

Table S4. Strains Used.

Strain	Genotype	Source
4741	<i>MATa his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	IN-VITROGEN
4742	<i>MATα his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	IN-VITROGEN
Y3656	<i>can1Δ::MFA1pr-HIS3-Mha1pr-LEU2 his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	(Tong et al., 2001)
579-6D (W303)	<i>MATa trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100 RAD5</i>	H.Klein
580-10D (W303)	<i>MATα trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100 RAD5</i>	H.Klein
W303dna2-1	<i>MATa dna2-1 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100 RAD5</i>	(Weitao et al., 2003a; Weitao et al., 2003b)
YLL157	<i>MATa rad9Δ::URA3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100 RAD5</i>	(Longhese et al., 1997)
SPY40	<i>MATa tel1::URA3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	(Ritchie et al., 1999)
U953-61A	<i>MATa mec1Δ::TRP1 sml1::HIS3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	(Zhao et al., 1998)
YAO328	<i>MATa mrc1AQ::LEU2::mrc1Δ::URA3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	Steve Elledge
Y2298	<i>MATa HIS3::mrc1AQ MYC13 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	(Osborn and Elledge, 2003)
MB100	<i>MATa dna2-1 his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
MB101	<i>MATα dna2-2-LEU2 his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
MB103	<i>can1Δ::MFA1pr-HIS3-Mha1pr-LEU2 dna2-1::URA3 his3Δ1 leu2Δ0met15Δ0 ura3Δ0</i>	This study
MB104	<i>can1Δ::MFA1pr-HIS3-Mha1pr-LEU2 dna2-2URA3 his3Δ1 leu2Δ0met15Δ0 ura3Δ0</i>	This study
MB110	<i>MATa dna2Δ::kanMX his3Δ1 leu2Δ0 met15Δ0 ura3Δ0(pSEY18GALDNA2)</i>	This study
MB111	<i>MATa dna2ΔkanMX pif1Δ::HIS5 his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
MB112	<i>MATα dna2-2-LEU2 pif1Δ::kanMX his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
509	<i>MAT□ pif1Δ::kanMX his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	IN-VITROGEN
MB90-7A	<i>MATa dna2-1 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
MB91	<i>MATa dna2-1pif1Δ::HIS5 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
24D	<i>MATα fob1Δ::HIS3 his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
27A	<i>MATa ctf4Δ::kanMX fob1Δ::HIS3 his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
2D	<i>MATα dna2-2::LEU2 fob1Δ::HIS3 his3Δ1 leu2Δ0 met15Δ0</i>	This study

	<i>ura3Δ0</i>	
25A	<i>MATα dna2-2::LEU2 ctf4Δ::kanMX fob1Δ::HIS3 his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
4A	<i>MATα dna2-2::LEU2 pol32Δ::kanMX his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
2D	<i>MATα dna2-1 pol32Δ:: kanMX his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	This study
17B	<i>MATα dna2-2::LEU2 sml1Δ::HIS3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
31A	<i>MATα mec1Δ::TRP1 tel1Δ::URA3 sml1Δ::HIS3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
31C	<i>MATα dna2-2 mec1Δ::TRP1 sml1Δ::HIS3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
23C	<i>MATα sml1Δ::HIS3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
37C	<i>MATα tel1Δ::URA3 sml1Δ::HIS3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
36D	<i>MATα mec1Δ::TRP1 sml1Δ trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100</i>	This study
35A	<i>MATα dna2-2::LEU2 tel1Δ::TRP1 sml1Δ::HIS3 trp1-1 ura3-1 his3-11,15 leu2-3,112 ade2-1 can1-100 pol1-1</i>	This study
CY387	<i>pri1-M4</i>	(Lucchini et al., 1990) (Marini et al., 1997)