





## Supplementary figure 3. DVA neurons lacking TRP-4 can still respond to membrane depolarization.

- (a-b) Primary DVA neurons were isolated from gravid wild-type or *trp-4(sy695)* mutant embryos expressing the transgene P*twk-16(DVA)::DsRed2* that labels DVA, and were cultured according to the standard protocol. Cells were loaded with the calcium dye fura-2 AM to permit calcium imaging. 100 mM KCl was used to challenge the DVA neurons. Change in calcium concentration is normalized as % change of ratio (340/380 nm).
- (c) No significant difference in KCI-evoked calcium response was observed between *trp-4* mutant and wild-type DVA neurons (n=5). Error bars represent SEM.