

Supplementary materials

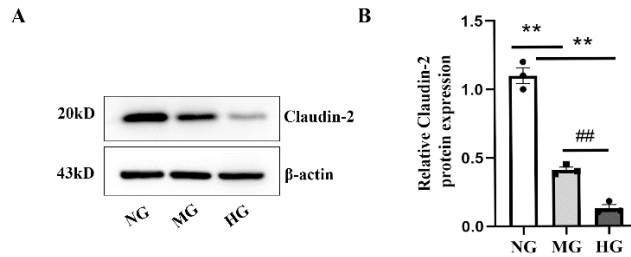


Figure S1. High glucose induced a decrease in Claudin-2 protein expression in PTECs

(A&B) Cells were cultured in 5.5mM D-glucose (NG) medium, 5.5 mM D-glucose + 24.5 mM D-mannitol (MG) medium, or 30mM D-glucose (HG) medium for 48 hours, respectively. Claudin-2 protein expression was significantly decreased in MG group and HG group compared to NG group. And the expression level of Claudin-2 was significantly lower in HG group relative to MG group by 31.7%. Representative blots and quantitative analysis of Claudin-2 are shown above. Data are expressed mean \pm SEM(n=3). ** P <0.01, vs NG, ## P <0.01, vs MG. MG: mannitol group. HG: high glucose.

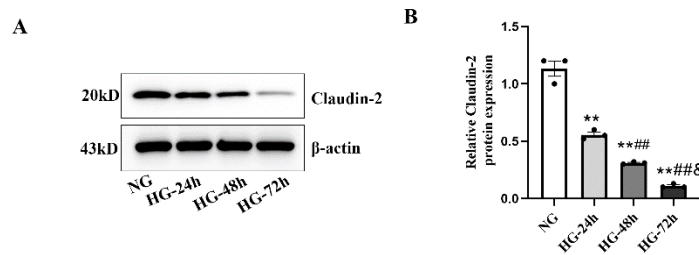


Figure S2. High glucose induced a decrease in Claudin-2 protein expression in PTECs in a time-dependent manner

(A&B) Cells were cultured in 30mM D-glucose (HG) medium for 24 hours, 48 hours, and 72 hours, respectively. HG induced a significant decrease expression of Claudin-2 in a time-dependent manner. Representative blots and quantitative analysis of Claudin-2 are shown above.

Data are expressed mean \pm SEM(n=3). ** P <0.01, vs NG, ## P <0.01, vs HG-24h. & P <0.05, vs HG-48h. HG: high glucose.

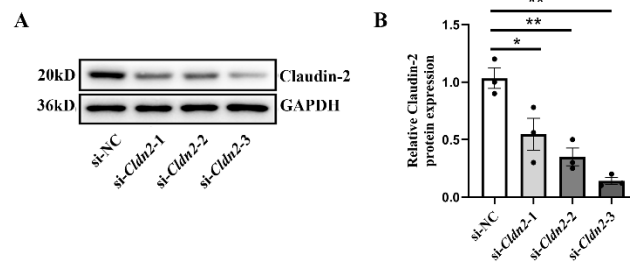


Figure S3. Analysis of Claudin-2 protein expression in NRK52 cells after transfection with various small interfering RNAs

(A&B) Western blot showed a significant decrease in Claudin-2 in NRK52E cells when transfected with small interfering RNAs (si-*Cldn2*) compared to transfection with negative control (si-NC). Representative blots and quantitative analysis of Claudin-2 are shown above. Data are expressed mean \pm SEM(n=3). * P <0.05, ** P <0.01, vs si-NC.