



**Figure S8. Calcium influx induces the formation of multipolar cells in the CP.** F-GFP-transfected migrating cell in the CP that stop migrating and shifts to a multipolar morphology (white arrowheads) upon ionomycin treatment. Left panel: cortical slice used for time-lapse at E18 (*in utero* electroporated at E15). Right panel: Time-lapse sequence of inset in left panel before and after ionomycin treatment. Scale bar: 100  $\mu\text{m}$  (left panel) and 10  $\mu\text{m}$  (time-lapse sequence).