

Supplemental Material

Disassembly of Subplasmalemmal Actin Filaments Induces Cytosolic Ca²⁺ Increases in *Astropecten aranciacus* Eggs

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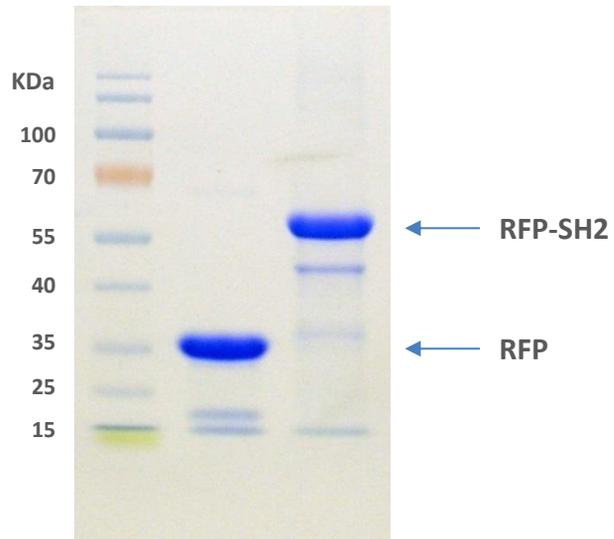
Supplemental Video 1. The first wave of instantaneous Ca^{2+} increases in the *A. aranciacus* eggs exposed to 6 μM LAT-A. The time labeling refers to min:sec after the drug addition to the media.

Supplemental Video 2. Multiplicity of the LAT-A-induced Ca^{2+} waves in the *A. aranciacus* eggs exposed to 6 μM LAT-A. The time labeling refers to min:sec after the drug addition to the media.

Supplemental Video 3. The Ca^{2+} wave gone astray in the *A. aranciacus* eggs microinjected with phalloidin prior to the LAT-A incubation. Instead of displaying a planar Ca^{2+} wave sweeping to the antipode, the wave front in these eggs often exhibited a circulating pattern of propagation along the plasma membrane.

Supplemental Data 1. Purity of the bacterially expressed proteins RFP-SH2 (circa 56 kDa) and RFP (circa 29 kDa). The recombinant proteins tagged with 6xHis were expressed in BL21 strain of *E. coli* and purified with nickel affinity chromatography and the subsequent dialysis in the microinjection buffer (10 mM HEPES, 450 mM KCl, pH 7.4). **(A)** 30 μg of purified proteins were resolved in 10% SDS PAGE gel and stained with Coomassie Brilliant Blue R-250. **(B)** The same recombinant proteins were microinjected into *A. aranciacus* eggs (10 $\mu\text{g}/\mu\text{l}$ in pipette) and visualized by confocal microscopy.

A



B

