

Extended Data Fig. 1 | GCaMP6 detects ABA-induced  $Ca^{2+}$  wave in the root. Flurorescence signals of GCaMP6s stimulated by ABA in 7-day-old plant root tip.  $(F-F_0)/F_0$ , relative fluorescence intensity. The red dotted box on the left indicates the area where the  $Ca^{2+}$  signal was detected. Instead of  $Ca^{2+}$  oscillations in guard cells, dual peaks (green arrow) were visible in the ABA-induced  $Ca^{2+}$  wave in the root tip. ABA,  $10 \mu M$ . Error bars denote  $\pm s.e.m.$ , n=7. All results were conducted in at least three biological repeats with similar results.