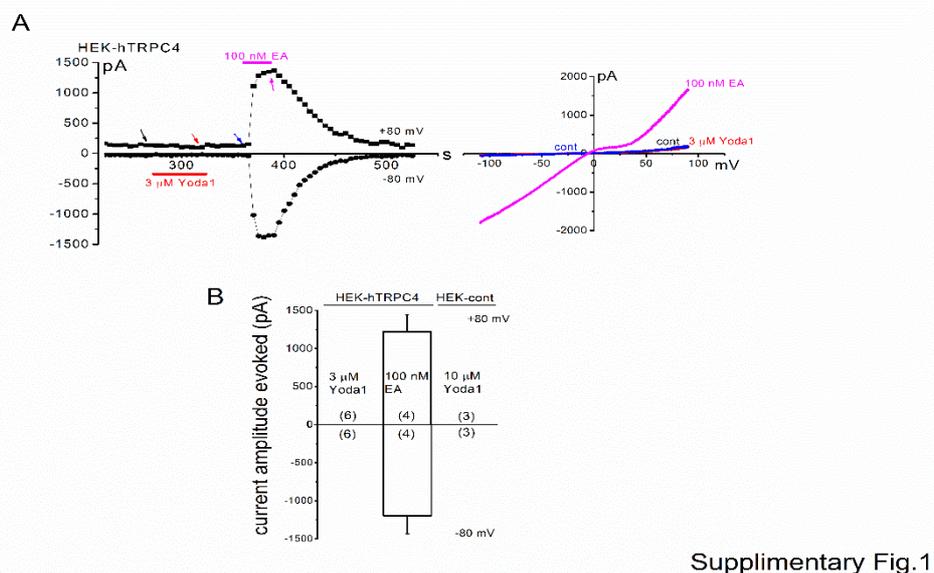


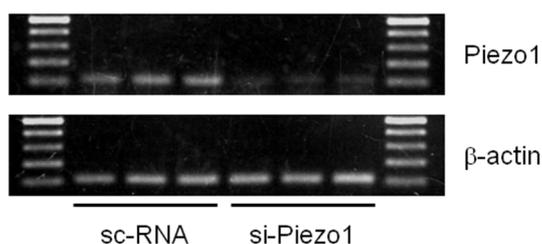


## Supplementary Materials



Supplementary Fig.1

Figure S1: Yoda1 has no effect on membrane currents in HEK-hTRPC4 and HEK-cont cells. (A) HEK-hTRPC4 cells were voltage-clamped in whole-cell configuration mode and treated with 3  $\mu$ M Yoda1. After the wash-out of Yoda1, the cells were exposed to 100 nM EA. Left panel: Ramp waveform pulses from  $-110$  to  $+90$  mV for 400 ms were applied every 5 s and the peak amplitude of membrane currents at  $-80$  and  $+80$  mV was plotted against time. Arrows denote the time at which each I-V was detected. Right panel: A typical I-V exhibited before and after the application of 3  $\mu$ M Yoda1, and before and after the application of 100 nM EA. (B) A summary of the peak amplitudes of membrane currents evoked at  $-80$  and  $+80$  mV in the presence of 3  $\mu$ M Yoda1 and 100 nM EA in HEK-hTRPC4 cells, and 10  $\mu$ M Yoda1 in HEK-cont cells. Pooled data were averaged and expressed as mean  $\pm$  SEM. The numbers in parentheses indicate the number of independent experiments.



Supplementary Fig.2

**Figure S2.** The mRNA expression of *PIEZO1* and  $\beta$ -*ACTIN* was determined with RT-PCR in SW982 cells treated with sc-RNA and si-Piezo1. Three independent samples were tested.