## Figure 8

Decreased glomerular capillary loops in α1KOAkitaKO Balb/c mice. (A) CD31 staining of kidney sections from 6 months old wild type (WT), AkitaKO and α1KOAkitaKO mice. The glomerular area is marked by dotted lines. (B) The degree of vascularization per glomerulus was quantified using Scion Image as described in Materials and Methods. Data represent the mean +/- SD of 20 glomeruli (5 glomeruli/mouse with 4 mice analyzed). \* and # are as in Figure 3.

## Figure 9

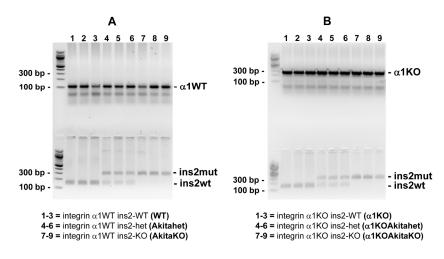
No significant evidence of tubulointerstitial fibrosis in  $\alpha$ 1KOAkitaKO Balb/c mice. (A) Electron microscopy pictures of tubules of 6 month old WT, AkitaKO and  $\alpha$ 1KOAkitaKO mice. Scale bar, 2  $\mu$ m. The values (in nm) represent the mean +/- SD of tubular basement membrane thickness of 30 measurements. (B) Paraffin kidney sections were co-stained with Dolichos biflorus agglutinin (DBA) and anti-collagen I (upper panel) or anti- $\alpha$ -smooth muscle action ( $\alpha$ -SMA, lower panel). Merged images are shown. V = vessel (C) Paraffin kidney sections were co-stained with anti-mouse E-cadherin antibodies or DAPI. Merged images at both low and high magnification are shown.

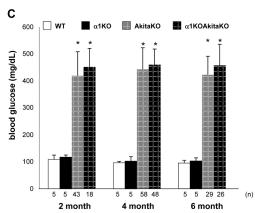
## **Supplemental Figure 1**

Generation of AkitaKO and integrin α1KOAkitaKO Balb/c mice. (A, B) PCR products of genomic DNA showing the successful generation of AkitaKO (A), as well as integrin α1KOAkitaKO (B) mice onto the Balb/c background. (C) Blood glucose levels were measured in controls, AkitaKO and integrin α1KOAkitaKO at the time points indicated. Values represent

the mean +/- SD of the mice indicated. Differences between non-diabetic and diabetic mice (\*) were significant with p<0.05.

## Yu et al., Supplemental Fig. 1





193x254mm (300 x 300 DPI)