Additional file 3. Ussing chamber buffer composition

Components	Serosal side [mmol/L]	Mucosal side [mmol/L]
NaCl *	113.6	53.6
KCl *	5.4	5.4
HCl *	0.2	0.2
$MgCl_2 \cdot 6\ H_2O$ *	1.2	1.2
$CaCl_2 \cdot 2\ H_2O$ *	1.2	1.2
$NaHCO_3$ *	21.0	21.0
$Na_2HPO_4 \cdot 2\ H_2O$ *	1.5	1.5
Glucose *	10.0	-
Mannitol +	2.0	2.0
HEPES a #	7.0	10.0
Na-gluconate *	6.0	6.0
Na-acetate $\cdot 3\ H_2O$ *	-	36.0
Na-propionate *	-	15.0
Na-butyrate *	-	9.0

Chemical composition of the mucosal and serosal buffer solutions used for Ussing chamber experiments to investigate the functional intestinal integrity and transport properties of turkey ceca. The buffers had an osmolality of 296 and 297 mOsm/kg, respectively, and a pH between 7.45 and 7.47 when flushed with carbogen gas. They were warmed to 37 °C.

[a] 2-[4-(2-hydroxyethyl)-1-piperazinyl]-ethanesulfonic acid

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[+] Sigma Aldrich Inc., St. Louis, MO, USA

[#] Carl Roth GmbH & Co. KG, Karlsruhe, Germany