Nayak et al., http://www.jcb.org/cgi/content/full/jcb.201002105/DC1

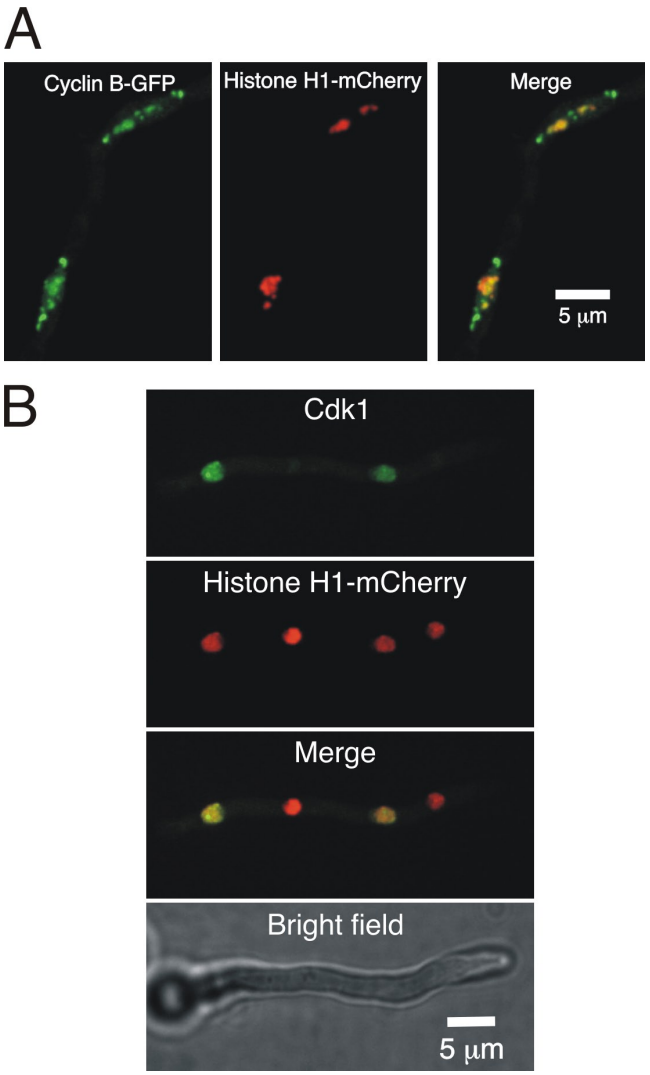

Figure S1. **Abnormal distribution of cyclin B and Cdk1 in a strain carrying *mip*AD159.** (A) Abnormal patchy distribution of cyclin B in two mitotic nuclei in a strain carrying *mip*AD159. Images are projections of z-series stacks captured with a spinning-disk confocal microscope. (B) A subset of nuclei fail to accumulate Cdk1. All images are projections of z-series stacks captured with a spinning-disk confocal microscope except for the brightfield image, which is a single-focal plane image of the same field. All four nuclei are in the same cell. Two have accumulated Cdk1 and two have not.

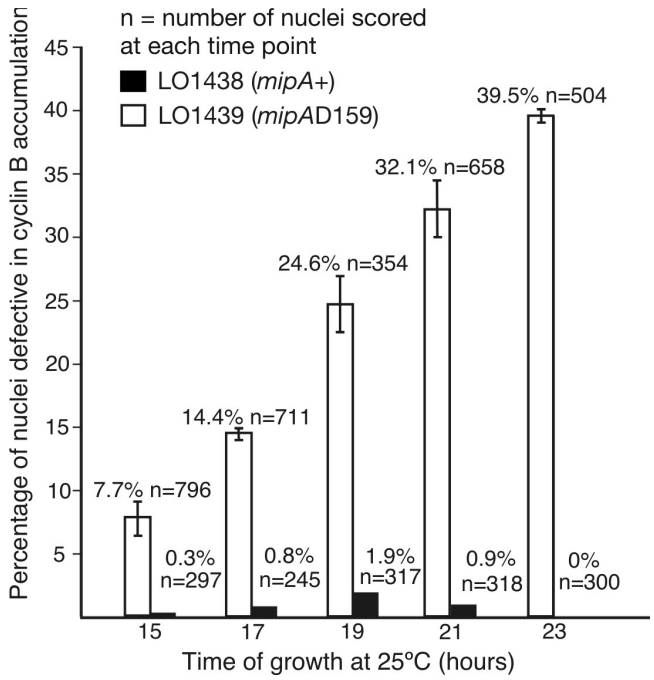

Figure S2. **Accumulation of CB− nuclei over time.** Spores carrying cyclin B–GFP, histone H1–mRFP, and *mipA*D159 or the wild-type *mipA* allele (*mipA*$^{+}$) were incubated at 25°C, a restrictive temperature for *mipA*D159. At 25°C, the first nuclear division occurs 10–11 h after the start of incubation. CB− nuclei were rare in the control, but there was a steady increase in CB− nuclei in the strain carrying *mipA*D159, the mutant γ-tubulin allele. Error bars indicate mean ± SD.

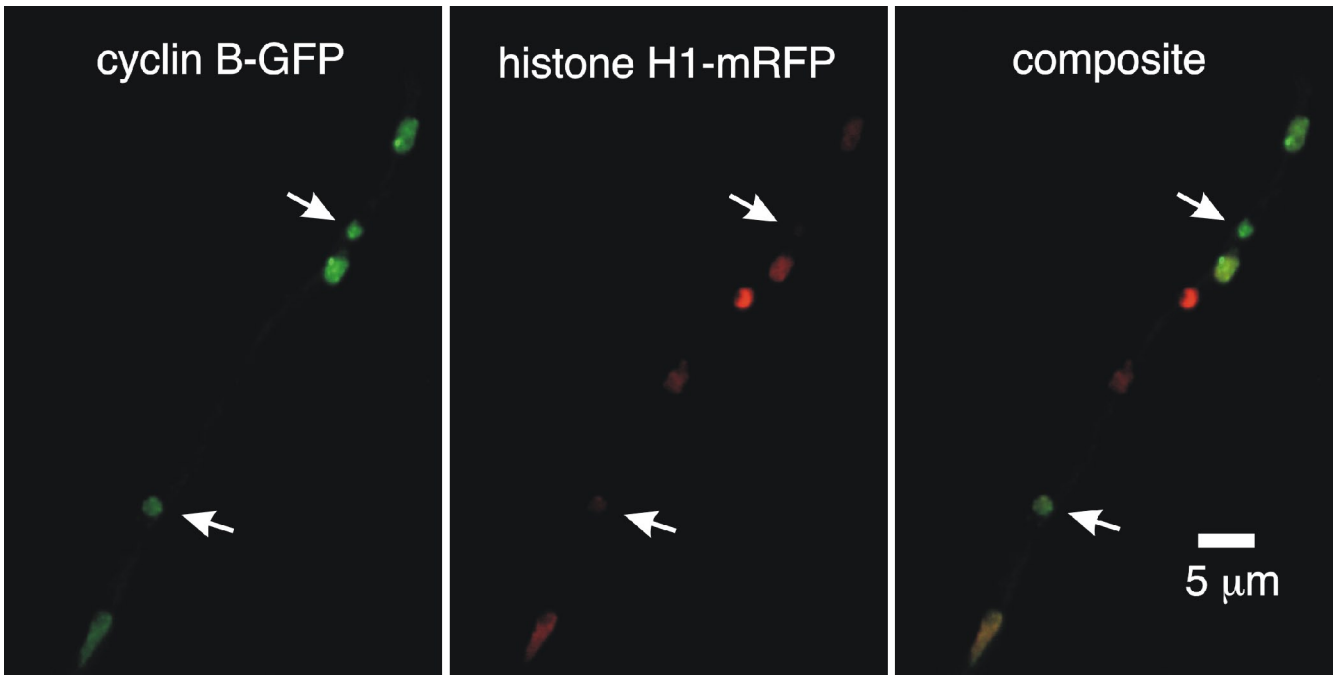

Figure S3. **Aneuploid CB+ nuclei.** Strain LO1439 (*mipA*D159, cyclin B–GFP, and histone H1–mRFP) was grown at a restrictive temperature of 25°C for 19.5 h. All three images are of the same field. Arrows designate two nuclei that contain very little chromatin and, thus, are highly aneuploid but contain cyclin B. CB− nuclei with more normal amounts of chromatin are present in the same cell.

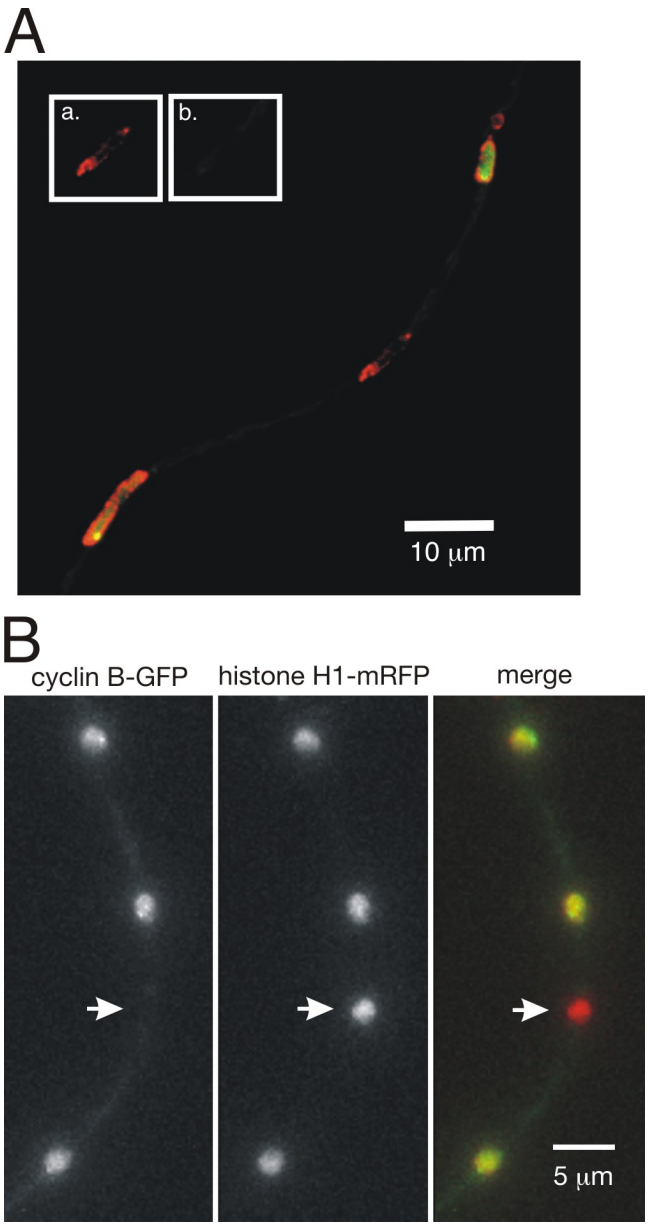

Figure S4. **CB− nuclei are not caused by defects in nuclear pore localization or protein export.** (A) A nuclear pore protein localizes to the nuclear envelope of CB− nuclei. A projection is shown of a z-series stack of a strain carrying *mip*AD159, cyclin B–GFP, and Nup49-mCherry grown at a restrictive temperature of 25°C. The central nucleus is CB−. (Insets) The mCherry channel alone (a) and the GFP channel alone (b) are shown. (B) CB− nuclei do not constitutively export cyclin B. The images shown are from a z-series projection from a time-lapse dataset. The strain (LO2994) carries *crm*AT525C, which makes nuclear export sensitive to leptomycin B. The hypha has been incubated for 15 h in 100 ng/ml leptomycin B. The presence of a CB− nucleus (arrows) indicates that CB− nuclei occur even when nuclear export is inhibited.

Table S1. **Strains used in this study**

Strain number	Genotype
LO699	*pyrG*89; *pabaA*1; *mipA*D159; *fwA*1
LO1438	*pyrG*89; *nimE*-GFP-*AfpyrG*; *hhoA*-mRFP-*AfpyrG*; *pyroA*4; *nkuA::argB*; *riboB*2; *yA*2
LO1439	*pyrG*89; *nimE*-GFP-*AfpyrG*; *hhoA*-mRFP-*AfpyrG*; *pyroA*4; *nkuA::argB*; *mipA*D159
LO1516	*pyrG*89; *pyroA*4; *nkuA::argB*; *hhoA*-mRFP-*AfriboB*; *riboB*2
LO1517	*wA*3; *pyrG*89; An*cdc14*-GFP-*AfpyrG*; *hhoA*-mRFP-*AfpyrG; pyroA*4; *nkuA::argB*
LO1532	*pyrG*89; An*cdc14*-GFP-*AfpyrG*; *hhoA*-mRFP-*AfpyrG*; *nkuA*Δ?; *mipA*D159
LO1668	*pyrG*89; *nimE*-GFP-*AfpyrG*; *nup49*-mCherry-*AfpyrG*; *pyroA*4; *nkuA*Δ?; *nirA*14?; *mipA*D159
LO1847	*pyrG*89; *wA::alcA*(p)-db*Δ*-*nimE*-GFP-*AfpyrG*; *pyroA*4; *nkuA::argB*; *hhoA*-mRFP-*AfriboB*; *riboB*2
LO1849	*pyrG*89; *wA::alcA*(p)-db*Δ*-*nimE*-GFP-*AfpyrG*; *nkuA*Δ?; *hhoA*-mRFP-*AfriboB*; *mipA*D159
LO1851	*pyrG*89; *nimE*-GFP-*AfpyrG*; *pyroA*4; *nkuA::argB; nimX*-mCherry-*AfriboB*; *riboB*2
LO1910	*pyrG*89; *wA::alcA*(p)-db*Δ*-*nimE*-GFP-*AfpyrG*; *nkuA*Δ?; *nimE*-mCherry-*AfriboB*; *mipA*D159
LO1943	*pyrG*89; *wA::alcA*(p)-*nimE*-GFP-*AfpyrG*; *pabaA*1; *nkuA*Δ?; *hhoA*-mRFP-*AfriboB*; *mipA*D159
LO1966	*pyrG*89; *bimA*-GFP-*AfpyrG*; *hhoA*-mCherry-*AfpyroA*; *pyroA*4; *nkuA::argB*; *fwA*1
LO2586	*pyrG*89; *nimE*-GFP-*AfpyrG*; *pyroA*4; *nkuA::argB*; *nimX*-mCherry-*AfriboB*; *mipA*D159
LO2589	*pyrG*89; *nimE*-GFP-*AfpyrG*; *pyroA*4;*StuA*(NLS)-DsRed-*argB*; *nkuA*Δ?; *mipA*D159; *yA*2
LO2994	*wA*3; *pyrG*89; *nimE*-GFP-*AfpyrG*; *crmA*T525C-*pyrG*; *pyroA*4?; *pabaB*22?; *nkuA*Δ?; *hhoA*-mRFP-*AfriboB*; *mipA*D159
LO3317	*pyrG*89; *nimE*-GFP-*AfpyrG*; *pyroA*4; *pabaA*1; *nkuA*Δ?; *hhoA*-mRFP-*AfriboB*; *riboB*2
LO3935	*pyrG*89; *bimA*-GFP-*AfpyrG*; *hhoA*-mCherry-*AfpyroA*; *pyroA*4; *nkuA*Δ?; *mipA*D159
LO3994	*pyrG*89; *nimE*-GFP-*AfpyrG*; *rpnE*-mCherry-*AfriboB*; *nkuA*Δ?; *mipA*D159; *fwA*1
LO4031	*pyrG*89; *nimX*-GFP-*AfpyrG*; *hhoA*-mRFP-*AfriboB*; *pyroA*4; *pabaA*1; *nkuA*Δ?; *mipA*D159; *fwA*1
LO4322	*pyrG*89; An*cdc14*-GFP-*AfpyrG; pyroA*4; *nimX*-mCherry-*AfriboB; nkuA*Δ?*; mipA*D159
TN02A7	*pyrG*89; *pyroA*4; *nkuA::argB*; *riboB*2

Question marks indicate alleles that were present in one of the parents of a cross but have not been tested in the progeny.