



Supplementing Figure S2. Effects of CME gene mutations on KNOLLE localization and effects of sterol biosynthesis interference on CME component localization.

(a-f) anti-KNOLLE immunolocalization (red) in cytokinetic root cells of wild-type (A) Col-0, (b) *drp2a-1*, (c) *drp2b-2*, (d) *chc1-2*, (e) *chc2-1* and (f) *chc2-2*. DAPI-stained DNA, blue).

(g-l) Live-imaging of five-day-old seedlings expressing DRP1A-tagRFP; DRP2B-GFP in (g-i) wild-type Col-0 and (j-l) *cpi1-1* (in Col-0) background. (g, j) DRP2B-GFP (green), (h, k) DRP1A-tagRFP (red). (i, l) Merge of the two images to the left, respectively

(m-r) anti-KNOLLE immunofluorescence detection (red) in cytokinetic cells from seedlings expressing CLC-GFP in wild type WS and (p-r) *cpi1-1* (in Col-0) background. (m, p) CLC-GFP (green); (n, q) anti-KNOLLE (red). (o, r) Merge of the two images to the left, respectively.

(s-u) Live-imaging analysis of cytokinetic root cells from five-day-old seedlings expressing DRP1A-GFP, grown on medium containing (s) 0.1% DMSO (DMSO), (t) 50 µg/ml fen (fen), or (u) 1 µM lov.

(u) White arrowheads indicate the cell division plane in a lov-treated cell displaying low DRP1A-GFP levels at the cell plate. (v) Quantification of DRP1A-GFP fluorescence intensity at the cell plate from multiple cells in roots treated with DMSO, fen or lov in experiments such as (s-u). Displayed are frequency distributions of cells per class average pixel intensity at the cell plate calculated as described in the Methods. Distributions were analysed for significance of differences by non-parametric, two-tailed Mann-Whitney test with a significance threshold level at $p < 0.05$.

p-values obtained from two-tailed Mann-Whitney test based on analysis of the number of cells (n) were $p = 0.151982$ for DMSO (n = 98 cells, from 23 roots) versus fen (n = 100 cells, from 53 roots) and $p < 2e-06$ for DMSO (n = 52 cells, from 21 roots) versus lov (n = 58 cells, from 23 roots).

Scale bars, 5 µm.