Supplementary Materials

AQP1 in the Gastrointestinal Tract of Mice: Expression Pattern and Impact of AQP1 Knockout on Colonic Function
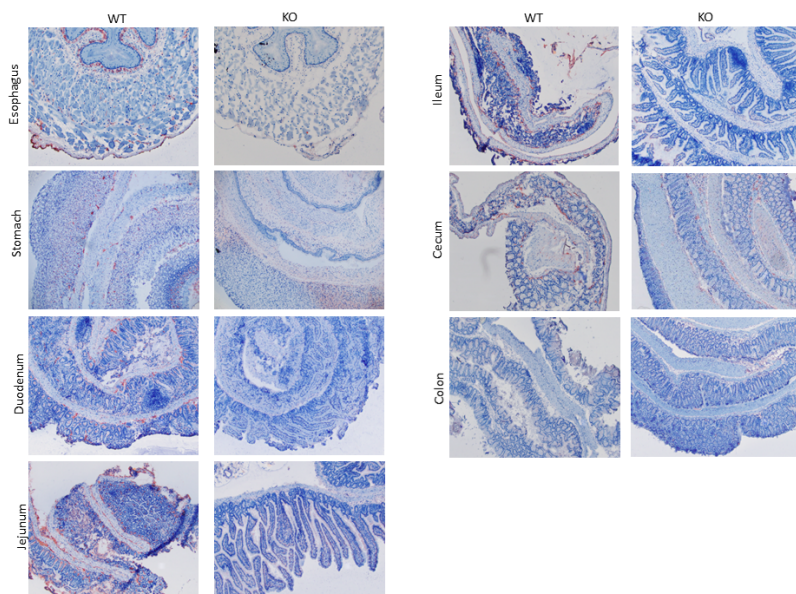

Figure S1. AQP1 expression in different parts of the gastrointestinal tract (WT and AQP1-KO).

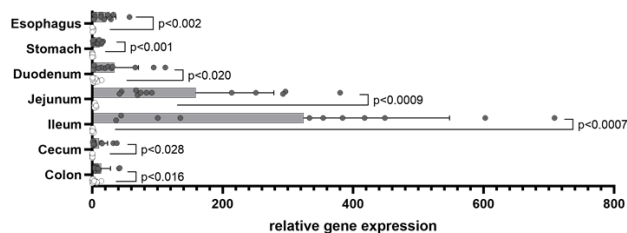AQP1 mRNA expression in different parts of the gastrointestinal tract (WT and AQP1-KO)

Figure S2. AQP1 mRNA expression in different parts of the gastrointestinal tract (WT and AQP1-KO);.

Table S1. Intestinal wall WT and AQP1-KO mean, standard deviation (SD) and number of measurements (N). All measurements in μm. .

| | Intestinal wall WT | | | Intestinal wall AQP1-KO | | | Difference |
	Mean	SD	N	Mean	SD	N	p-value
Esophagus	280.82	87.51	30	240.97	94.35	24	*0.128*
Stomach	415.19	114.94	30	609.07	125.73	24	*<0.0001*
Duodenum	229.09	96.82	24	261.65	94.87	24	*0.245*
Jejunum	325.57	129.79	27	620.67	213.53	24	*<0.000001*
Ileum	313.30	143.58	27	417.34	67.69	24	*0.002*
Cecum	255.53	63.55	30	294.59	72.22	24	*0.325*
Colon	481.29	108.86	30	377.01	79.79	24	*0.006*

Table S2. Muscular layer WT and AQP1-KO mean, standard deviation (SD) and number of measurements (N). All measurements in μm.

	Muscular layer WT			Muscular layer AQP1-KO			Difference
	Mean	SD	N	Mean	SD	N	p-value
Esophagus	211.08	60.19	30	173.94	68.24	24	*0.039*
Stomach	132.01	64.76	30	153.98	85.75	24	*0.190*
Duodenum	54.89	15.97	24	71.96	28.89	24	*0.016*
Jejunum	61.34	21.85	27	78.70	36.18	24	*0.048*
Ileum	75.43	26.17	30	87.40	19.62	24	*0.069*
Cecum	72.58	23.81	29	99.03	36.83	24	*0.004*
Colon	178.88	58.72	30	136.84	49.00	24	*0.007*

Table S3. Mucosal layer WT and AQP1-KO mean, standard deviation (SD) and number of measurements (N). All measurements in μm.

	Mucosal layer WT			Musosal layer AQP1-KO			Difference
	Mean	SD	N	Mean	SD	N	p-value
Esophagus	69.74	31.88	30	67.02	28.43	24	*0.742*
Stomach	283.18	108.25	30	455.09	53.91	24	*<0.0001*
Duodenum	174.21	84.20	24	189.69	75.93	24	*0.507*
Jejunum	264.23	116.99	27	541.97	201.89	24	*<0.000001*
Ileum	236.86	129.92	27	329.95	63.98	24	*0.002*
Cecum	178.90	48.66	30	195.56	57.30	24	*0.415*
Colon	302.41	74.26	30	240.17	51.65	24	*0.0007*