

Supplemental Materials

Molecular Biology of the Cell

Khan et al.

Supplementary Material

Table S1: A list of all the fungal strains, plasmids and oligonucleotides that were used in the study.

Fungal Strains

Name	Description	Source
AG127	AgSHS1-GFP: NAT	Helfer and Gladfelter 2006
AG372.1	Agshs1 S35V-GFP:GEN hetero	This study
AG384.1	AgCdc11A-GFP:GEN homo	Bridges et al., 2016
AG416	Leu2ΔThr4Δ	Dundon et al., 2016
AGY075	ScCDC11-GFP::His/ScSHS1-mCherry::Gen	H. Ewers*

*Freie Universität, Berlin, Germany

Plasmids

Name	Description	Selection Marker	Source
AGB088	pRS416 AgShs1-GFP:GEN	amp	Helfer and Gladfelter 2006
AGB211	pRS416 Agshs1 S35V-GFP: GEN	amp	This study
AGB401	pMVB128 HIS-ScCDC12/ ScCDC10	amp	J. Thorner**
AGB454	pMVB133 ScCDC3/ScCDC11-GFP	cam	Bridges et al., 2014
AGB501	pMVB133 ScCDC3/ ScCDC11-SNAP	cam	Bridges et al., 2016
AGB548	pMVB133 ScCDC3/ ScSHS1-GFP	cam	This study
AGB560	pCOLA-ScSHS1-GFP	kan	This study
AGB561	pMVB128 HIS-Sccd12 T75A-GFP/ ScCDC10	amp	This study
AGB562	pMVB133 ScCDC3/ Sccd11 D65T-GFP	cam	This study
AGB598	pRS416 ScShs1-linker-yeGFP	kan	This study
AGB710	pMVB128 TEV-HIS ScCDC12/ ScCDC10	amp	Bridges et al., 2016
AGB839	pET-His6-GFP-TEV-LIC cloning vector	kan	Addgene
AGB895	pCOLA-ScSHS1-GFP	kan	This study

** University of California, Berkeley, CA

Oligonucleotides

Number	Sequence
AGO412	5'-CGTCGCTGTAATCGTGATCC-3'
AGO537	5'-CTGGTCCGCCCGTCCGAACTGGAAAG-3'
AGO538	5'-CTTTCCAGTTCCGACGGGGCCGACCAG-3'
AGO541	5'-TGACCGCCGTCCAATATTCG-3'
AGO592	5'-GGCCTGGGAACGTCTTTATG-3'

AGO593 5'-GTGTCTCCTCTGCGAGTACC-3'
 AGO1192 5'-GCCTGATTCTGGACTTGAAC-3'
 AGO1271 5'-GCGGGCGCAGGTGCCGGTGCAAGTAAAG-3'
 AGO1272 5'-CTAATATACTAAGATGGGGAATTG-3'
 AGO1273 5'-CATCTTAGTATATTAGTTAAGTATAAGAAGGAGA
 TATACATATGAGCACTGCTTCAACACCGCC-3'
 AGO1274 5'-GGCACCTGCGCCCGCGCCATCTCTACCCGATGCAATAGAGGCTAAATC-3'
 AGO1320 5'-TGCTTCAACACCGCCAATTAAC-3'
 AGO1340 5'-GAACCCATCAGAAAGGCTGTAGAAATCGATATCACAAGAG-3'
 AGO1341 5'-CTCTTGTGATATCGATTTCTACAGCCTTTCTGATGGGTTC-3'
 AGO1342 5'-CATACCCACGCCGAAACAAG-3'
 AGO1347 5'-CCACAGATACGTGACAGAAATAACCTTACAATTGAG-3'
 AGO1348 5'-CTCAATTGTAAGGTTATTTCTGTGCGACGTATCTGTGG-3'
 AGO1349 5'-CCGTCCCTACAAAGAAGAAG-3'
 AGO1350 5'-TGCTGATCACAGGGATGATG-3'
 AGO1496 5'-CCTCAAGACCCGTTTAGAGG-3'
 AGO1805 5'-TGCTTAAGTCGAACAGAAAG-3'
 AGO1806 5'-ATCTCTACCCGATGCAATAG-3'
 AGO1807 5'-CTATTGCATCGGGTAGAGATATCGGTGACGGTGCTGGT-3'
 AGO1808 5'-CTTTCTGTTCGACTTAAGCATGCCGGTAGAGGTGTGGTC-3'

Supplementary Movie- Video 1- Filaments formed on a SLB by addition of 5 nM total protein containing Cdc11 only complexes, corresponding to Figure 2. Time lapse was acquired via TIRF microscopy with a 100 ms exposure and a 250 ms interval.

Supplementary Movie- Video 2- Filaments formed on a SLB by mixing Cdc11 and Shs1 complexes in a 1:1 ratio to a final protein concentration of 5 nM, corresponding to Figure 2. Video was acquired with a 100 ms exposure and 250 ms time interval.

Supplementary Movie- Video 3- Filaments formed in absence or presence of nucleotide using 5 nM protein and 5 μ M nucleotide, corresponding to Figure 3.