



**Figure S1. Electropherograms of PCR products for Cl<sup>-</sup> channels and Cl<sup>-</sup> transporters in Reissner's membrane.**

Analyses of DNA products of RT-PCR by Agilent Bioanalyzer. Transcripts for all genes tested in column "+RNA" were present except for ClC-1, barttin, Best1, Best3; Clca1 was judged to be absent. NTC, no template controls.

**Table S1.** Gene array analysis of Cl<sup>-</sup> channel genes in Reissner's membrane

Gene	Affymetrix Probe Set ID	Average Signal		Ratio (RM/SV)	Present (P) Marginal(M) Absent (A)
		RM <sup>a</sup> Mean	SV <sup>b</sup> Mean		
Cftr	1420579_s_at	8	52	0.2	AAA/APA <sup>d</sup>
Cftr	1427767_a_at	9	30	0.3	AAA/AAA <sup>d</sup>
Slc26a7	1425841_at	1909	76	25	PPP/AAA
CIC-1	1427591_at	17	95	0.2	AAA/AAA
CIC-2	1449248_at	296	97	3.1	PPP/PAA
CIC-Ka	1450182_at	362	1458	0.2	PPP/PPP
CIC-Ka	1455677_s_at	372	2030	0.2	PPP/PPP
CIC-Kb	1450340_a_at	46	837	0.1	AAA/PAA <sup>c</sup>
Barttin	1421482_at	52	550	0.1	AAA/AAA <sup>c</sup>
CiCa1	1417852_x_at	66	104	0.6	PPP/PPM
CiCa1	1417853_at	28	31	0.9	PPA/AAA
CiCa2	1419463_at	2	107	0.0	AAA/PPA
CiCa2	1437578_at	7	10	0.7	AAA/AAA
CiCa3	1416306_at	5	6	0.8	AAA/AAA
CiCa3	1459889_at	32	95	0.3	AAA/AAA
CiCa4	1451823_at	28	94	0.3	AAA/AAA
Best 1	1428841_at	366	177	2.1	PPP/AAA
Best 2	1425729_at	12	77	0.2	AAA/AAA
Ano1/tmem16a	1426571_at	5	62	0.1	AAA/AAA
Ano1/tmem16a	1459713_s_at	46	414	0.1	AAA/PPP
Clns1a	1423181_s_at	2463	1913	1.3	PPP/PPP
Clns1a	1427548_a_at	145	234	0.6	PPP/PAA
Clns1a	1436935_x_at	10426	11084	0.9	PPP/PPP

Affymetrix annotation date is July 13, 2009; results are from three gene chips for each tissue; mean signal background for RM= 57, SV=100; GEO accession numbers: <sup>a</sup>GSE6196, <sup>b</sup>GSE4749. <sup>c</sup>These proteins are known to be present in SV. <sup>d</sup>Reported earlier (Kim et al., 2009).

#### Reference

Kim SH, Kim KX, Raveendran NN, Wu T, Pondugula SR, Marcus DC (2009) Regulation of ENaC-mediated sodium transport by glucocorticoids in Reissner's membrane epithelium. *Am J Physiol Cell Physiol* 296:C544-C557.