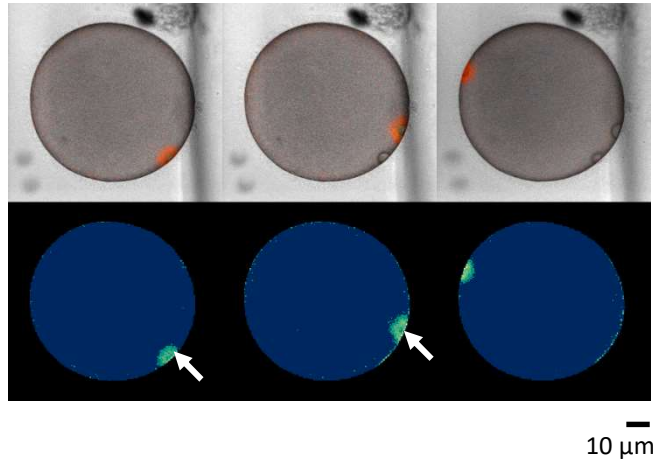


Supplementary data S1. Instantaneous Ca^{2+} spots in the cortical region of live starfish and sea urchin eggs induced by the GPN. Transmission light and pseudocolor images taken with the CCD camera showing the *A. aranciacus* and *P. lividus* eggs 10-20 minutes after the exposure to GPN. **(A)** Ca^{2+} bursts in starfish eggs after their incubation in the presence of 500 μM GPN. **(B)** Sea urchin egg with visible Ca^{2+} puffs during the exposure to 200 μM GPN. Arrows indicate the spots of the instantaneous Ca^{2+} release in the eggs.

Supplementary data S2. Effect of the GPN treatment on the FE in fertilized sea urchin eggs. *P. lividus* eggs were observed with SEM 10 minutes after fertilization. Upper panel shows the flat surface of the elevated FE in the DMSO-pretreated control egg. Lower panel shows multiple cracks (arrow) on the FE caused by the GPN pretreatment (200 μM , 40 min).

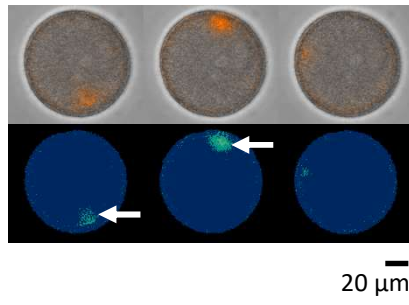
A

GPN 500 μ M



B

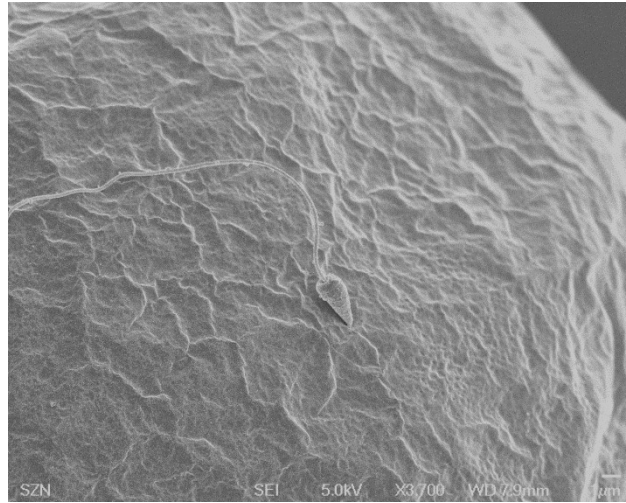
GPN 200 μ M



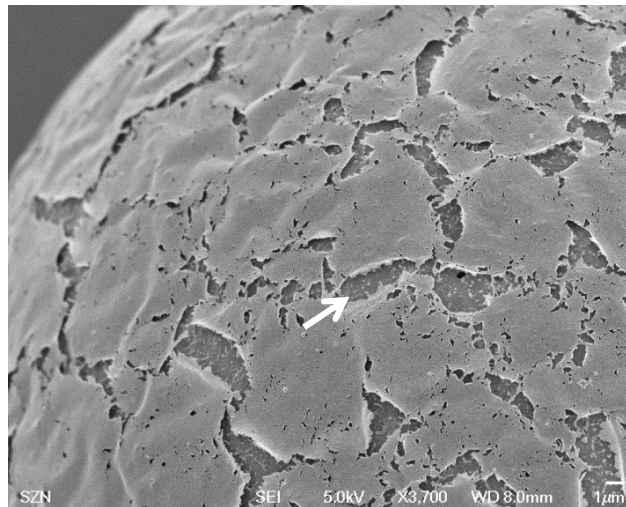
Supplementary data S1.

Inseminated

DMSO



GPN 200 µM



1 µm