

E07-11-1204 Wiese

Supplemental Figure S1: Extent of maskin depletion from *Xenopus* egg extracts. Western blot to quantify the extent of maskin depletion in our experiments. Decreasing amounts of control mock depleted extract (used to generate a standard curve) and three representative maskin depleted extracts were probed with an antibody directed against maskin (upper panel) and α -tubulin (loading control; lower panel). The approximate extent of maskin depletion is indicated above the blot for each extract.

Supplemental Videos

Videos 1, 2: microtubules nucleated from sperm chromatin in mock depleted (Video 1; stills are shown in Fig. 1a, top panel) or maskin depleted (Video 2; stills are shown in Fig. 1a, bottom panel) *Xenopus* egg extract. Recording was initiated within the first 2 min of warming the reaction mixture to initiate microtubule assembly. Images were recorded every 2 seconds for approximately 5 min. The videos are played back at 10 frames per sec.

Videos 3, 4: microtubules nucleated from sperm chromatin in mock depleted (Video 3; stills are shown in Fig. 1b, top panel) or maskin depleted (Video 4; stills are shown in Fig. 1b, bottom panel) *Xenopus* egg extract. Recording was initiated at least 3 min after warming the reaction mixture to initiate microtubule assembly. Images were recorded every 2 seconds for approximately 5 min. The videos are played back at 10 frames per sec.

Videos 5, 6 microtubules nucleated from a centrosome in mock-depleted (Video 5; stills are shown in Fig. 2c, top panel) or maskin-depleted (Video 6; stills are shown in Fig. 2c, bottom panel) *Xenopus* egg

extract. The left-hand panels show the images as recorded by the camera. In the right-hand panels, microtubule were redrawn using MetaMorph software. Images were recorded every 2 second for approximately 5 min. The videos are played back at 10 frames per sec.

Albee and Wiese Figure S1

