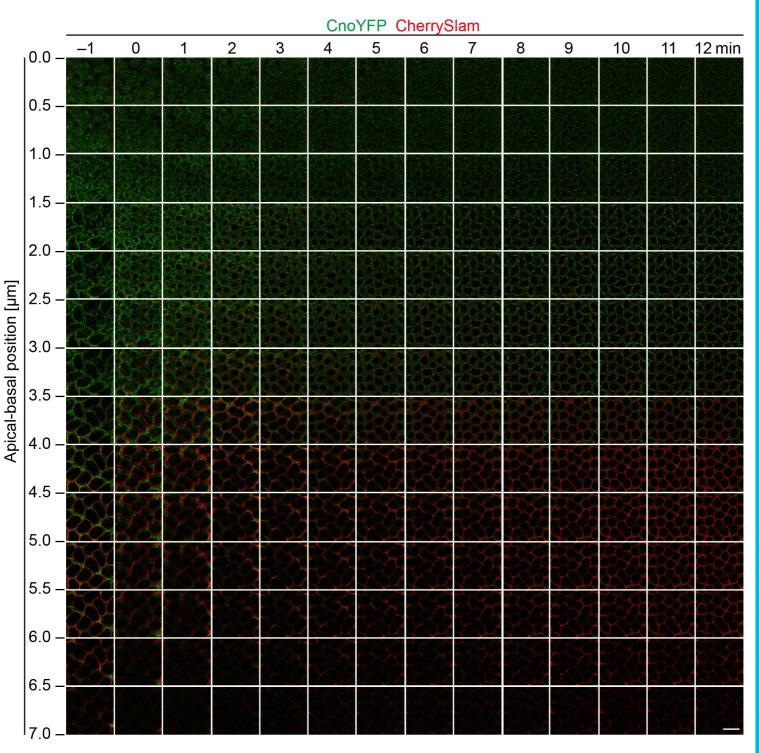
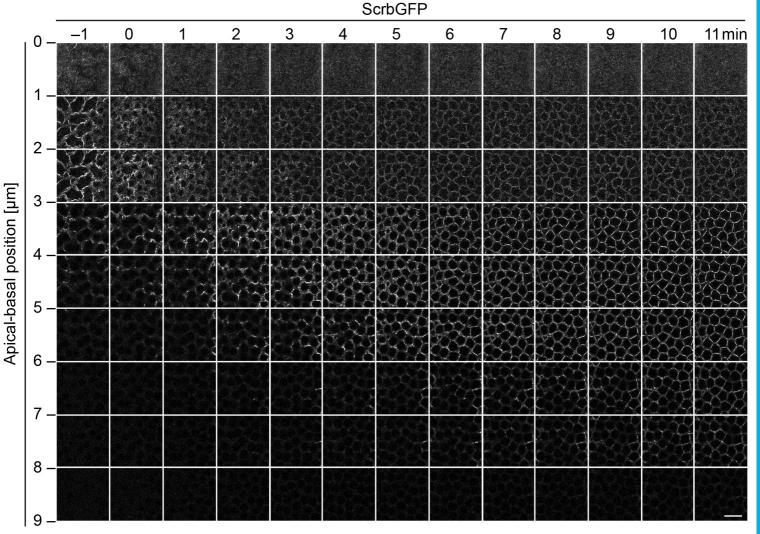
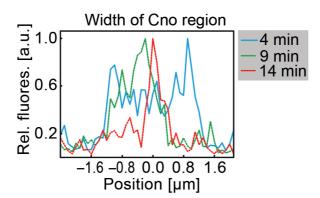
## Supplemental data



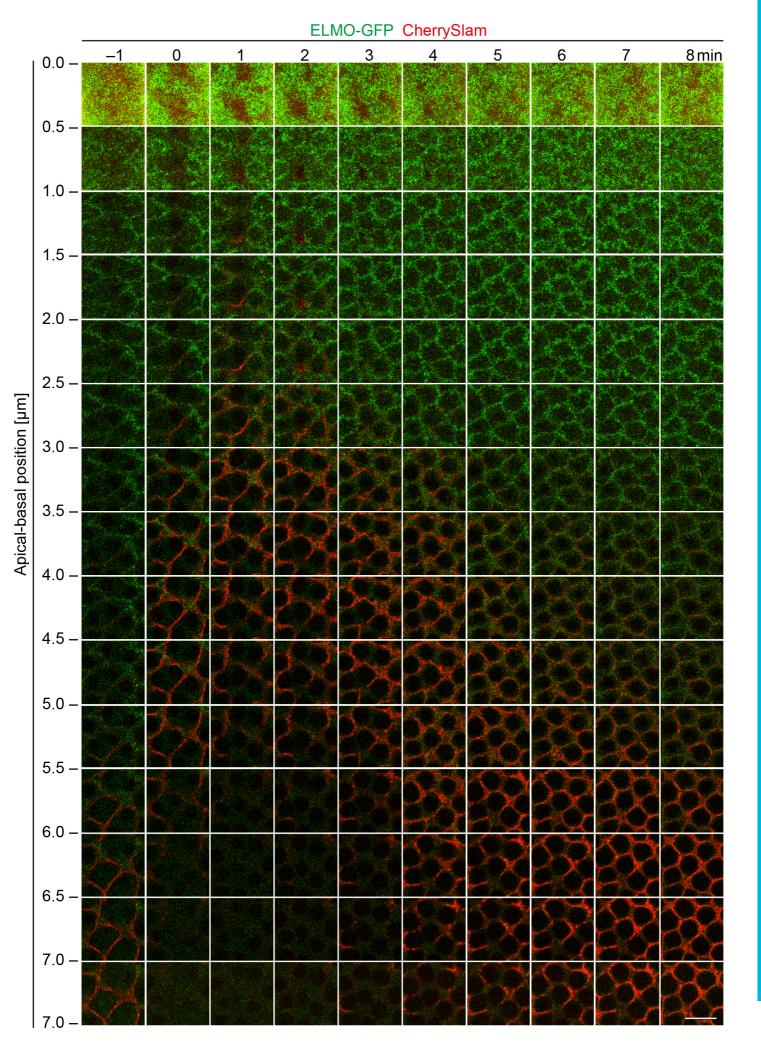
**Supplemental Fig. S1.** CanoeYFP and CherrySlam dynamics during mitosis 13 and interphase 14. Images from time lapse recording of an embryo expressing CanoeYFP (green) and CherrySlam (red). Time from left to right, apical basal position from up to down. Time point t=0 was defined by the emergence of a new furrow between two corresponding daughter nuclei. The spatial difference between the two color channels at t=0 and 1 min is due to a time lag in imaging as the channels were recorded one after the other. Scale bar 10  $\mu$ m.



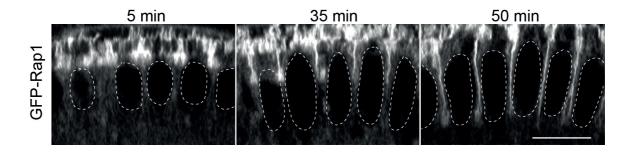
**Supplemental Fig. S2.** ScribbledGFP dynamics during mitosis 13 and interphase 14. Images from a time lapse recording of an embryo expressing ScribbledGFP. Time from left to right, apical basal position from up to down. Time point t=0 was defined by the emergence of a new furrow between two corresponding daughter nuclei. Scale bar 10  $\mu$ m.



**Supplemental Fig. S3.** Canoe fluorescent signal narrows as the new furrow elongates. Distribution of CanoeYFP signal (relative fluorescence) across a new emerging furrow (Fig. S1) at three different time points as indicated.



**Supplemental Fig. S4.** ELMO-GFP and CherrySlam dynamics during mitosis 13 and interphase 14. Images of a time lapse recording of an embryo expressing Elmo-GFP (green) and CherrySlam (red). Time from left to right, apical basal position from up to down. Time point t=0 was defined by the emergence of a new furrow between two corresponding daughter nuclei. Scale bar 10  $\mu$ m.



**Supplemental Fig. S5**. GFP-Rap1 localization during early and mid-cellularization. Images from living embryos expressing GFP-Rap1 at indicated time after onset of cellularization. Reconstructed orthogonal views from axial stacks of embryos expressing GFP-Rap1. Note that GFP-Rap1 localizes to the entire membrane without a clear enrichment at subapical, lateral or basal domain. Scale bar 10  $\mu$ m.