

Supplementary Figure 1. Western blot of conditionally immortilised mouse podocytes stimulated with insulin at 1-100nM showing increased phosphorylation of AKT.



Supplementary Figure 2 Phenotype of pod GSK3aKD mice.

- (A) Body weight of podGSK3 α KD and littermate control mice at 6 and 26 weeks of age.
- (B) Urinary albumin:creatinine in podGSK3αKD and littermate control mice at 6 and 26 weeks. Unpaired t test, *p<0.05. n=12-13 mice per group (6 weeks); n=3 per group (26 weeks).</p>
- (C) No histological differences apparent in PAS stained sections from podGSK3αKD and littermate control mice at 26 weeks. Scale bar=50µm (upper panel); 25µm (lower panel).
- (D) WT-1 immunofluorescent staining of podGSK3αKD and Cre negative control littermate at 26 weeks. Nuclei counterstained with DAPI. Scale bar=50µm. No difference in % podocytes per glomerulus in podGSK3αKD mice compared with littermate controls. ≥8 glomeruli analysed per mouse, 3 mice per group, unpaired test.



Supplementary Figure 3. Treatment of ciGSK3 α KO cells with rapamycin at 0.25-4nM did not affect cell survival. GSK3 α floxed podocytes were transduced with Cre expressing lentivirus for 24 hours to allow gene knockout, then treated with rapamycin at the above doses and cell number determined after 7 days. n=3 independent experiments.