Table S1 Strains used in this study

Strain Name	**Genotype** (all cells are in the W303 background)
LBHY29	*MAT*α P_{FUS1}*-YFP @ LEU2 MFA1-TRP1::mfα1Δ MFA2-HIS3::mfα2Δ STE2-NatMX4::ste3Δ ade2-1 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY41	*MAT*α *ade2-1 can1-100 his3-11,15 leu2-112 trp1-1*
LBHY44	*MAT***a** P_{FUS1}*-YFP @ LEU2 bar1Δ::HphMX4 MFα1-HIS3::mfα1Δ MFα2-TRP1::mfα2Δ STE3-NatMX4::ste2Δ asg7Δ::URA3(Kluyveromyces lactis) ade2-1 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY47	*MAT*α P_{FUS1}*-YFP @ LEU2* $P_{MFα1}$*-STE6-URA3 MFA1-TRP1::mfα1Δ MFA2-HIS3::mfα2Δ STE2-NatMX4::ste3Δ* P_{FUS1*}*-BAR1-KanMX6 ade2-1 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY49	*MAT*α P_{FUS1}*-YFP @ LEU2* $P_{MFα1}$*-STE6-ura3*$^{-}$ *MFA1-TRP1::mfα1Δ MFA2-HIS3::mfα2Δ STE2-NatMX4::ste3Δ* P_{FUS1*}*-BAR1-KanMX6 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY89	*MAT*α *mfα1Δ::NatMX4 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1*
LBHY92	*MAT*α *mfα1Δ::NatMX4 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1*
LBHY93	*MAT*α *mfα1Δ::NatMX4 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1*
LBHY98	*MAT***a** P_{FUS1}*-YFP @ LEU2 bar1Δ::HphMX4 MFα1-HIS3::mfα1Δ MFα2-TRP1::mfα2Δ STE3-NatMX4::ste2Δ asg7Δ::URA3(K. lactis)* P_{ACT1}*-yCerulean @ ADE2 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY108	*MAT***a** P_{ACT1}*-mCherry-HIS3MX6 @* P_{ACT1} *ade2-1 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1*
LBHY156	*MAT***a** *mfa1Δ::KanMX6 mfa2Δ::HphMX4 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1*
LBHY177	*MAT*α P_{FUS1}*-YFP @ LEU2 MFA1-TRP1::mfα1Δ MFA2-HIS3::mfα2Δ STE2-NatMX4::ste3Δ bar1Δ::KanMX6 ade2-1 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY286	*MAT***a** *mfa1Δ::KanMX6 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1*
LBHY290	*MAT***a** P_{FUS1*}*-BAR1-KanMX6 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1*
LBHY316	*MAT*α/α P_{FUS1}*-YFP @ LEU2/leu2-112* $P_{MFα1}$*-STE6-URA3/*P_{STE6}*-STE6 MFA1-TRP1::mfα1Δ/MFα1 MFA2-HIS3::mfα2Δ/MFα2 STE2-NatMX4::ste3Δ/STE3* P_{FUS1*}*-BAR1-KanMX6/ bar1Δ::ADE2 SPA2/ SPA2-YFP:HIS3 ade2-1/ade2-1 can1-100 /can1-100 his3-11,15/his3-11,15 trp1-1/trp1-1 ura3-1/ura3-1*
LBHY318	*MAT***a/a** P_{FUS1}*-YFP @ LEU2/ leu2-112 bar1Δ::HphMX4/BAR1 MFα1-HIS3::mfa1Δ/MFA1 MFα2-TRP1::mfa2Δ/MFA2 STE3-NatMX4::ste2Δ/STE2 asg7Δ::URA3(K. lactis)/ASG7 SPA2-CFP:KanMX6/SPA2 ADE2/ade2-1 can1-100/can1-100 his3-11,15/*P_{FUS1}*-YFP @ HIS3 trp1-1/trp1-1 ura3-1/ura3-1*
LBHY346	*MAT*α P_{FUS1}*-YFP @ LEU2* $P_{MFα1}$*-STE6-URA3 MFA1-TRP1::mfα1Δ MFA2-HIS3::mfα2Δ STE2-NatMX4::ste3Δ* P_{FUS1*}*-BAR1-KanMX6 afb1Δ::HphMX4 ade2-1 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY350	*MAT*α *afb1Δ::HphMX4 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1*
LBHY352	*MAT*α *afb1Δ::HphMX4 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1*
LBHY395	*MAT***a** P_{FUS1}*-YFP @ LEU2 bar1Δ::HphMX4 MFα1-HIS3::mfα1Δ MFα2-TRP1::mfα2Δ STE3-NatMX4::ste2Δ asg7Δ::URA3(K. lactis)* P_{TDH3}*-MFα1:KanMX6 @* P_{TDH3} *ade2-1 can1-100 his3-11,15 trp1-1 ura3-1*
LBHY397	*MAT***a** P_{ACT1}*-AFB1:KanMX6 @* P_{ACT1} *ade2-1 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1*
LBHY409	*MAT***a** P_{ACT1}*-AFB1:KanMX6 @* P_{ACT1} *ade2-1 can1-100 his3-11,15 leu2-112 trp1-1*
LBHY410	*MAT*α P_{FUS1}*-YFP @ LEU2* $P_{MFα1}$*-STE6-ura3*$^{-}$ *MFA1-TRP1::mfα1Δ MFA2-HIS3::mfα2Δ STE2-NatMX4::ste3Δ* P_{FUS1*}*-BAR1-KanMX6 afb1Δ::HphMX4 can1-100 his3-11,15 trp1-1 ura3-1*

MP 381	*MAT*α *bar1Δ::ADE2 SPA2-YFP:HIS3 ade2-1 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1*
MP 384	*MAT***a** *bar1Δ::ADE2 SPA2-YFP:HIS3 ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1*
MP 420	*MAT***a** *SPA2-CFP:KanMX6* P_{FUS1}*-YFP @ HIS3 can1-100 leu2-112 trp1-1 ura3-1*
W303	*MAT***a** *ade2-1 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1 (W303 wildtype)*
W303	*MAT*α *ade2-1 can1-100 his3-11,15 leu2-112 trp1-1 ura3-1 (W303 wildtype)*

All strains are from this study except for MP 381, MP 384, and MP 420, which are from M. Piel and the W303 wildtype strains, which are from Thomas and Rothstein 1989 (Thomas and Rothstein 1989).

LITERATURE CITED

Thomas, B. J., and R. Rothstein, 1989 Elevated recombination rates in transcriptionally active DNA. Cell **56:** 619-630.