

## Supplemental material

Wozniak et al., <https://doi.org/10.1085/jgp.201812071>

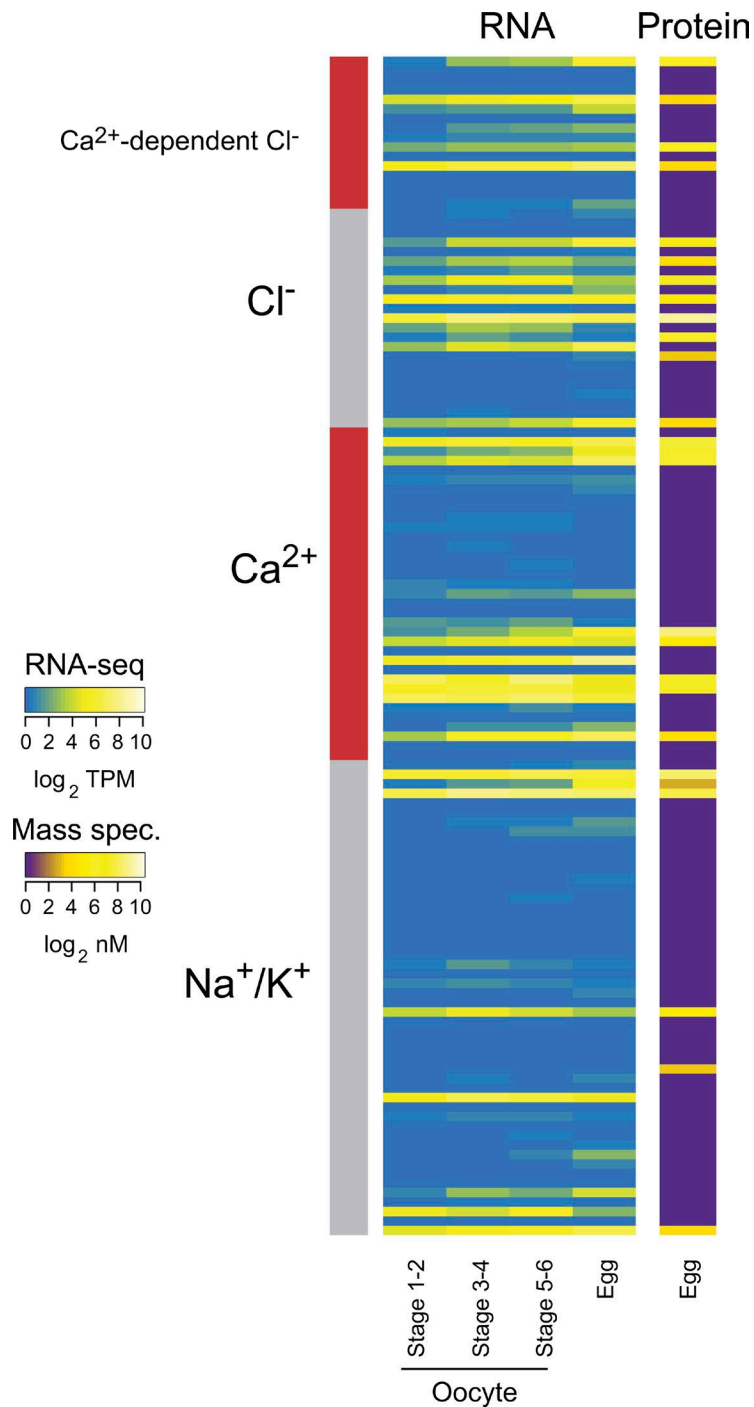


Figure S1. **Ion channel expression in *X. laevis* oocytes and eggs.** Left: Heatmaps showing RNA expression levels (based on RNA-seq from Session et al., 2016) as  $\log_2$  transcripts per million (TPM). Right: Heatmaps showing protein concentrations (based on mass spectrometry from Wühr et al. 2014) in  $\log_2$  nanomolar. Transcripts and proteins are grouped by channel type.

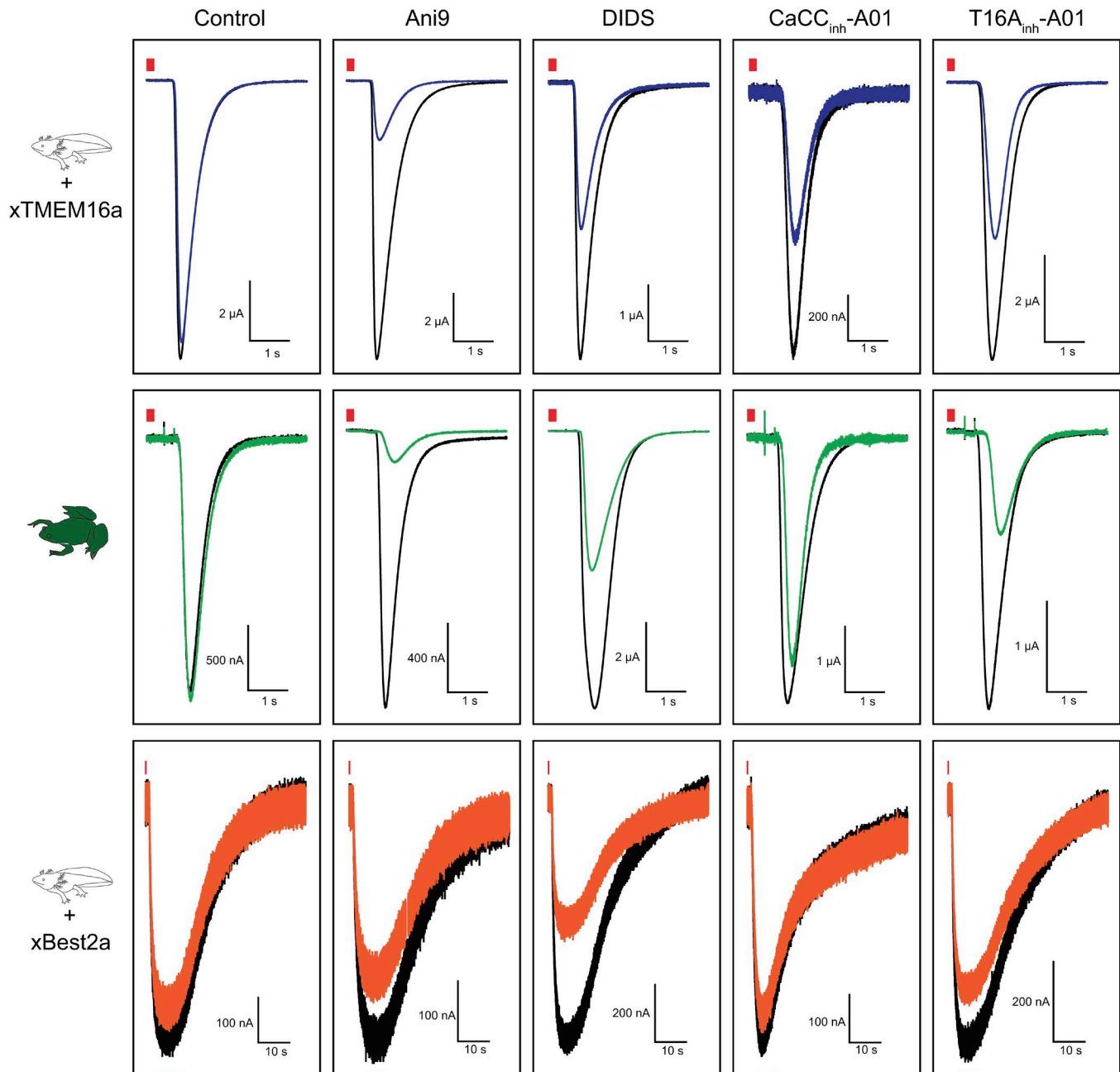


Figure S2. **IP<sub>3</sub>-evoked currents in various inhibitors.** Representative current traces evoked by IP<sub>3</sub> uncaging in axolotl oocytes expressing xTMEM16A (top) or xBEST2A (bottom) and in wild-type *X. laevis* oocytes (middle). Shown are typical traces before (black) and after (colored) application of a control solution, Ani9, DIDS, CaCC<sub>inh</sub>-A01, or T16A<sub>inh</sub>-A01. Red bars denote the 250-ms UV exposure.

Table S1. **Inhibition of Ca<sup>2+</sup>-activated current using Cl<sup>-</sup> channel inhibitors**

	Control	10 μM MONNA	1 μM Ani9	30 μM T16A <sub>inh</sub> -A01	10 μM CaCC <sub>inh</sub> -A01	7.5 μM DIDS
xTMEM16A in axolotl oocytes	5 ± 3	72 ± 3	76 ± 5	46 ± 11	35 ± 7	46 ± 2
<i>X. laevis</i> oocytes	2 ± 4	87 ± 2	80 ± 4	45 ± 13	25 ± 11	47 ± 7
xBEST2A in axolotl oocytes	7 ± 4	10 ± 8	22 ± 7	26 ± 4	9 ± 3	29 ± 7

Mean ± SEM percentage of current inhibition seen for uncaging experiments is reported. The number of independent observations for each treatment is  $n = 8-16$  for MONNA,  $n = 5-8$  for Ani9,  $n = 6-7$  for T16A<sub>inh</sub>-A01,  $n = 6-10$  for CaCC<sub>inh</sub>-A01, and  $n = 6-7$  DIDS.