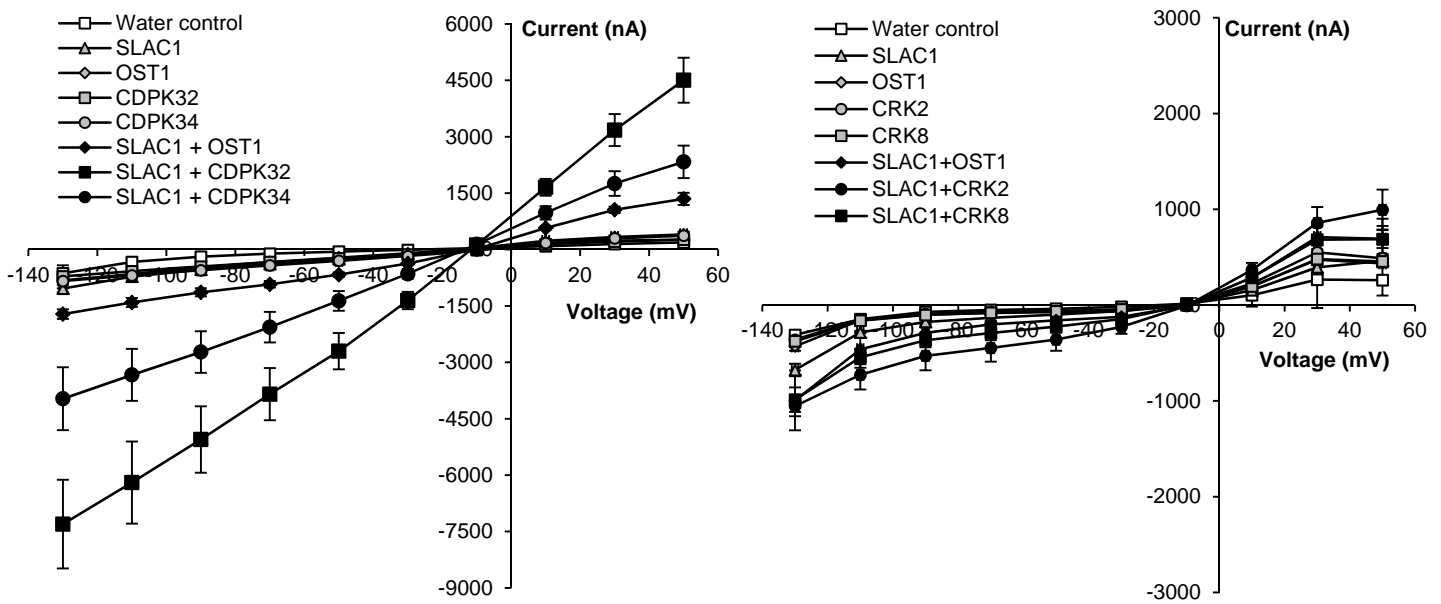
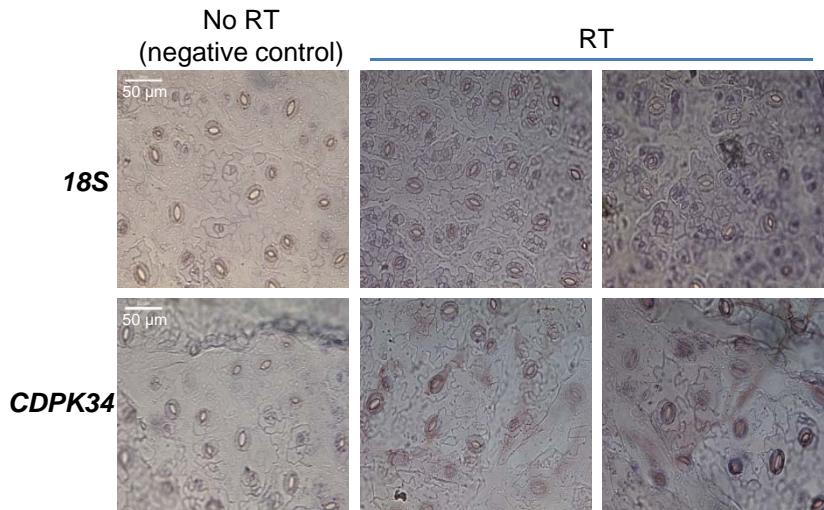


**A** Current traces for oocytes expressing combinations of SLAC1 and/or CDPK32, CDPK34, CRK2, CRK8, OST1



**B** Expression of CDPK34 and the 18S positive control in guard cells of *ost1-2 sal1-8*



**Figure 5 – figure supplement 1. Expression and activity of CDPKs up-regulated by PAP.**

**(A)** Representative current trace data of SLAC1 anion activation by different kinases in *Xenopus laevis* oocytes at voltage pulses ranging from +50 to -130mV in 20mV decrements. Values are means of three to five oocytes  $\pm$  SEM. **(B)** Representative images for expression of CDPK34 and the housekeeper 18S in guard cells of *ost1-2 sal1-8*, as detected by *in situ* PCR on leaf peels. Staining for cDNA of CDPK34 and 18S ribosomal RNA showed a diffuse blue pattern across both pavement and guard cells. In guard cells the staining was evenly blue or punctate, consistent with CDPK34 expression. The negative control (“no RT”) slides showed only large precipitates or no staining as expected. The “no RT” negative controls refer to leaf peels in which the reverse transcription of mRNA was omitted, thus any staining in these slides occur by non-specific binding or precipitation of the stain. Similar results were observed in at least two biological replicates per mRNA.

**Figure 5 – figure supplement 1.**