



**Figure 3-figure supplement 1. Activation of SLAH3 and its close relative SLAC1 by different kinases.** (A) Instantaneous currents of *Xenopus* oocytes injected with WT SLAH3 alone, with CIPK23/CBL1 or PBL27, respectively. The effect of ABI1 on the SLAH3-derived was studied by co-expression of the ABI1 phosphatase in oocytes. Currents were recorded in standard buffers containing 100 mM nitrate ( $n \geq 4$  experiments, mean  $\pm$  SD). (B) Instantaneous currents of *Xenopus* oocytes injected with wild type SLAC1 alone or together with BIK1, PBL27, CIPK23/CBL1 or OST1. Currents were recorded at -100 mV in 100 mM chloride containing buffers. Note: For full activation of SLAC1 via OST1 split-YFP constructs (SLAC1-YFPc and OST1-YFPn) were used ( $n = 4$  experiments, mean  $\pm$  SD). (C) Instantaneous currents of *Xenopus* oocytes injected with wild type SLAH3 alone or together with PBL27, PBL19, PBL39, BIK1 or PBL1. Currents were recorded at -100 mV in 100 mM chloride containing buffers ( $n = 4$  experiments, mean  $\pm$  SD). (D) Instantaneous currents of *Xenopus* oocytes injected with wild type SLAH3 alone or together with PBL1, or co-injected with PBL1 and CERK1. Currents were recorded at -100 mV in 100 mM chloride containing buffers ( $n = 4$  experiments, mean  $\pm$  SD). (E) Instantaneous currents at -100 mV of *Xenopus* oocytes injected with WT SLAH3 alone or co-injecting PBL27, MAPKKK5 or both kinases in nitrate-based buffers (100 mM) ( $n \geq 4$  experiments, mean  $\pm$  SD). Significant differences (ANOVA with Tukey's HSD test,  $P < 0.01$ ) between bars are denoted with different letters.