



Figure 4 - figure supplement 1. KATANIN localization pattern in ovule primordium.

(A) Localization of GFP:KTN1 (complementing *ktn1-2* null mutant background), in the L1 outer wall of ovule primordium, detected by Airyscan super-resolution microscopy. KATANIN protein is detected as small foci frequently aligned with cellulose fibers. Insets are close up of the sectors outlined with white square on the image. GFP channel is displayed in green (two first ovules from the left), or in green and as heatmap (FIRE scale) of fluorescence intensity (third ovule at right). Cell wall cellulose fibers were stained with Renaissance SR2200 (grayscale signal). Scale bars: 10µm.

(B) Localization of GFP:KTN1 in median longitudinal section passing through the SMC (left) or adjacent section passing through the frontal SMC wall (SMC wall plane, right). SMC wall was located thanks to the cellulose dye Renaissance SR2200 (grayscale signal). Ovule primordia at stages 0 (top), 1 (middle) or 2 (bottom) were observed. KATANIN protein is detected more frequently in the L1 layer as indicated by relative fluorescence intensity heatmap visualization (FIRE scale). However, KATANIN signal is present also in internal layers, and notably in the SMC (white arrows) and its neighbors' cells (yellow arrows). n: number of ovules observed (from 9 independent plants). Scale bars: 10µm.