

S3 Table. Yeast strains used in this study

Name	Genotype	Source
MY10733	<i>MATa MSH2-myc::KanMX ura3-1 leu2-3,112 can1-100 his3-11,15 bar1::HISG POL2-3xHA::LEU2</i>	Gammie laboratory
MY10567	<i>MATa MCM4-HA::TRP1 ade2-1 leu2-3,112 can1-100 his3-11,15 trp1-1 bar1::HISG</i>	Stephen Bell Laboratory, MIT
MY15095	<i>MATa POL2-3xHA::LEU2 MSH2-myc::KanMX pol30-204 leu2-3,112 his3-11,15 trp1-1 ura3-1 bar1::HISG can1-100 msh6-F33A,F34A</i>	Gammie laboratory
MY11870	<i>MATa POL2-3xHA::LEU2 MSH2-myc::NatMX pol30-201 bar1 ura3-1 leu2-3,112 can1-100 his3-11,15 rad5-5</i>	Gammie laboratory
AGY1198	<i>MATa msh6Δ::HphMX ade2-1 trp1-1 ura3-1 leu2-3,112</i>	Gammie laboratory
AGY1196	<i>MATa msh3Δ::HphMX ade2-1 trp1-1 ura3-1 leu2-3,112</i>	Gammie laboratory
MY14904	<i>MATa MSH2-myc::KanMX MSH3-myc::KanMX MSH6-myc::KanMX ura3-1 his3-11,15 leu2-3,112</i>	Gammie laboratory
MY13803	<i>MATa POL2-3xHA::LEU2 MSH6-myc::KanMX can1-100 trp1-1 his3-11,15 bar1::HISG</i>	Gammie laboratory
MY12327	<i>MATa POL2-3xHA::LEU2 MSH3-myc::KanMX trp1-1 ura3-1 hom3-10 leu2-3,112 his3-11,15 bar1::HISG</i>	Gammie laboratory

All strains are derived from W303 and confirmed to be wild-type (unless indicated) at the *RAD5* locus by PCR and at the *CAN1* locus by canavanine resistance assays.