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736 **Supplementary Figure S1: CrFor1 bundles F-actin.**

737 **(A)** Low speed (10,000 x g) sedimentation of F-actin preassembled from 5 μM Mg-ATP
 738 actin with a range of concentrations of CrFor1 (\circ) or fission yeast formin SpFus1 (\bullet).

739 Plot of the dependence of F-actin in the pellets on the concentration of CrFor1 or
 740 SpFus1. (B) Fluorescence micrographs of F-actin preassembled alone or in the
 741 presence of CrFor1 or SpFus1 for 20 min and stained with rhodamine-phalloidin. Scale
 742 bar, 5 μm .

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744 **Supplemental Movie Figure Legends:**

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746 **Movie 1: CrPRF facilitates formin- over Arp2/3 complex-mediated actin assembly,**

747 **related to Figure 6.** TIRF microscopy bead assays. Beads coated with fission yeast

748 Wsp1 (left panel) or CrFor1 (right panel) were incubated with a series of components

749 (listed in top left of each movie). (Left panel) Wsp1 bead is incubated with 1.5 μ M actin

750 (10% Alexa-488 labeled) and 30 nM Arp2/3 complex (Actin, Arp2/3) followed by flowing

751 in a mixture of the same concentrations of actin, Arp2/3 complex, and 2.5 μ M CrPRF

752 (+CrPRF). (Right panel) CrFor1 bead is incubated with 1.5 μ M actin (10% Alexa-488

753 labeled) (Actin), followed by flowing in a mixture of actin and 2.5 μ M CrPRF (+CrPRF).

754 The bright flash in each movie indicates photobleaching, which helps observe new actin

755 assembly. Scale bar, 5 μ m. Time in sec.

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