



**Supplementary information, Figure S2** AKT2 channel voltage gating is not changed by CIPK6+CBL4.

(A) Proportion of time-dependent (gating mode#1, black) and instantaneous (gating mode#2, white) currents (with respect to the total current) recorded at  $-155$  mV in oocytes expressing *AKT2* or *AKT2+CIPK6+CBL4*. Data were normalized by the mean of the total current (mode#1+mode#2) recorded at  $-155$  mV and are displayed as means  $\pm$ SE (n=38 for *AKT2* and n=35 for *AKT2+CIPK6+CBL4*). (B) Voltage-gating of the time-dependent fraction of the *AKT2* current is not changed by CIPK6+CBL4. The relative conductance ( $G/G_{max}$ ) values were obtained as described in Dreyer et al. (2001) from at least 3 independent experiments on

oocytes expressing either *AKT2* only or *AKT2+CIPK6+CBL4*. Symbols represent means  $\pm$ SE (*AKT2*: n=29, *AKT2+CIPK6+CBL4*: n=28). Curves represent best fit to the data of a Boltzmann equation (*AKT2*:  $z_g=1.26$ ;  $E_{a50}=-134$  mV, full black line; *AKT2+CIPK6+CBL4*:  $z_g=1.03$ ;  $E_{a50}=-139$  mV; dotted gray line). (C) *AKT2* unitary conductance is not affected by *CIPK6-CBL4*. Conductance values were obtained from a cell attached patches of oocytes clamped at  $-140$  mV and expressing *AKT2* alone or *AKT2* with *CIPK6* and *CBL4*. Data are means  $\pm$ SE. Oocytes were maintained in an external solution of 100mM  $K^+$  (in the bath and the pipette).