

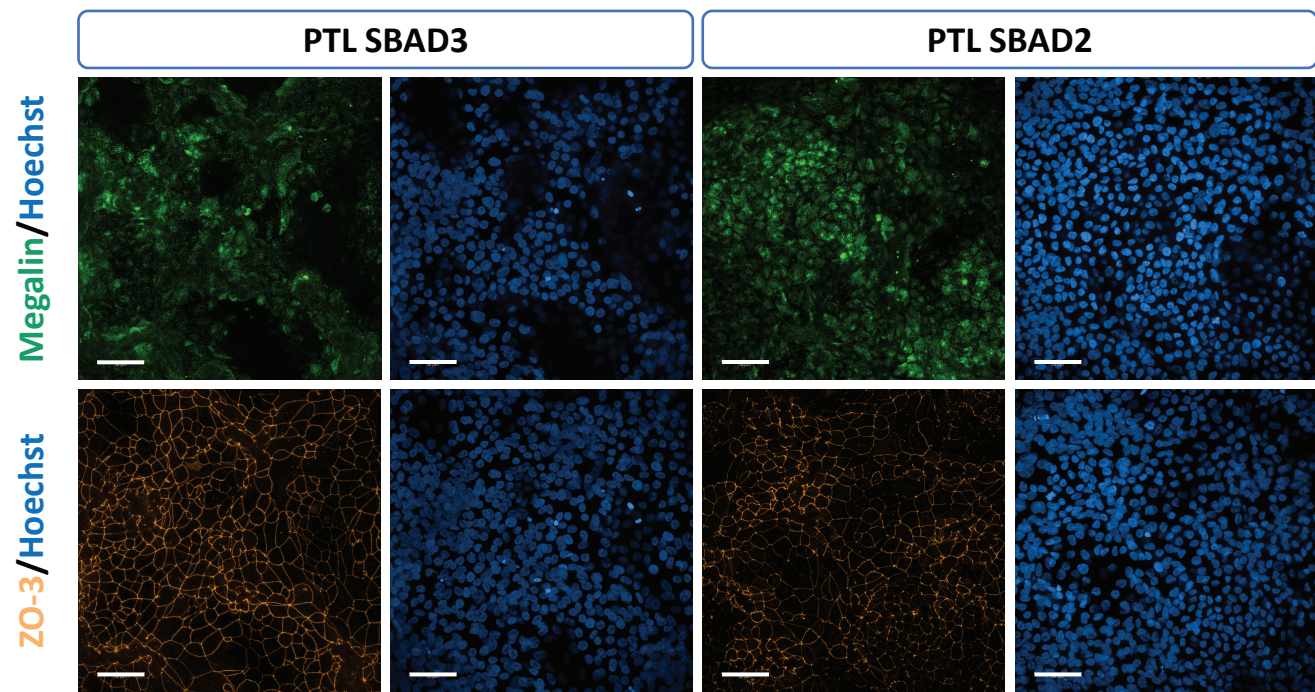
**Supplementary Materials**

**Table S1: List of PCR primers.** Sequences of forward and reverse primers used for PCR with resulting PCR product size. The housekeeping gene *GAPDH* served as internal control.

Gene	Sequence Forward Primer	Sequence Reverse Primer	Product Size (bp)
GAPDH	5'- GTC TCC TCT GAC TTC AAC AGC G -3'	5'- ACC ACC CTG TTG CTG TAG CCA A -3'	131
SLC22A6 (OAT1)	5'- GGC TTC CTT GTC ATC AAC TCC C -3'	5'- ATA CTT CTG GTG CTC TTG TTG CTG -3'	456
SLC22A8 (OAT3)	5'- CAA CAG CAC CAA GGA CTC CAT TG -3'	5'- GAG GTT GAC TCC AAA TTC TTC CAC ACC -3'	754

**Table S2: List of primary and secondary antibodies used for immunofluorescence (IF) and western blotting (WB).**

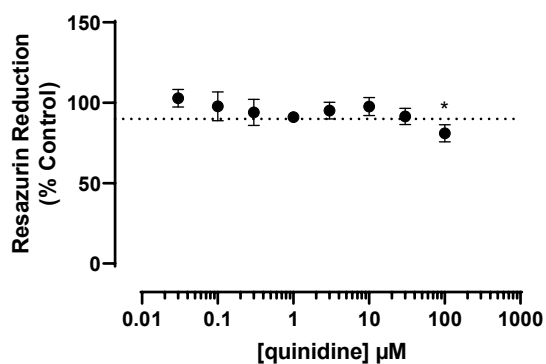
<b>Name</b>	<b>Supplier</b>	<b>Catalogue Number</b>	<b>Dilution</b>	<b>Application</b>
<b>Actin</b>	Santa Cruz Biotechnology	sc-8432	1:1000	WB
<b>ATP1A1</b>	Invitrogen	MA3-928	1:100	IF
<b>Donkey anti-mouse Alexa Fluor 488</b>	Invitrogen	A21202	1:1000	IF
<b>Donkey anti-rabbit Alexa Fluor 546</b>	Invitrogen	A10040	1:1000	IF
<b>Donkey anti-rabbit Alexa Fluor Plus 647</b>	Invitrogen	A32795	1:1000	IF
<b>Goat anti-mouse HRP</b>	Abcam	ab6789	1:5000	WB
<b>Goat anti-rabbit HRP</b>	Abcam	ab6721	1:5000	WB
<b>Hoechst 33342 (nuclear stain)</b>	Invitrogen	H3570	1:10000 (final: 1 µg/mL)	IF
<b>Megalin</b>	R&D systems	MAB9578	1:100	IF
<b>OCT2</b>	Sigma-Aldrich	HPA008567	1:200	IF
<b>OCT2</b>	Sigma-Aldrich	HPA008567	1:500	WB
<b>OCTN2</b>	Abcam	ab79964	1:100	IF
<b>ZO-3</b>	Cell Signaling Technology	3704	1:1600	IF



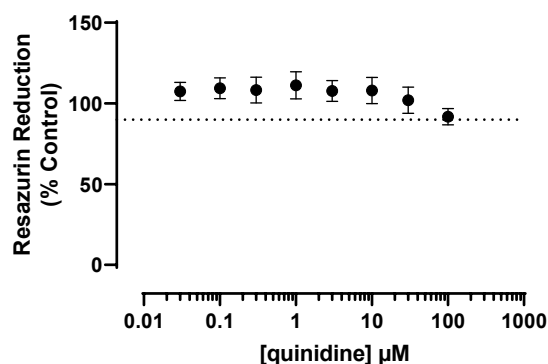
**Figure S1: Immunofluorescent images of the proximal tubular-enriched marker megalin and tight junction marker tight junction protein 3 (*TJP3*, aka **ZO-3**) in PTL.** PTL SBAD3 and SBAD2 were stained with the nuclear stain Hoechst 33342 (blue) and antibodies against megalin (green) and ZO-3 (orange). Images were obtained using 40× water confocal imaging. The scale bar represents 50 μm.



RPTEC/TERT1

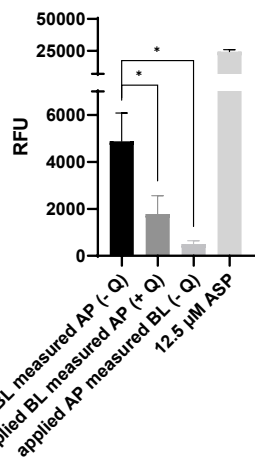


PTL SBAD2

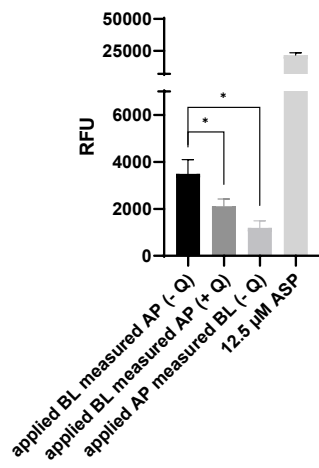


**Figure S2: Effect of quinidine on cell viability.** RPTEC/TERT1 and PTL SBAD2 cells were exposed to quinidine for 24 h. Cell viability was assessed after 1.5 h incubation in 44  $\mu\text{M}$  resazurin. Data is shown as mean  $\pm$  SD of 2 independent experiments, depicted as % control (untreated). Statistical significance was calculated using one-way ANOVA. \* represents  $p$ -value  $< 0.05$  (untreated versus treated) and  $\geq \text{IC}_{10}$ . The dotted line represents a decrease of 10% in resazurin reduction compared to control.

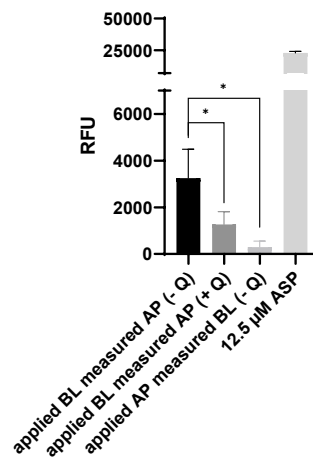
Primary PTEC #1



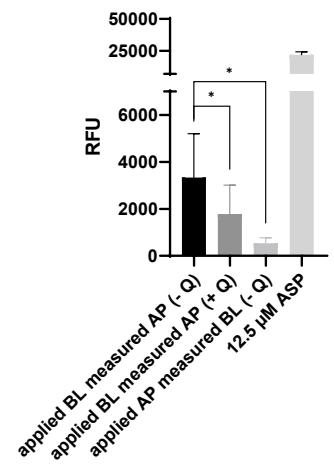
Primary PTEC #2



RPTEC/TERT1

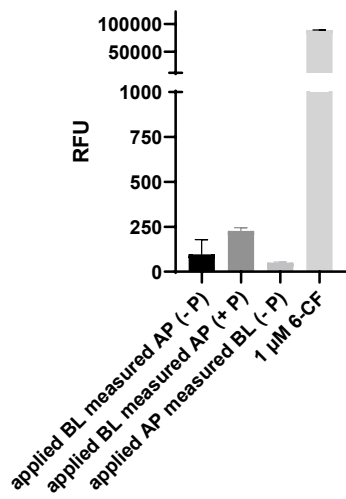


PTL SBAD3

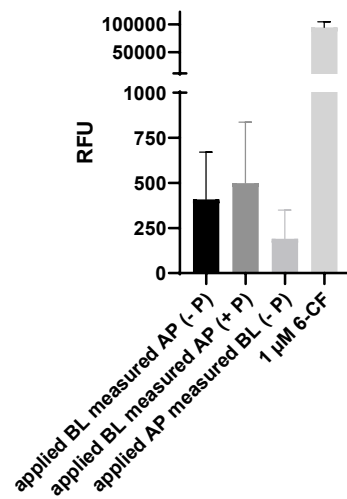


**Figure S3: ASP basolateral to apical versus apical to basolateral transfer.** Cells were pre-incubated for 1 h in absence or presence of the inhibitor quinidine (Q) applied BL, followed by a 1 h incubation with the substrate ASP applied BL or AP in absence or presence of the inhibitor applied BL. Relative fluorescence units (RFU) of the applied 12.5  $\mu$ M ASP is shown as comparison. RFU data is shown as mean  $\pm$  SD of 2 independent experiments minimum. Statistical significance was calculated using a two-tailed unpaired Student's *t*-test. \* represents *p*-value < 0.05.

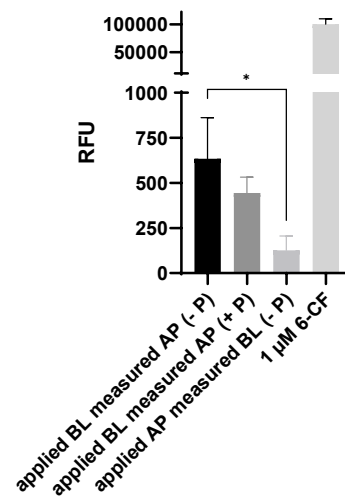
Primary PTEC #1



RPTEC/TERT1



PTL SBAD3



**Figure S4: 6-CF basolateral to apical versus apical to basolateral transfer.** Cells were pre-incubated for 1 h in absence or presence of the inhibitor probenecid (P) applied BL, followed by a 1 h incubation with the substrate 6-CF applied BL or AP in absence or presence of the inhibitor applied BL. RFU of the applied 1  $\mu$ M 6-CF is shown as comparison. RFU data is shown as mean  $\pm$  SD of 2 independent experiments minimum. Statistical significance was calculated using a two-tailed unpaired Student's *t*-test. \* represents *p*-value < 0.05.