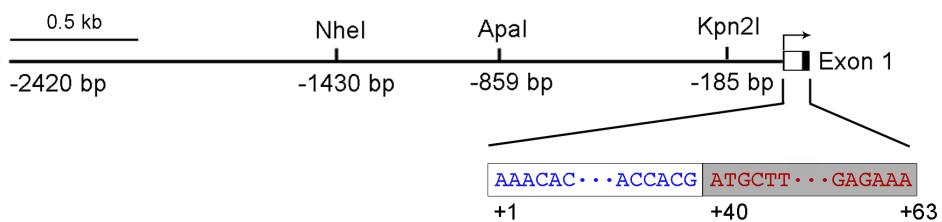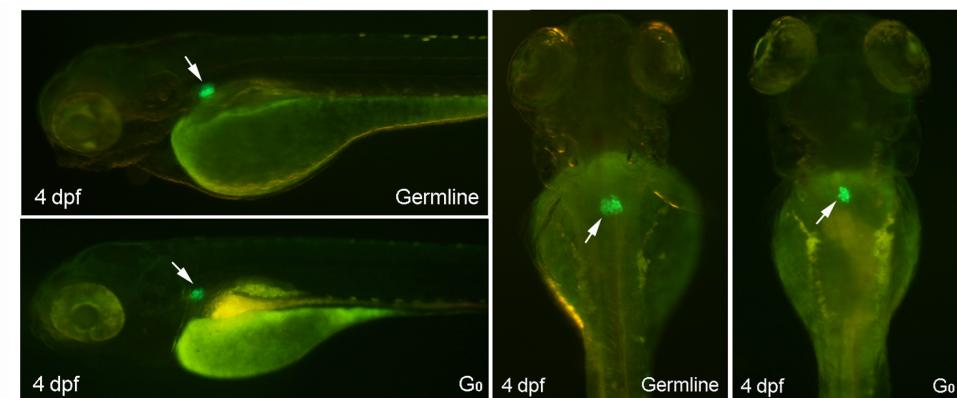**A**

B

Figure S1. GFP expression driven by the 2.5 kb zebrafish *nphs2* promoter fragment in injected (G_0) and germline (G_1) embryos. (A) Genomic structure of the promoter fragment used for GFP expression. The UTR in blue color and the coding region in red color are indicated with frames. (B) Comparison of GFP expression between G_0 embryos and G_1 embryos from germline fish at 4 dpf. The pronephric glomerulus is indicated with arrows.

Table S1. DNA sequence analysis of the 5-kb *Nphs2* promoter fragment upstream of the transcription start site in different species

Species	Potential motif sequence
Primates	
Bushbaby	TAATTAcatatcAAAAATA
Human	TTAATAAagaccCTAAATA
Gibbon	TTAATAAagaccCTAAATA
Gorilla	TTAATAAagaccCTAAATA
Macaque	TTAATAAagacgCTAAATA
Marmoset	TTAATAAagaccCTAAATA
Orangutan	TTAATAAagaccCTAAATA
Rodents	
Guinea Pig	TGTTTATtctggaaaaaaaaactcaaaTTATTAA
Mouse	TATTTGTtgtctggTAATTA
Rabbit	TAATTAcagaggaatctaaaaGAAAACA
Rat	TATTTGTtatccggTAATTA
Squirrel	TAATTActgtattCCCAACA
Placental mammals	
Cow	TATTCAGtgagaaaTTATTAA
Dog	TAATTAaacatGGCAATA
Dolphin	TAATTAtgTTAAATA
Ferret	TAATTAaacatGGTAATA
Horse	TATTGCTaatcttcTAATTA
Megabat	No
Microbat	TGTTCATatcctTAATTA
Opossum	TATTTATtttttTAATTA
Pig	TATTACTaatcattTAATTA
Tasmanian devil	TTAATAAttcggcTGAAACA
Sauropsida	
Anole lizard	TGTTTTCatctcagGTATTAA
Chicken	No
Fish	
Coelacanth	TATTTAAtatttcTTATTAA
Fugu	TTAAGAAttaagatgaaACCAATA
Medaka	TAATTAtttttAACAATA
Platyfish	TAATTAtgaaaatGCAAATA
Stickleback	TATTTTGacattTTCTTAA
Tetraodon	No
Zebrafish	TAATTAgaagagtATAAACA

Of note, only complete DNA sequence within 5 kb was included for analysis.

FLAT-E/F binding consensus: TAATTA/TTAAKAM
Forkhead binding consensus: RYMAAYA
(K=G/T; M=A/C; R=A/G; Y=C/T)

Table S2. Sequences of primers used for cloning, mutagenesis and qPCR

_____

zfin_nphs2prom-5: 5´-GGTGATTCTATGCTCTTTGCGCTTTGT
zfin_nphs2prom-3: 5´-TTTCTCTATCTCCGCAGGAAGCATCGT

zp0.1k_finemap-5: 5´-GGTGTTTCTTCTGTGGAAAG
zfin_nphs2prom-3: 5´-TTTCTCTATCTCCGCAGGAAGCATCGT

zp0.2_lmxmut-5: 5´-TTCTGTGGAAAGTTACTTAGAAGAGTATAAACACTCCCAC
zp0.2_lmxmut-3: 5´-GTGGGAGTGTTTATACTCTTCTAAGTAACTTTCCACAGAA

zp_motif-5: 5´-CGGAAGACTAGTCAGGAAAG
zp_motif-3: 5´-TGTGGGAGTGTTTATACTCT

zp_motif-5: 5´-CGGAAGACTAGTCAGGAAAG
zp_motif_del-3: 5´-ACTCTTCTAATTAACTTTCCAC

zp0.2_foxmut-5: 5´-ATTAGAAGAGTATAGACACTCCCACATTATCAAATAAATC
zp0.2_foxmut-3: 5´-GATTTATTTGATAATGTGGGAGTGTCTATACTCTTCTAAT

GFP_qPCR-5: 5´-ACCACTACCTGAGCACCCAGTC
GFP_qPCR-3: 5´-GTCCATGCCGAGAGTGATCC

zbactin_qPCR-5: 5´-CGAGCAGGAGATGGGAACC
zbactin_qPCR-3: 5´-CAACGGAAACGCTCATTGC

zpodocin_qPCR-5: 5´-CGAGAGATACTGGCCCATCA
zpodocin_qPCR-3: 5´-CCACTTTAATACCCCACCTG

zlmx1b1_qPCR-5: 5´-CCGGGAGAGGAAACTTTACT
zlmx1b1_qPCR-3: 5´-ATGGTAAACACACTCCAGCG

zfoxc1a_qPCR-5: 5´-GAGGACCGAGGTGTTAAAGA
zfoxc1a_qPCR-3: 5´-TAATGTCCTGAATGCGCACG

hp_motif-5: 5´-CCCAACTCCTGCTTTCATCA
hp_motif-3: 5´-CTCTCTTTGCGATGTGTTTC

zfoxc1a_cDNA_AgeI-5: 5´-ACCGGTCGCCACCATGCAGGCGCGCTATTCCGT
zfoxc1a_cDNA_ClaI-3: 5´-ATCGATGGTTTGGTCAAAATTTGCTGCAGTCA

zlmx1b1_cDNA_AgeI-5: 5´-ACCGGTCGCCACCATGTTGGACGGTATAAAAATCG
zlmx1b1_cDNA_ClaI-3: 5´-ATCGATTTCATGAGGCGAAATAGGAGCTCTG

hccnc_motif-5: 5´- GGTCTCCACCTACAATGTGA
hccnc_motif-3: 5´- GAGCAGCGGAATCAACAGTT

hmeis2_motif-5: 5´- TTATGCACATATTTATCCCTCTAA
hmeis2_motif_BamHI-3: 3´- GGATCCCACTCTCCTCTTGTAAAGCG

zccnc splicing-5: 5´-CTTCTGGCAGAGTTCACATT
zccnc splicing-3: 5´-CGTTTACTATTCTCCAAGCC

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Table S3. Sequences of oligonucleotide probes used for EMSA

Zebrafish

zfin podocin WT:	5´CTAGTGTGGAAAGTTAATTAGAAGAGTATAAACACTCCCACATT
zfin podocin mutLmx1:	5´CTAGTGTGGAAAGTTA**c**TTAGAAGAGTATAAACACTCCCACATT
zfin podocin mutFox:	5´CTAGTGTGGAAAGTTAATTAGAAGAGTATA**g**ACACTCCCACATT
zfin podocin mutAll:	5´CTAGTGTGGAAAGTTA**c**TTAGAAGAGTATA**g**ACACTCCCACATT

Human

human podocin WT:	5´CTAGGGCATAAGCATTAATAAAGACCCTAAATAATAACAGAGAC
human podocin mutLmx1:	5´CTAGGGCATAAGCATT**gg**T**g**AAGACCCTAAATAATAACAGAGAC
human podocin mutFox:	5´CTAGGGCATAAGCATTAATAAAGACCCTA**gg**T**g**ATGACAGAGAC
human podocin mutAll:	5´CTAGGGCATAAGCATT**gg**T**g**AAGACCCTA**gg**T**g**ATGACAGAGAC

All probes have CTAG tails at the 5´end for labeling purposes. Mutants are marked in bold and lower case.

Table S4. Sequences of morpholino antisense oligos (MOs) used for zebrafish gene knockdown

_____

Control-MO: 5´- CCTCTTACCTCAGTTACAATTTATA (www.gene-tools.com)

ATG-*lmx1b1*-MO: 5´- CTTCGATTTTTATACCGTCCAACAT (ref. 29)

ATG-*lmx1b2*-MO: 5´- CCTCAATTTTGATTCCGTCCAGCAT (ref. 29)

Mismatch ATG-*lmx1b1*-MO: 5´- CaTCcATTTTaATcCCGTCCAcCAT (ref. 29)

ATG-*foxc1a*-MO: 5´- CCTGCATGACTGCTCTCCAAAACGG (ref. 28)

ATG-*foxc1b*-MO: 5´- GCATCGTACCCCTTTCTTCGGTACA (ref. 28)

ATG-*ccnc*-MO: 5´-AACTCTGCCAGAAGTTCCCTGCCAT

E3I3-*ccnc*-MO: 5´-ACGGCACTGCACTGCTCACCTGGCA

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