

Fig. S1. Aster assembly assay in *Xenopus* **egg cytoplasm. (A)** Experimental workflow. Undiluted cytoplasm with intact actin was prepared from *Xenopus* eggs (3). Extract was supplemented with fluorescent probes and then released from meiotic arrest into interphase by calcium addition, which mimics fertilization. Beads coated with Aurora A kinase (AurkA) antibody that mimic centrosomes (4) were added, a thin extract layer was spread between PEG- passivated coverslips and immediately imaged. **(B)** Widefield time-lapse showing recruitment of AurkB (CPC subunit) and Kif23 (Centralspindlin subunit) to an aster-aster interaction zone (AAIZ); image sequence related to Fig. 1, B and C. **(C)** Kymographs along the bead-bead axis (yellow lines in (B)) showing aster growth and interaction (MTs, left) and recruitment of Kif23 where asters interact (right, from 18 min). Similar profiles were obtained for AurkB recruitment. **(D)** Spinning disc confocal image of AAIZs at 30min with the embryonic paralog of PRC1 localized (GFP-PRC1E).