

Supplemental Materials

Molecular Biology of the Cell

Botchkarev et al.

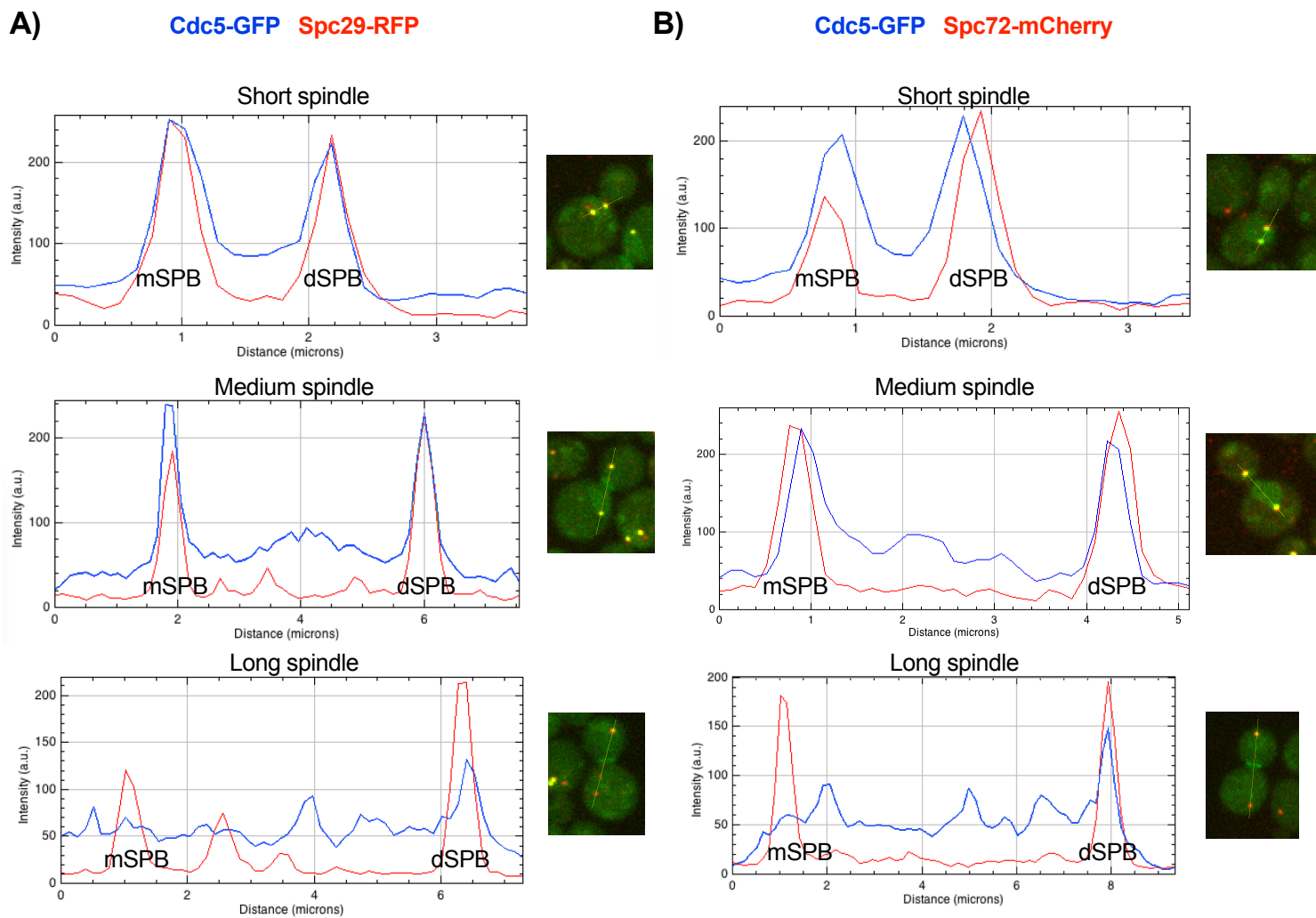


Figure S1. Cdc5 co-localizes at SPBs with Spc29 in early mitosis but with Spc72 only in cells with long mitotic spindles. Localization of red and green fluorescence intensity peaks determined by a line scan drawn across both SPBs in cells expressing either A) Cdc5-GFP and Spc29-RFP or B) Cdc5-GFP and Spc72-mCherry.

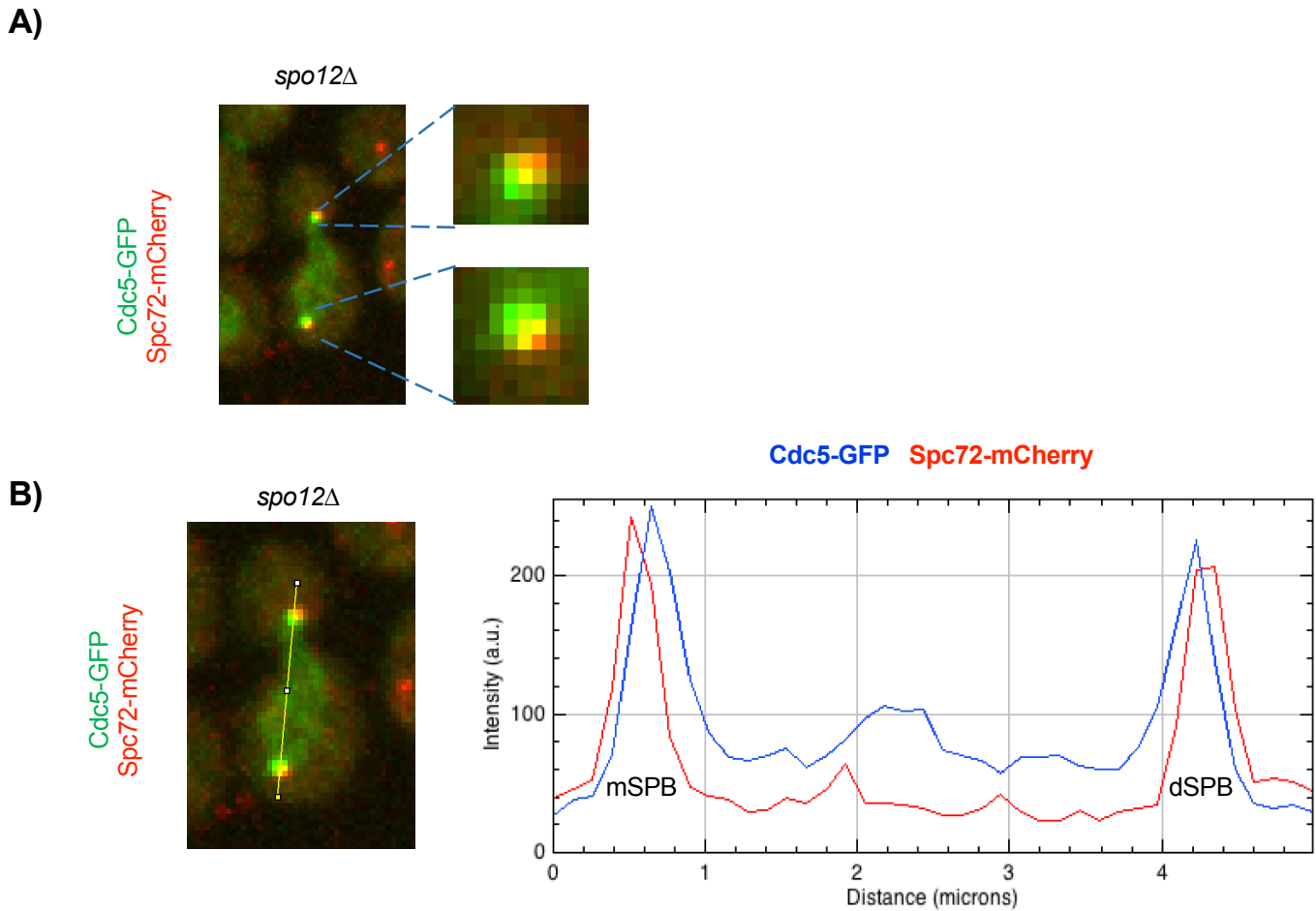


Figure S2. Cdc5-GFP SPB puncta face the nucleus relative to Spc72-mCherry puncta in anaphase cells of FEAR mutant *spo12Δ*. A) Representative image showing Cdc5-GFP and Spc72-mCherry localization in a *spo12Δ* anaphase cell. B) Quantification of fluorescent intensity peaks of Spc72-mCherry and Cdc5-GFP at the mother and daughter SPBs in *spo12Δ* in anaphase as determined by a line scan drawn across both SPBs. Cdc5-GFP SPB fluorescence intensity peaks were closer to each other than Spc72-mCherry SPB fluorescence intensity peaks.

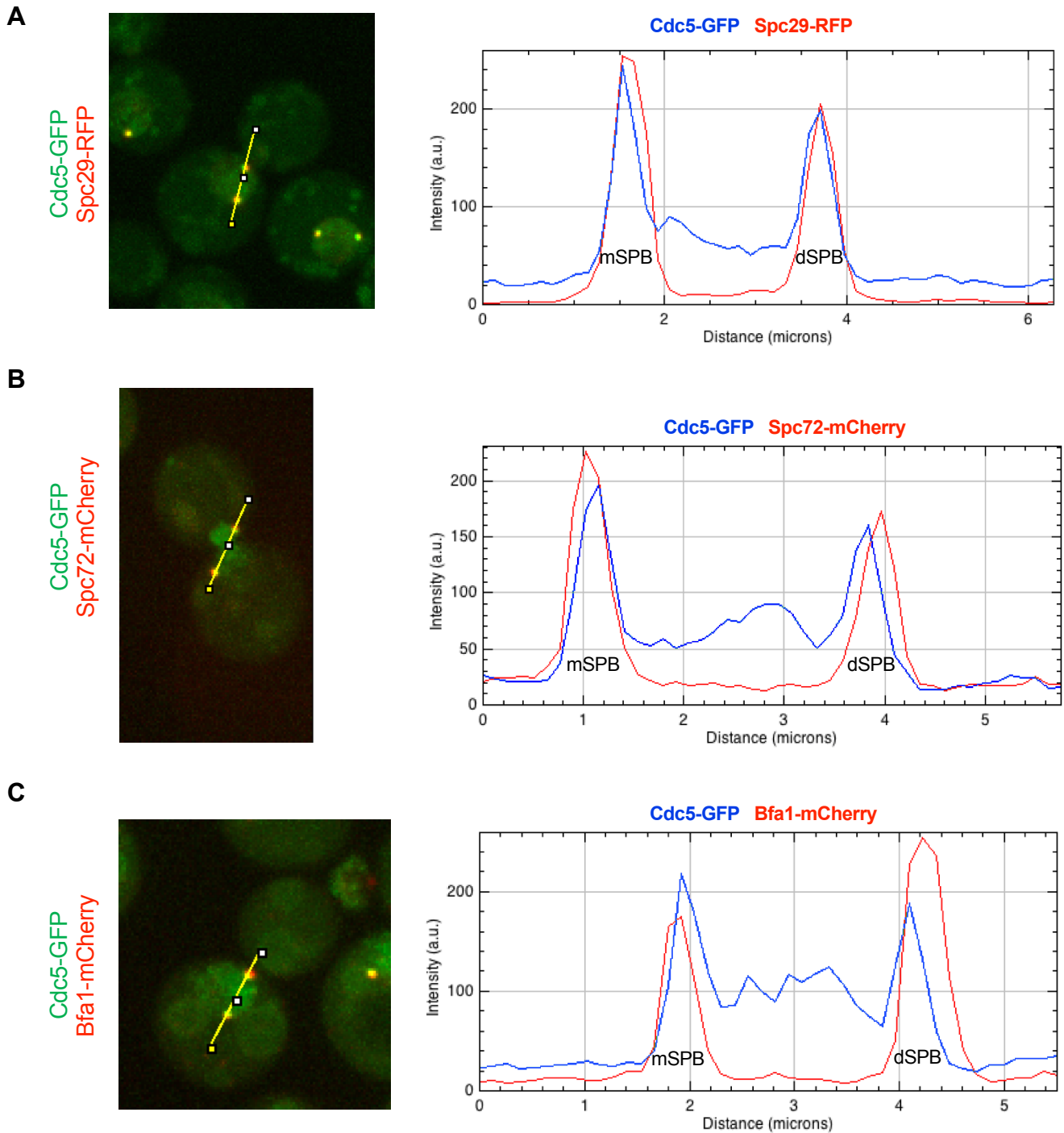


Figure S3. Cdc5-GFP SPB puncta co-localize with Spc29-RFP during a DNA damage-induced G2/M arrest. A) Quantification of fluorescent intensity peaks of Spc29-RFP and Cdc5-GFP at the mother and daughter SPBs in JKM179 cells 6h after HO endonuclease induction as determined by a line scan drawn across both SPBs. B and C) Cdc5-GFP SPB peaks are closer to each other than Spc72-mCherry and Bfa1-mCherry SPB peaks in JKM179 6 h after HO endonuclease induction as determined by a line scan drawn across both SPBs.

Supplementary Table 1: List of strains used in this study

Strain Name	Genotype	Mating Type	Genetic Background
VB467	<i>cdc5::CDC5-GFP::HIS3</i>	a	BY4741
SY1532	<i>cdc5::CDC5-GFP::HIS3 bfa1Δ::KAN</i>	a	BY4741
YY138	<i>bfa1::BFA1-GFP::HIS3</i>	a	BY4741
SY1382	<i>cdc5::CDC5-GFP::HIS3 cdc14-1</i>	a	BY4741
VB839	<i>cdc5::CDC5-GFP::HIS3 bfa1::KAN cdc14-1</i>	alpha	BY4741
SY1202	<i>cdc5::CDC5-GFP::HIS3 cdh1Δ::KAN</i>	a	BY4741
VB844	<i>cdc5::CDC5-GFP::HIS3 cdh1Δ::KAN bfa1Δ::KAN</i>	alpha	BY4741
VB378	<i>cdc5::CDC5-GFP::HIS3 cdh1Δ::KAN cdc14::GAL1-CDC14::URA</i>	alpha	BY4741
VB847	<i>cdc5::CDC5-GFP::HIS3 bfa1Δ::KAN cdh1Δ::KAN cdc14::GAL1-CDC14::URA</i>	alpha	BY4741
VB1005	<i>bfa1::BFA1-GFP::HIS3 slk19Δ::KAN</i>	a	BY4741
SY1387	<i>cdc5::CDC5-GFP::HIS3 slk19Δ::KAN</i>	a	BY4741
SY1579	<i>cdc5::CDC5-GFP::HIS3 spo12Δ::KAN</i>	a	BY4741
VB1612	<i>cdc5::CDC5-GFP::HIS3 slk19Δ::KAN bfa1Δ::KAN</i>	a	BY4741
VB1611	<i>bfa1::BFA1-GFP::HIS3 cdc14::GAL1- CDC14::URA</i>	a	BY4741
EPY18	<i>cdc5::CDC5-GFP::HIS3 nuf2::NUF2- mCherry::KAN</i>	a	BY4741
VB888	<i>cdc5::CDC5-GFP::HIS3 spc42::SPC42- RFP::KAN</i>	alpha	BY4741
VB2004	<i>cdc5::CDC5-GFP::HIS3 spc72::SPC72- mCherry::NAT spo12Δ::KAN</i>	a	BY4741
VB374	<i>cdc5::CDC5-GFP::HIS3 cdc14::GAL1- CDC14::URA</i>	alpha	BY4741
VB806	<i>DELho DELhml::ADE1 DELhmr::ADE1 ade1-110 leu2, 3-112 lys5 trp1::hisG ura3- 52 ade3::GAL10:HO cdc5::CDC5- GFP::TRP1</i>	alpha	JKM179
VB1708	<i>DELho DELhml::ADE1 DELhmr::ADE1 ade1-110 leu2, 3-112 lys5 trp1::hisG ura3- 52 ade3::GAL10:HO cdc5::CDC5- GFP::TRP1 bfa1::BFA1-mCherry-kanMX6</i>	alpha	JKM179
VB1710	<i>DELho DELhml::ADE1 DELhmr::ADE1 ade1-110 leu2, 3-112 lys5 trp1::hisG ura3- 52 ade3::GAL10:HO cdc5::CDC5- GFP::TRP1 bfa1Δ::HPH</i>	alpha	JKM179
VB2000	<i>DELho DELhml::ADE1 DELhmr::ADE1 ade1-110 leu2, 3-112 lys5 trp1::hisG ura3-</i>	a	JKM179

	<i>52 ade3::GAL10:HO cdc5::CDC5-GFP::TRP1 spc29::SPC29-RFP::HPH</i>		
VB2002	<i>DELho DELhml::ADE1 DELhmr::ADE1 ade1-110 leu2, 3-112 lys5 trp1::hisG ura3-52 ade3::GAL10:HO cdc5::CDC5-GFP::TRP1 spc72::SPC72-mCherry::NAT</i>	alpha	JKM179

Supplementary Table 2: List of plasmids used in this study

Plasmid name	Vector	Insert	Source
pJH2459 via p100	YIPlac211	<i>GAL1-CDC14</i>	Angelika Amon