

**Table S1.** List of primers.

Primer	Sequence
Fibronectin (rFn)	F: 5'-CGGGAACATCATCGGATCGT-3' R: 5'-GGAGAACCAGGAGAGCACAC-3'
Nephrin (rNph)	F: 5'-GTGACCTCAGTGATGACGCA-3' R: 5'-TAGGAGACACAAGCTCGGGA-3'
DUOX1 (DUOX-1)	F: 5'-AGGCACTGGTGGAAAACATC-3' R: 5'-GGAGAAAAGGTGCCTGAAAA-3'
DUOX2 (DUOX-2)	F: 5'-GAAGTCCACAGCAGCATCAA-3' R: 5'-CCACGGACATTGAAGAAACC-3'
AMPK (AMPK-a1)	F: 5'-GCAGTTGCCTACCACCTCAT-3' R: 5'-GTACGCCTTGGTGTITGGAT-3'
GAPDH	F: 5'-GGGGCTCTCTGCTCCTCTG-3' R: 5'-CGGCCAAATCCGTTACACCG-3'

**Table S2.** Gene Ontology biological process associated with TRPC6 protein interactions network obtained from GeneMANIA database.

Gene	Description	Rank
<i>DUOX1</i>	dual oxidase 1 [Source:HGNC Symbol;Acc:HGNC:3062]	N/A
<i>DUOX2</i>	dual oxidase 2 [Source:HGNC Symbol;Acc:HGNC:13273]	N/A
<i>GLP1R</i>	glucagon like peptide 1 receptor [Source:HGNC Symbol;Acc:HGNC:4324]	N/A
<i>TRPC6</i>	transient receptor potential cation channel subfamily C member 6 [Source: HGNC Symbol;Acc:HGNC:12338]	N/A
<i>GCG</i>	glucagon [Source:HGNC Symbol;Acc:HGNC:4191]	1
<i>GNAS</i>	GNAS complex locus [Source:HGNC Symbol;Acc:HGNC:4392]	2
<i>TPO</i>	thyroid peroxidase [Source:HGNC Symbol;Acc:HGNC:12015]	3
<i>KCNQ5</i>	potassium voltage-gated channel subfamily Q member 5 [Source:HGNC Symbol;Acc:HGNC:6299]	4
<i>KCNQ4</i>	potassium voltage-gated channel subfamily Q member 4 [Source:HGNC Symbol;Acc:HGNC:6298]	5
<i>KCNQ2</i>	potassium voltage-gated channel subfamily Q member 2 [Source:HGNC Symbol;Acc:HGNC:6296]	6
<i>KCNQ3</i>	potassium voltage-gated channel subfamily Q member 3 [Source:HGNC Symbol;Acc:HGNC:6297]	7
<i>NPHS2</i>	NPHS2 podocin [Source:HGNC Symbol;Acc:HGNC:13394]	8
<i>ORAI1</i>	ORAI calcium release-activated calcium modulator 1 [Source:HGNC Symbol; Acc:HGNC:25896]	9
<i>RNF24</i>	ring finger protein 24 [Source:HGNC Symbol;Acc:HGNC:13779]	10
<i>SP3</i>	Sp3 transcription factor [Source:HGNC Symbol;Acc:HGNC:11208]	11
<i>TRPC7</i>	transient receptor potential cation channel subfamily C member 7 [Source: HGNC Symbol;Acc:HGNC:20754]	12
<i>NPHS1</i>	NPHS1 nephrin [Source:HGNC Symbol;Acc:HGNC:7908]	13
<i>ITPR3</i>	inositol 1,4,5-trisphosphate receptor type 3 [Source:HGNC Symbol;Acc: HGNC:6182]	14
<i>PRKG2</i>	protein kinase, cGMP-dependent, type II [Source:HGNC Symbol;Acc:HGNC: 9416]	15
<i>PRKG1</i>	protein kinase, cGMP-dependent, type I [Source:HGNC Symbol;Acc:HGNC: 9414]	16
<i>TRPC3</i>	transient receptor potential cation channel subfamily C member 3 [Source: HGNC Symbol;Acc:HGNC:12335]	17
<i>TRPC4</i>	transient receptor potential cation channel subfamily C member 4 [Source: HGNC Symbol;Acc:HGNC:12336]	18
<i>TRPC5</i>	transient receptor potential cation channel subfamily C member 5 [Source: HGNC Symbol;Acc:HGNC:12337]	19
<i>TRPM2</i>	transient receptor potential cation channel subfamily M member 2 [Source: HGNC Symbol;Acc:HGNC:12339]	20