

Supplementary Fig. 1: Raptor^{Δpodocyte} mice display no obvious histological phenotype at 2 weeks of age, but show glomerulosclerosis at 8 weeks of age. Arrows indicate sclerosed glomeruli. Scale bars: 20 μm.



4 months

Supplementary Fig. 2: No obvious impairment of the expression of slit diaphragm molecules in 4-month-old Raptor ^{Δpodocyte} mice. Immunofluorescence staining of the slit diaphragm proteins Nephrin (A), Podocin (B) and (C) Par3 revealed no obvious changes in the expression pattern of 4-month-old Raptor^{Δpodocyte} mice. Nidogen served as basement membrane marker. Scale bars: 5 µm.



Supplementary Fig. 3: Stereological analyses of Raptor^{$\Delta podocyte$} and wildtype mice. Quantitative stereological analyses displayed a significantly reduced mean glomerular volume in Raptor^{$\Delta podocyte$} mice compared to wildtype littermates at 8 weeks of age, with no significant difference in the number of podocytes per glomerulus (n=3 each; * p<0.05).



CD68 / Podocin

Supplementary Fig. 4: Wildtype animals compared to Raptor^{Het podocyte} mice in the STZ model. (A) No difference in blood glucose. (B) No difference in systolic blood pressure. (C) No obvious glomerular macrophage invasion in diabetic control and Raptor^{Het podocyte} mice compared to glomerulonephritic mice. Scale bars: 5 µm in C.