Development and application of an *ex vivo* fosphenytoin nasal bioconversion/permeability evaluation method

Supplementary material

Table S1 Initial phenytoin (PHT) and fosphenytoin (FOS) concentrations quantified in the donor chambers.

Donor solution	Mean (µM)	SD	***n***	95% CI	*p*-value
PHT pH 7.4	313	45	9	29	0.6130
FOS pH 7.4	304	21	8	14	
FOS pH 7.4	648	36	8	25	
FOS pH 7.4	3398	145	10	90	
FOS pH 7.4	7378	350	8	242	0.2415
FOS pH 4.5	7160	219	5	192	

SD: Standard deviation; CI: Confidence interval. *p*-value was calculated by a two-tailed *t*-test, using 95% confidence intervals.

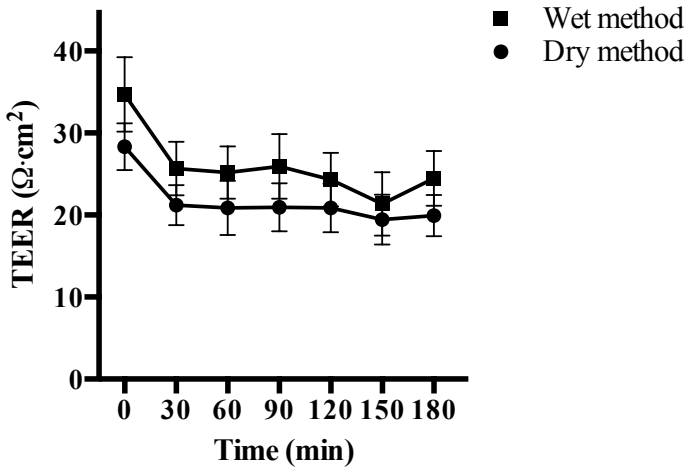

Fig. S1 Comparison of the transepithelial electrical resistance (TEER) of the porcine nasal mucosas during 180 min (60 min of preincubation and 120 min of incubation) for the two methods of transport to the laboratory after excision. Wet method - transport in gassed KRB; Dry method – transport in dry tubes placed on ice (n = 8). Mean ± SEM. KRB: Krebs-Ringer Bicarbonate buffer.

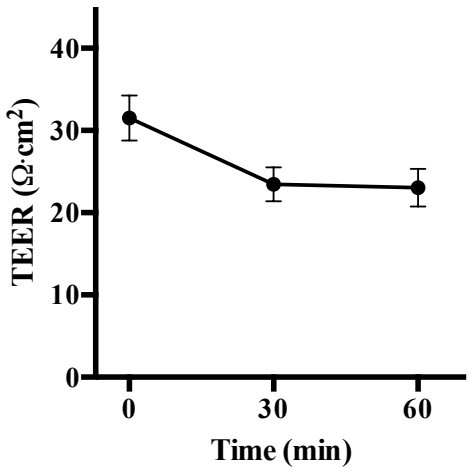

Fig. S2 Evolution of the transepithelial electrical resistance (TEER) of the porcine nasal mucosas during the preincubation period in KRB until reaching the state of electrophysiological equilibrium (n = 16). Mean ± SEM. KRB: Krebs-Ringer Bicarbonate buffer.