

Supplemental Materials

Molecular Biology of the Cell

Ivanova et al.

SUPPLEMENTARY TABLE SI

Strains used in this work

Strain	Genotype	Origin
972	h-	Lab stock
JA242	cdc10-HA-kan+ leu1-32 h-	This work
JA672	chk1::ura4+ ura4-D18 h+	This work
JA770	cdc10-HA::nat+ leu1-32 h-	This work
JA803	cdc10-C4 h+	Lab stock
JA974	yox1S114-115A-13Myc-kan+ h-	Gomez-Escoda et al (2011)
JA977	yox1-13Myc-kan+ nrm1-HA-nat+ h+	This work
JA1016	nrm1::kan+ max1-13Myc-nat+ ura4-D18 h+	This work
JA1069	rad3::nat+ cdc10-HA-kan+ h-	This work
JA1070	cds1::kan+ cdc10-HA-nat+ leu1-32 h-	This work
JA1078	cdc10-HA-nat+ yox1-S114A-T115A h+	This work
JA1089	cdc10-HA-nat+ cds1::kan+ chk1::ura4+ ura4-D18 h+	This work
JA1090	cdc10-HA-nat+ chk1::ura4+ ura4-D18 h+	This work
JA1269	cdc10-kan+ h-	This work
JA1270	cdc10-S3-kan+ h-	This work
JA1271	cdc10-S5-kan+ h-	This work
JA1272	cdc10-S3,S5-kan+ h-	This work
JA1405	chk1:9myc2HA6His:ura4+ cds1::kan+ ura4-D18 h+	This work
JA1406	chk1:9myc2HA6His:ura4+ yox1S114-115A-13Myc-kan ura4-D18 h+	This work
JA1407	chk1-HA-Kan+ h-	This work
JA1408	cdc10-S563A-kan h+	This work
JA1409	cdc10-T603A-kan h-	This work
JA1411	yox1::ble+ nrm1::nat+ h+	This work
JA1413	yox1::ble+ nrm1::nat+ cdc10-S3A-kan+ h-	This work
JA1414	yox1::ble+ nrm1::nat+ cdc10-S5A-kan+ h-	This work
JA1415	yox1::ble+ nrm1::nat+ cdc10-S3,S5-kan+ h-	This work
JA1573	chk1:9myc2HA6His:ura4+ cdc10-HA-kan+ ura4-D18 h?	This work
JA1672	res1-HA:nat+ h-	This work
JA1673	res2-HA:nat+ h-	This work
LLD3427	chk1:9myc2HA6His:ura4+ ura4-D18 leu1-32 h-	Furnary et al (1997)

SUPPLEMENTARY METHODS

FACS. For cell cycle progression, *S.pombe* strains were grown in liquid MM or YE5S media to an OD₆₀₀ of 0.5 and the cultures were treated with the corresponding MMS concentration for the indicated time. ~5×10⁶ cells for each sample were fixed in 70% ethanol, washed with 1ml 50 mM Sodium citrate (pH 7), resuspended in 0.5ml of the same buffer with 100 µg/ml RNase and incubated overnight at 37°C. DNA was stained with 1 µg/ml of propidium iodide, mixed vigorously and sonicated. To determine cell viability, *S. pombe* strains were grown in liquid MM or YE5S media to an OD₆₀₀ of 0.5 and the cultures were treated with the corresponding MMS concentration for the indicated time. Cells were then washed, diluted in YE5S and spotted onto YE5S media agar plates. Plates were incubated at 30°C for 3–4 days.

SUPPLEMENTARY FIGURE LEGENDS

Supplementary Figure S1. Wild type (WT) and $\Delta chk1$ cells were treated with the indicated concentration of MMS for 1h. Viability was measured by spotting 10^0 to 10^5 cells onto YE5S plates and incubated at 30°C for 3-4 days.

Supplementary Figure S2. Yox1 binds MBF through the C-terminal region of Cdc10. Loading of Yox1 on *cdc22* and *cdc18* promoters was measured in untreated or MMS-treated (0.1% MMS, 1h at 25°C) cultures of WT and *Cdc10-C4* strain by ChIP. The average of three individual experiments (\pm s.d.) is plotted.

Supplementary Figure S3. Phosphorylation of S563 and T603 do not affect Cdc10 promoter binding after DNA damage. Loading of Cdc10 on *cdc22* and *cdc18* promoters was measured in untreated or MMS-treated (0.1% MMS, 1h at 25°C) cultures of wild type (WT), *Cdc10.S563A* and *Cdc10.T603A* strains by ChIP. The average of three individual experiments (\pm s.d.) is plotted.





