

Expression of Other TRPC Channels in Kidney

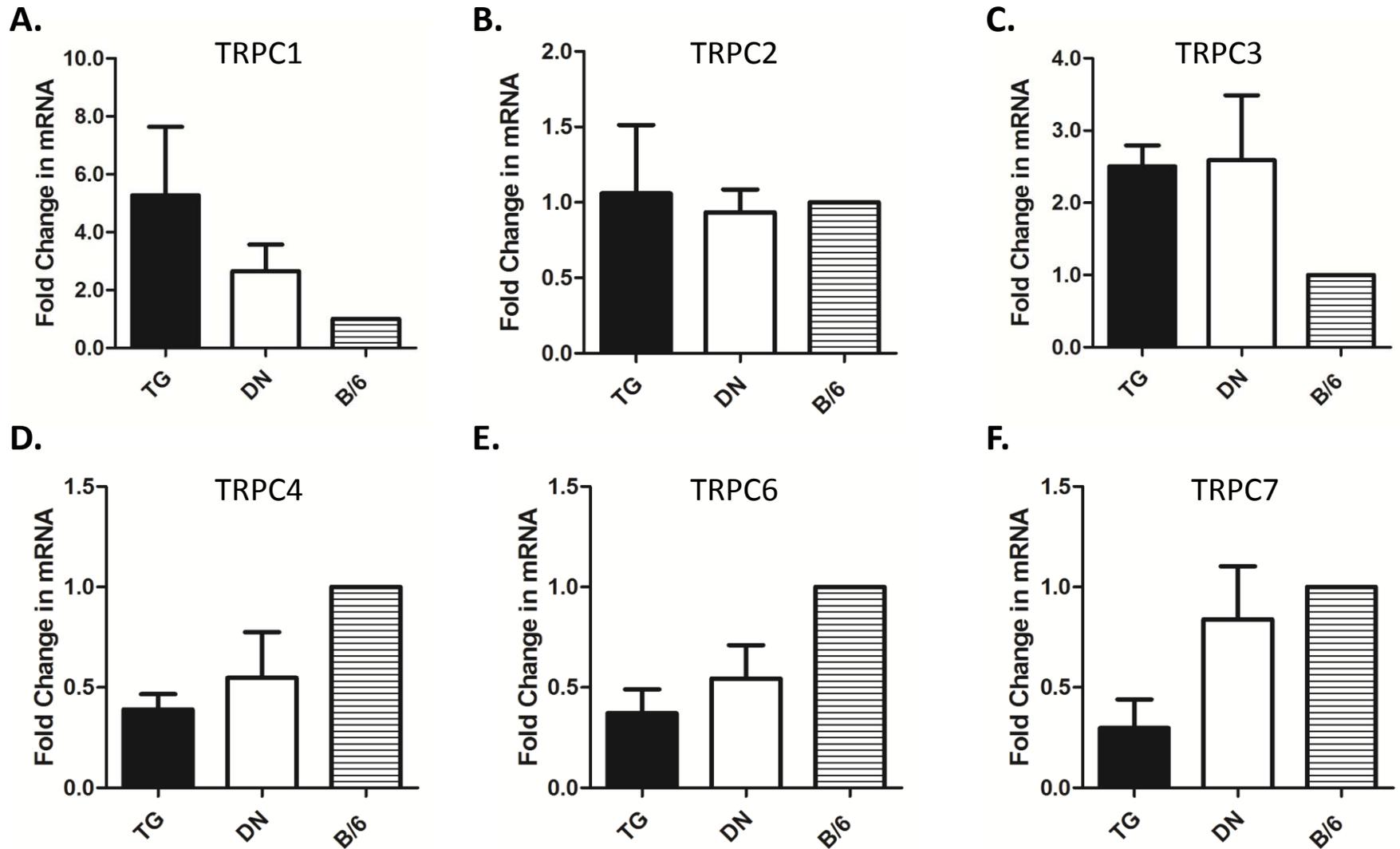
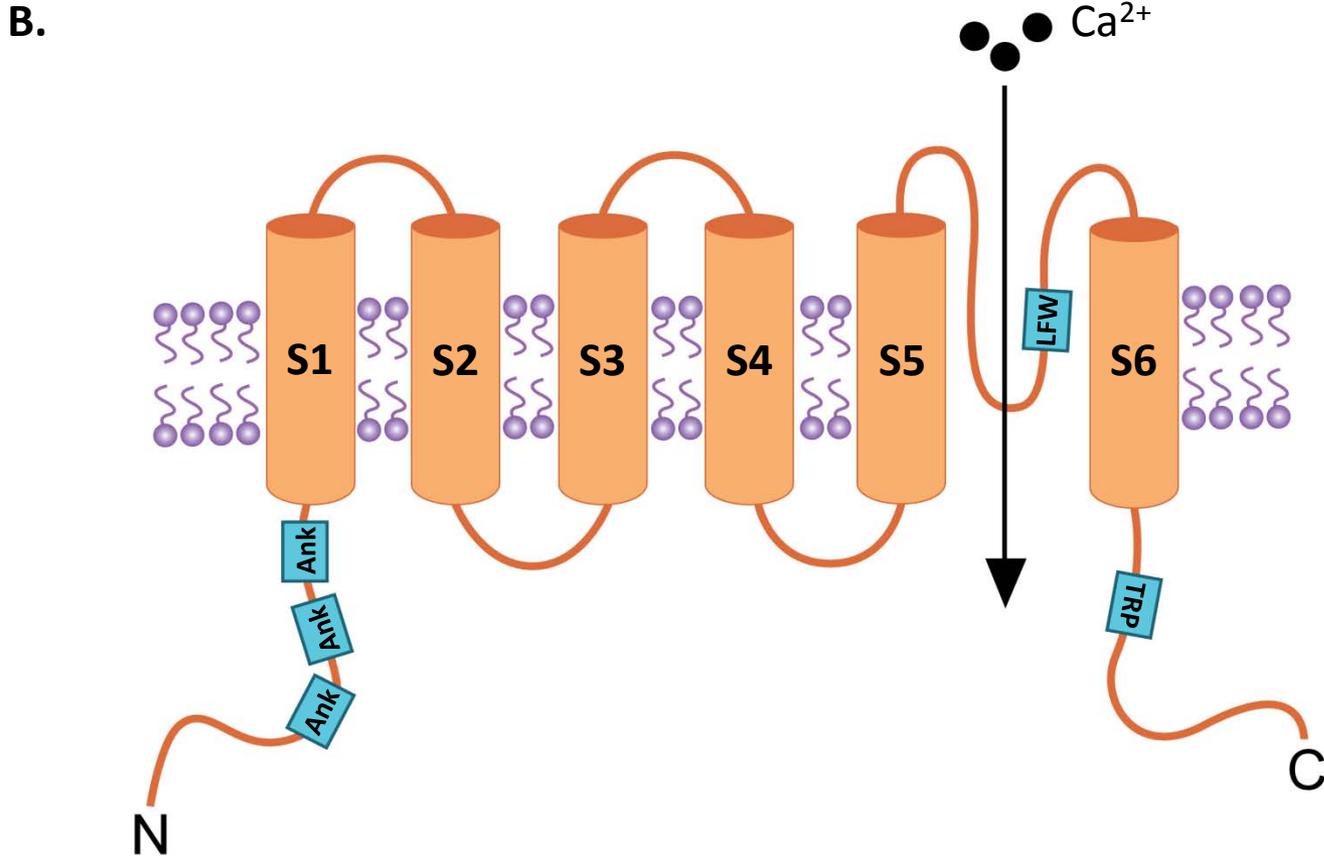


FIGURE S3, Wang et al.

A.

	S5	Pore	S6		
TRPC5 WT	---NQLYFY	ETRAIDEPNNCKGIRCEKQNNAFSTLFETLQSLFW	SVFGLLNLYVTNVKARHEFTEFVGA	TMFGTYN---	
TRPC5 DN	---NQLYFY	ETRAIDEPNNCKGIRCEKQNNAFSTLFETLQ	SAASVFGLLN	LYVTNVKARHEFTEFVGA	TMFGTYN---



Supplemental Figure Legends

Figure S1: Confirmatory agarose gel of TRPC5 qPCR products and validation of customized antibody. (A) The single DNA band for TRPC5 in each group demonstrated the integrity and specificity of the Real-Time PCR. The mRNA from HEK 293 transfected with TRPC5 was presented as control (CTL). (B) Representative Western blot images showed the expression levels of TRPC5 (commercial NeuroMab TRPC5 antibody) and GAPDH housekeeping gene in brain lysates of TG, DN and B/6 mice. (C) Quantitative analysis of TRPC5 expression (normalized with GAPDH) exhibited that TRPC5 was overexpressed in TG and DN mice compared to that in B/6 mice. (D) Western blot of lysates from primary podocytes and TRPC5-transfected HEK cells using both customized and commercial TRPC5 antibodies, respectively. Only our customized antibody was able to detect a weak TRPC5 band from podocytes and the bands were too weak to quantify the densities of TRPC5 bands. * denotes $p < 0.05$ compared to B/6; error bars are \pm SE.

Figure S2: Other TRPC channels expression in kidney. (A-F) mRNA levels of TRPCs (1, 2, 3, 4, 6, and 7) were not significantly different between each of TG, DN and B/6 mice. mRNA levels in B/6 mice was set as 1.0.

Figure S3: Schematic image of TRPC5 structure. (A) The primary sequence alignment of two TRPC5 variants (WT and DN) around the pore region. Location of the LFW motif in wild-type TRPC5 was replaced by mutated dominant-negative AAA. (B) Schematic image of TRPC5 channel and location of LWF motif. Ank: ankyrin domain; S1-S6: transmembrane structural domains; TRP, TRP box; N and C: termini of the channel subunit.