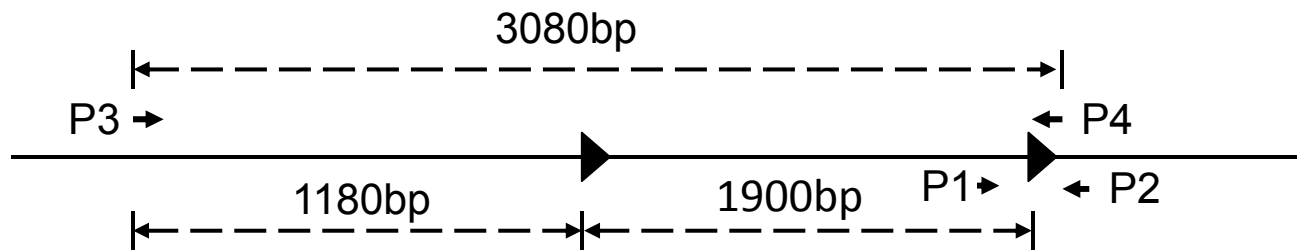


Supplemental Fig. 1. TAK1 is activated by TGF- β 1 and regulates JNK and p38 MAPK signaling pathways in human podocytes. Immortalized human podocytes were differentiated for 10 days under 37°C followed by the incubation for another 18 h in the media supplemented with 1% serum. Cells were treated with TGF- β 1 (5 ng/ml) for 20 min, with or without pretreatment of various concentrations of pharmacological inhibitor of TAK1, LLZ16409-2 (LZ). Control cells were treated with only DMSO, a vehicle for LZ. Western blotting was performed for phospho-TAK1 (p-TAK1), total TAK1 (TAK1), phospho-JNK (p-JNK), total JNK (JNK), phospho-p38 (p-p38), total p38 (p38) and α -tubulin. **The levels of p-TAK1, p-JNK and p-p38 were quantitated by densitometry as a ratio to respective total protein.** Data are represented as the mean value \pm SE of three independent experiments. * p <0.05 versus untreated control; # p <0.05 versus TGF- β 1 treatment only.

Supplemental Table 1. Primer sequences for RT-qPCR

gene	Primer sequence	
	Forward (5' to 3')	Reverse (5' to 3')
WT1	ATAACCACACAACGCCATC	TCAGATGCCGACCGTACAA
VEGF	ATCTTCAAGCCATCCTGTGTGC	CAAGGCCACAGGGATTTTC
HIF-1 α	GGGAGTTTATCCTTTTTCG	TTGTGGCTACCACGTACTGC
nephrin	AGGACCGAGTCAGGAACGA	CTGTGAAACCTCGGGAATA
β -Actin	AGGCCAACC GCGAGAAGAT	GAAGTCCAGGGCGACGTAG



Supplemental Fig. 2. Positions and sequences of PCR primers used for genotyping of *Tak1*.

Primer set #1 (P1 and P2) produces 242 bp of wild-type *Tak1* or 320 bp of floxed *Tak1* and primer set #2 (P3 and P4) yields approximately 1.2 Kb of deleted *Tak1*. Arrow heads illustrate flox sequence.

Primer sequences are as follow;

primer set #1: forward: 5'-GGCTTTCATTGTGGAGGTAAGCTGAGA-3'
reverse: 5'-GGAACCCGTGGATAAG TGCACCTTGAAT-3'

primer set #2: forward: 5'-GCAACTTCGACAACTTGCTTCCTGTG-3'
reverse: 5'-GCACTTGAATTAGCGGCCGCAAGCTTATAACT-3'