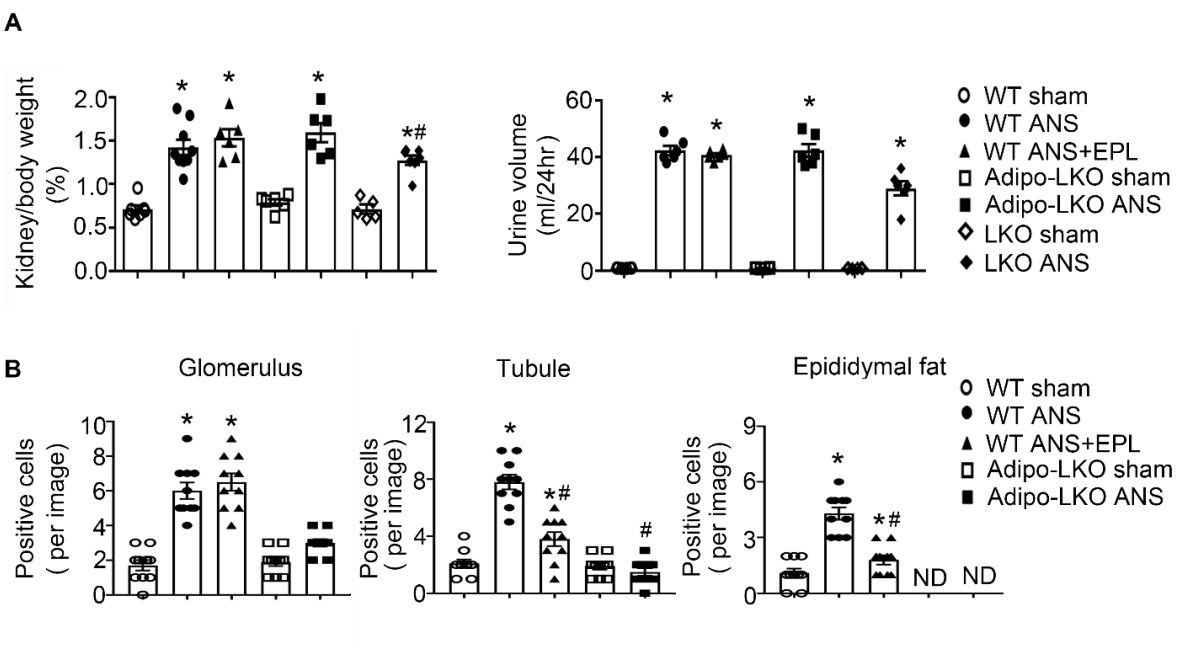
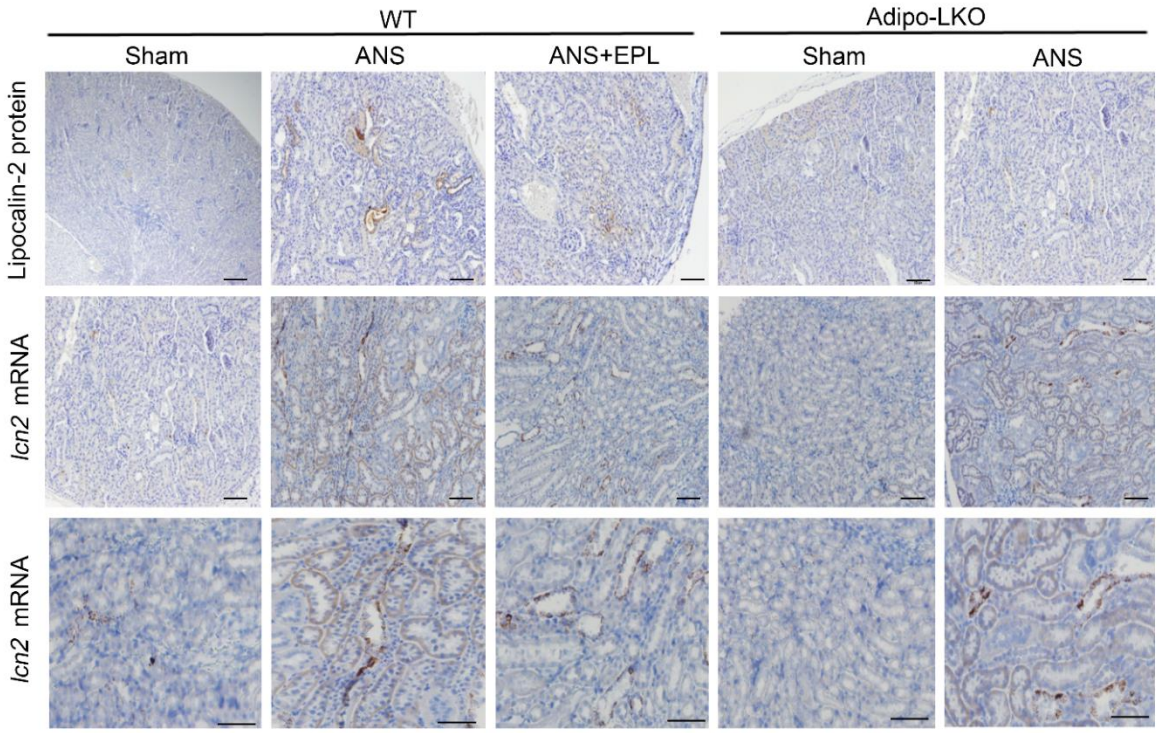
Supplementary Figure 1



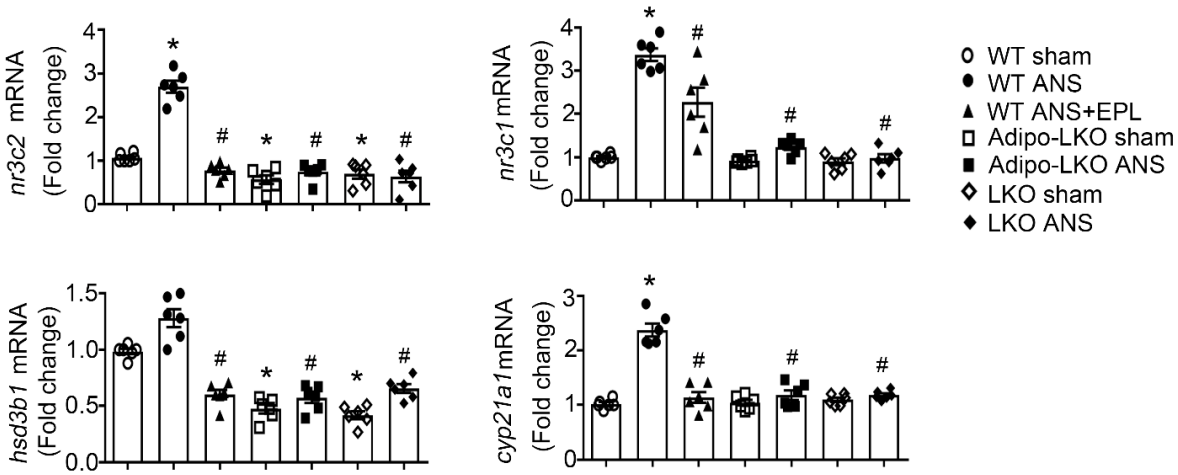
Supplementary Figure 1. A, WT, Adipo-LKO and LKO mice were subjected to sham or four-weeks of ANS challenge as in Figure 1. Kidney tissues were collected at the end of treatment. The weight of the right kidney was measured for calculating the ratios to body weight for comparison (*left*). The 24-hour urine samples were collected to compare the urination (*right*). B, Quantitative analyses were performed for Figure 1D. Briefly, ten images per tissue section were analyzed to manually count the number of cells with positive staining (brown) in a double-blinded manner. The average numbers were calculated for comparison among different treatment groups. Data are presented as mean ± SEM; *, $P<0.05$ vs corresponding sham controls; #, $P<0.05$ vs WT ANS by Mann-Whitney non-parametric Student's *t*-test (n=6-10). EPL, eplerenone.

Supplementary Figure 2



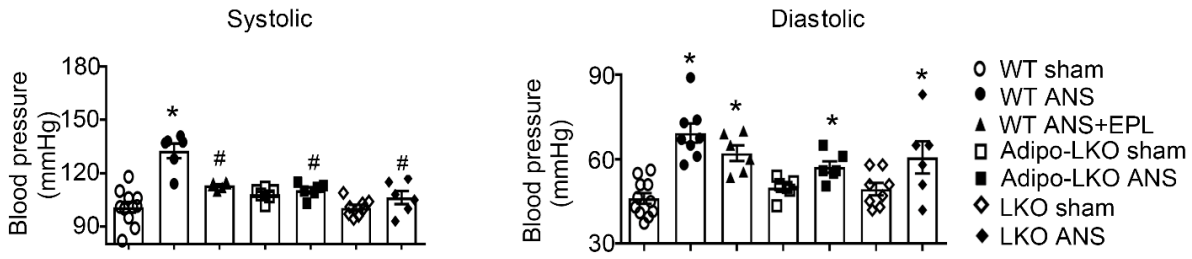
Supplementary Figure 2. WT and Adipo-LKO mice were subjected to sham or four-weeks of ANS challenge as in Figure 1. At the end of treatment, the localization of lipocalin-2 protein in kidney tissue sections was examined by immunohistochemistry using an antibody specifically recognizing murine lipocalin-2 (*upper row*). Magnification, 100x; Scale bar, 100 μm. The *lcn2* mRNA expression was examined by *in-situ* hybridization. The brown and dotted pattern indicates positive staining. Images were shown with magnification, 100x; scale bar, 100 μm (*middle row*), or magnification, 400x; scale bar, 20 μm (*lower row*). EPL, eplerenone.

Supplementary Figure 3



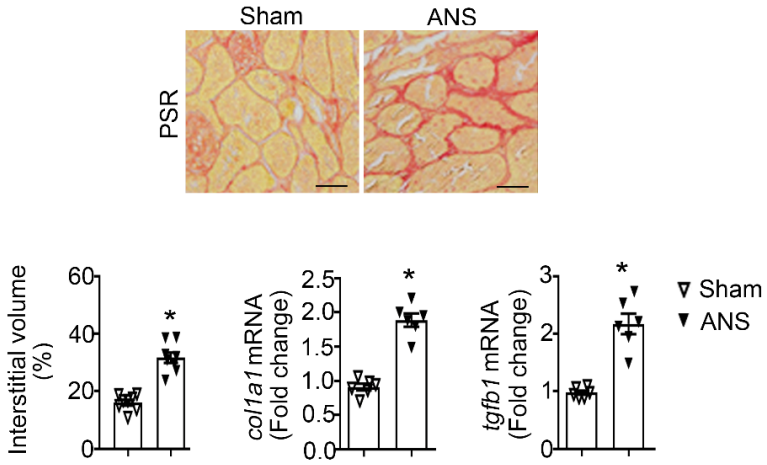
Supplementary Figure 3. WT, Adipo-LKO and LKO mice were subjected to sham or ANS treatment as in Figure 1. At the end of treatment, epididymal adipose tissues were collected for QPCR analyses of genes including mineralocorticoid receptor (*nr3c2*), glucocorticoid receptor (*nr3c1*), 3β-hydroxysteroid dehydrogenase type 1(*hsd3β1*) and steroid 21-hydroxylase A1 (*cyp21a1*). Results are presented as fold changes against WT sham controls. Data are shown as mean ± SEM; *, $P<0.05$ vs WT sham controls; #, $P<0.05$ vs WT ANS by Mann-Whitney non-parametric Student's *t*-test (n=6-8). EPL, eplerenone.

Supplementary Figure 4



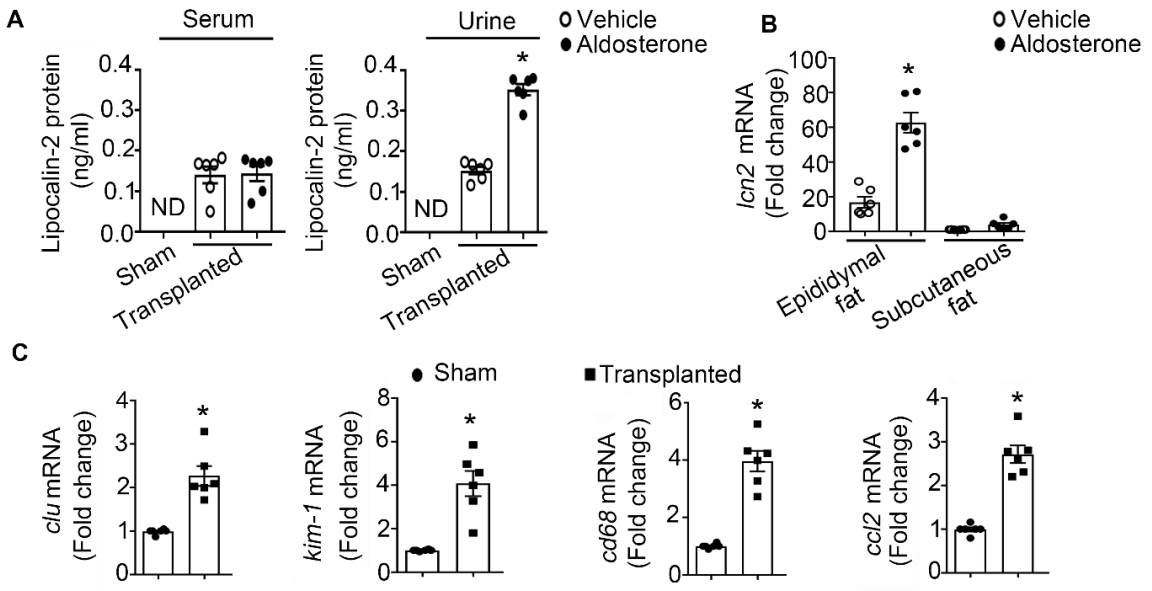
Supplementary Figure 4. WT, Adipo-LKO and LKO mice were subjected to sham or ANS treatment as in Figure 1. The arterial systolic (A) and diastolic (B) blood pressures were measured by the tail cuff method as described (103). Data are shown as mean ± SEM; *, $P<0.05$ vs corresponding sham controls; #, $P<0.05$ vs WT ANS group by Mann-Whitney non-parametric Student's *t*-test (n=6-10). EPL, eplerenone.

Supplementary Figure 5



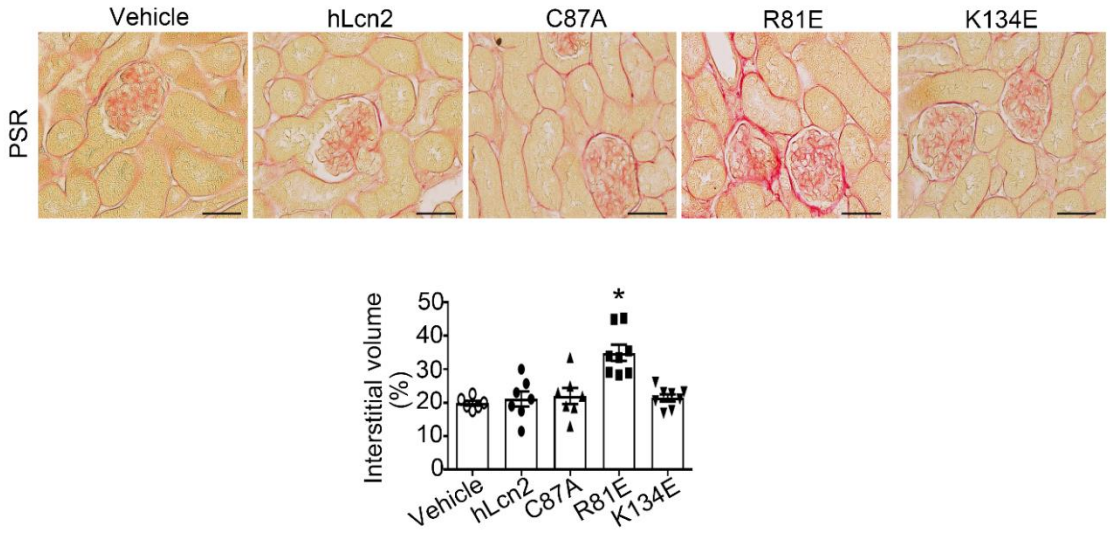
Supplementary Figure 5. Wt1^{CreGFP}-LKO mice were subjected to sham or ANS treatment as in Figure 1. Kidney tissues were collected after four-weeks treatment. PSR staining was used to evaluate the interstitial fibrosis in kidney of sham- or ANS-treated Wt1^{CreGFP}-LKO mice. Magnification, 400x; Scale bar, 20 μm. The interstitial volume was quantified by ImageJ software as described in Methods. QPCR was performed to measure the *col1a1* and *tgfb1* mRNA levels. Data are shown as mean ± SEM; *, $P<0.05$ vs sham controls by Mann-Whitney non-parametric Student's *t*-test (n=6).

Supplementary Figure 6



Supplementary Figure 6. Fat pads from WT were transplanted into LKO mice as described in Methods. Six-weeks after transplantation, acute treatment with aldosterone was performed as in Figure 5. A, Lipocalin-2 protein levels were measured in serum and 24-hour urine samples of sham and fat-transplanted LKO mice treated with vehicle or aldosterone. B, After 24-hour aldosterone treatment, the epididymal and subcutaneous adipose tissues were collected for QPCR to examine the mRNA expressions of *lcn2*. C, The kidney tissues of the sham and fat-transplanted LKO mice were collected for QPCR analyses to examine the mRNA expressions of *clu, kim-1, cd68* and *ccl2*. Data are shown as mean ± SEM; *, $P<0.05$ vs sham by Mann-Whitney non-parametric Student's *t*-test (n=6).

Supplementary Figure 7



Supplementary Figure 7. LKO mice were administrated with vehicle or recombinant human lipocalin-2 proteins (10 μg/mouse/day) as in Figure 7. PSR staining was performed to examine interstitial fibrosis in kidney tissue sections. Magnification, 400x; Scale bar, 20μm. Ten random images were captured for each kidney section for analyses. The interstitial volume was quantified using ImageJ software for comparison. Data are shown as mean ± SEM; *, $P<0.05$ vs vehicle group by Mann-Whitney non-parametric Student's *t*-test (n=6-8).