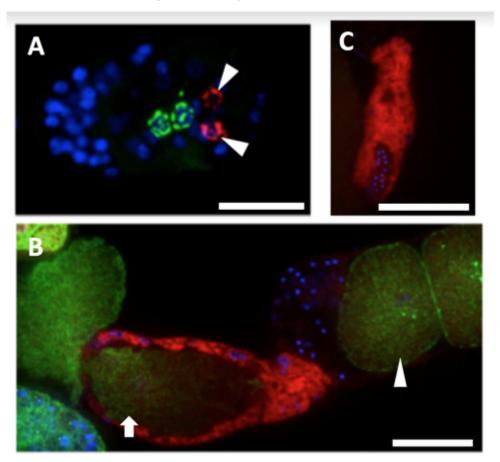


swt-3 transcripts are expressed in Z1/Z4 during embryogenesis and in the adult spermatheca

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Description

Stellaris smFISH probes targeting <u>swt-3</u>, an ortholog of the human solute carrier transporter *SLC50A1*, are shown in red (Cal Fluor 610), DAPI in blue, and PGL-1::GFP, a marker for P granules, in green. A) <u>swt-3</u> transcripts are expressed in Z1/Z4 cells during embryogenesis (arrowheads). The embryo shows Z1 and Z4 migrating to Z2/Z3 P granule cells (marked with PGL-1::GFP in green). B) A dissected proximal gonad of a young adult capturing the ovulation of a recently fertilized zygote (arrow) as it passes through the <u>swt-3</u> expressing spermatheca (red). Proximal oocyte marked with arrowhead. C) Sperm nuclei (blue) within the <u>swt-3</u> (red) spermatheca. scale = 20μ The experiment confirms and extends <u>swt-3</u> enrichment in cell-specific Z1/Z4 mRNA profiling experiment reported by Kroetz & Zarkower 2015.

Reagents

The Stellaris <u>acdh-1</u> smFISH probe contains 44 oligos labeled with Cal Fluor 610 (sequences available upon request). Staining was performed as described by Ji and van Oudenaarden (2012). In short, PGL-1::GFP embryos and worms were fixed with formaldehyde and ethanol. Hybridization was done in the dark at 37°C for four hours. Cal Fluor 610 coupled probes were designed with the Stellaris Probe Designer from Biosearch Technologies.

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