

Table S5

Yeast strains used in this study.

Strain	Genotype	Source
YJL6558	<i>MATa MCM7-2NLS ura3-52::pGAL-ΔntCDC6,cdk2A, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	Green et al. ¹
YJL6974	<i>MATa MCM7-2NLS ura3-52::pGAL, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	Green et al. ¹
YJL7445	<i>MATa rad1::TRP1 MCM7-2NLS ura3-52::pGAL-ΔntCDC6,cdk2A, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL7451	<i>MATa rad51::TRP1 MCM7-2NLS ura3-52::pGAL-ΔntCDC6,cdk2A, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL7607	<i>MATa MCM7-2NLS ura3-52 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL7852	<i>MATa MCM7-2NLS ura3-52::pGAL-ΔntCDC6,cdk2A, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL7906	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL7929	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX YDRCTy2-1::pGAL-YDRCTy2-1 5' homology - RA3 - YDRCTy2-1 3' homology(v1), URA3}</i>	This Study
YJL7931	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX YDRCTy1-1::pGAL-YDRCTy1-1 5' homology(v1) - UR - YDRCTy1-1 3' homology, URA3}</i>	This Study
YJL7954	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCDelta2, YDRCDelta3, YDRCDelta4, YDRCTy2-1, YDRCDelta5>Δ::RA3(v1)</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL7964	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v1)</i>	This Study
YJL7986	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5>Δ::RA3(v1) YDRCTy1-1::{YDRCTy1-1 5' homology(v1) - UR - YDRCTy1-1 3' homology, URA3}</i>	This Study
YJL7993	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5>Δ::RA3(v1) YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v1)</i>	This Study
YJL8027	<i>MATa MCM7-2NLS ura3- ΔORF::{tACT1-pGAL1/10-Δ ntCDC6,cdk2A-tCDC6, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL8031	<i>MATa MCM7-2NLS ura3-ΔORF::{tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5>Δ::RA3(v1)</i>	This Study
YJL8035	<i>MATa MCM7-2NLS ura3-ΔORF::{tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v1)</i>	This Study
YJL8040	<i>MATa MCM7-2NLS ura3-ΔORF::{tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5>Δ::RA3(v1) YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v1)</i>	This Study
YJL8100/8 101	<i>MATa MCM7-2NLS ura3 ::tACT1-pGAL1/10-Δ ntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL8104	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5>Δ::RA3(v1)</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL8108	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v1)</i>	This Study
YJL8112/8113	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5>Δ::RA3(v1) YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v1)</i>	This Study
YJL8230	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX YDRCTy2-1::{YDRCTy2-1 5' homology - RA3 - YDRCTy2-1 3' homology(v2), URA3}</i>	This Study
YJL8259	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2)</i>	This Study
YJL8261	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX YDRCTy1-1::{YDRCTy1-1 5' homology(v2) - UR - YDRCTy1-1 3' homology, URA3}</i>	This Study
YJL8264	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) YDRCTy1-1::{YDRCTy1-1 5' homology(v2) - UR - YDRCTy1-1 3' homology, URA3}</i>	This Study
YJL8271	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL8274	<i>MATa MCM7-2NLS ura3-ΔORF ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8340	<i>MATa MCM7-2NLS URA3 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2)</i>	This Study
YJL8342	<i>MATa MCM7-2NLS URA3 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8344	<i>MATa MCM7-2NLS URA3 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8355	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2)</i>	This Study
YJL8359	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8363/8364	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL8407/8 408	<i>MATa dni4::TRP1 MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8409/8 410	<i>MATa rad52::TRP1 MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8412/8 413	<i>MATa rad51::TRP1 MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8415/8 416	<i>MATa rad1::TRP1 MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8418/8 419	<i>MATa msh3::TRP1 MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study
YJL8421/8 422	<i>MATa pol32::TRP1 MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL8425/8 426	<i>MATa MCM7-2NLS ura3-52::pGAL-ΔntCDC6-cdk2A, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{hphMX, I-SceI cut site, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL8427/8 428	<i>MATa MCM7-2NLS ura3-52::pGAL, URA3} ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{hphMX, I-SceI cut site, ade3-2p, ARS317} ars317::natMX</i>	This Study
YJL8799	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-Δ ntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX YDRCTy2-1::YDRCTy2-1 5' homology-YDRCTy2-1 3' homology(v2), URA3}</i>	This Study
YJL8807	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1> Δ</i>	This Study
YJL8824	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1> Δ YDRCTy1-1::YDRCTy1-1 5' homology(v2)-YDRCTy1-1 3' homology, URA3}</i>	This Study
YJL8842	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1> Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9> Δ</i>	This Study
YJL9054	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV_{567kb}::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1> Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9> Δ ChrIV_{515kb}::{hphMX, RA3}</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL9056	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV545kb::{hphMX, RA3}</i>	This Study
YJL9057	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV565kb::{hphMX, RA3}</i>	This Study
YJL9060	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV576kb::{hphMX, RA3}</i>	This Study
YJL9062	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV607kb::{hphMX, RA3}</i>	This Study
YJL9067	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV650kb::{hphMX, RA3}</i>	This Study
YJL9115/9 116	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV515kb::{hphMX, RA3} ChrIV607kb::{UR, TRP1}</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL9118/9 119	MATa MCM7-2NLS <i>ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV515kb::{hphMX, RA3} ChrIV650kb::{UR, TRP1}</i>	This Study
YJL9121/9 122	MATa MCM7-2NLS <i>ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV515kb::{hphMX, RA3} ChrIV753kb::{UR, TRP1}</i>	This Study
YJL9127/9 128	MATa MCM7-2NLS <i>ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV515kb::{hphMX, RA3} ChrIV875kb::{UR, TRP1}</i>	This Study
YJL9130/9 131	MATa MCM7-2NLS <i>ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV515kb::{hphMX, RA3} ChrIV985kb::{UR, TRP1}</i>	This Study
YJL9133/9 134	MATa MCM7-2NLS <i>ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV515kb::{hphMX, RA3} ChrIV1100kb::{UR, TRP1}</i>	This Study
YJL9136/9 137	MATa MCM7-2NLS <i>ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV545kb::{hphMX, RA3} ChrIV592kb::{UR, TRP1}</i>	This Study

Table S5 (continued)

Yeast strains used in this study.

YJL9139/9 140	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV565kb::{hphMX, RA3} ChrIV576kb::{UR, TRP1}</i>	This Study
YJL9142/9 143	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV576kb::{hphMX, RA3} ChrIV713kb::{UR, TRP1}</i>	This Study
YJL9145/9 146	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV607kb::{hphMX, RA3} ChrIV753kb::{UR, TRP1}</i>	This Study
YJL9147/9 148	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-ΔntCDC6,cdk2A-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ ChrIV650kb::{hphMX, RA3} ChrIV753kb::{UR, TRP1}</i>	This Study
YJL9149- 9151	<i>MATa MCM7-2NLS ura3::tACT1-pGAL1/10-tCDC6 ORC2 orc6(S116A) leu2 trp1-289 ade2 ade3 bar1::LEU2 ChrIV567kb::{kanMX, ade3-2p, ARS317} ars317::natMX <YDRCdelta2, YDRCdelta3, YDRCdelta4, YDRCTy2-1, YDRCdelta5, tL(UAA)D, YDRCdelta6a, YDRCdelta7, YDRW034C-A, YDRCdelta6b, tQ(UUG)D1>Δ::RA3(v2) <tQ(UUG)D2, YDRCdelta7, YDRCTy1-1, YDRCdelta8, YDRCsigma1, YDRCdelta9>Δ::UR(v2)</i>	This Study

¹ Green, B.M. et al. *Science* **329**, 943–946 (2010)