Trans-lesion DNA polymerases may be involved in yeast meiosis

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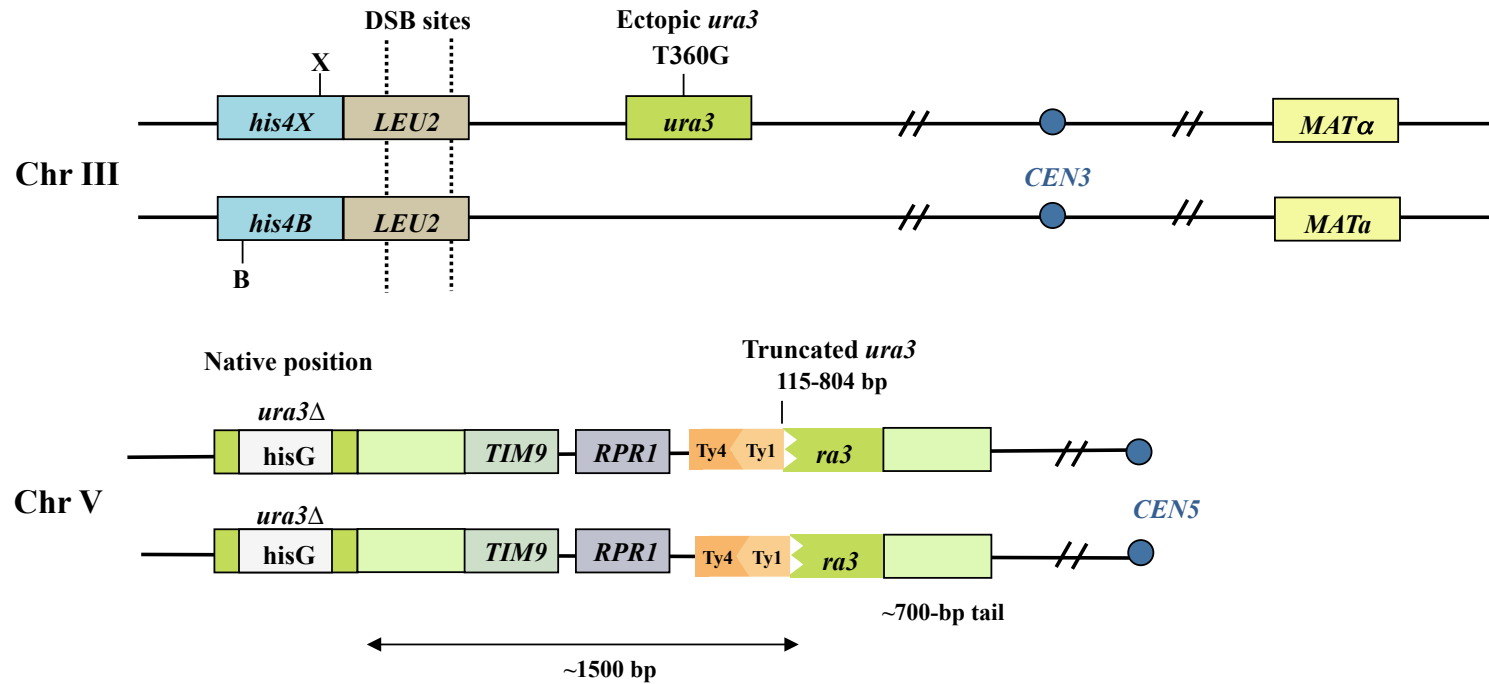-mail: giora.simchen@mail.huji.ac.il

Figure S1 Chromosomal structure of strains used for tests of allelic recombination and ectopic gene conversion. The diploid strains have undergone deletion of the gene *URA3* on the two copies of chromosome V (*PstI-SmaI* region replaced by hisG of Salmonella); in addition, the strains were found to contain, on both chromosomes V, an insert of a truncated copy of the same gene (marked *ra3*), starting at base 115 and ending ~700 bp downstream of *URA3*. These ~1500-bp inserts contain also short sequences of Ty1 and Ty4, and are found ~1500 bp downstream of the original location of *URA3*, namely beyond the genes *TIM9* and *RPR1*. One of the two copies of chromosome III has also an insert of *URA3* near the *his4-X-LEU2* construct (Cao et al 1990), in which T at position 360 was replaced by G (*T360G*), thus making the strain auxotrophic for uracil (Ura⁻).

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Table S1 *Saccharomyces cerevisiae* strains used in this study, all of SK1 genetic background

Strain name	Strain #	Genotype	Source
WT	DAO23-1	*MAT a/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2,TRP1/trp1::hisG*	This study
rev3D	DAO63	*MATa/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2, trp1::hisG/TRP1, lys2/lys2, rev3::kanMX4/rev3::kanMX4*	This study
rad30D	DAO36	*MATa/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2, TRP1/trp1::hisG, rad30::kanMX4/rad30::kanMX4*	This study
rev1D	DAO42	*MAT a/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/ leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2, trp1::hisG/TRP1, lys2/lys2, rev1::kanMX4/rev1::kanMX4*	This study
rev7D	DAO29	*MATa/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2, TRP1/trp1::hisG, rev7::kanMX4/rev7::kanMX4*	This study
rev1Drad30D	DAO49	*MATa/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/ leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2,trp1::hisG/TRP1, lys2/lys2, rev1::kanMX4/rev1::kanMX4, rad30::kanMX4/rad30::kanMX4*	This study
rev3Drad30D	DAO80	*MATa/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, lys2/lys2, TRP1/trp1::hisG, leu2::hisG/ leu2::hisG, his4-X::LEU2-ura3(T360G)/his4-B::LEU2, rev3::kanMX4/rev3::kanMX4, rad30::kanMX4/rad30::kanMX4*	This study
rev1Drev3D	DAO56	*MATa/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/ leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2,trp1::hisG/TRP1, lys2/lys2, rev1::kanMX4/rev1::kanMX4, rev3::kanMX4/rev3::kanMX4*	This study
rev1D rad30D rev3D	DAO82	*MATa/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, lys2/lys2, trp1::hisG/trp1::hisG, leu2::hisG/ leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2, rev1::kanMX4/rev1::kanMX4, rev3::kanMX4/rev3::kanMX4, rad30::kanMX4/rad30::kanMX4*	This study
Spo11D	DAO62	*MAT a/MATa, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ura3(PstI-SmaI)::hisG, leu2::hisG/leu2::hisG, his4-X::LEU2-ura3-T360G /his4-B::LEU2,TRP1/trp1::hisG, spo11::kanMX4/spo11::kanMX4*	This study
Rev1-Myc	DAO110	*MATa/MATa, ho::hisG/ ho::hisG, ura3(PstI-SmaI)::hisG/ ura3(PstI-SmaI)::hisG his4/his4 lys2/lys2, REV1-13myc:TRP1/ REV1-13myc:TRP1*	This study
Rev3-Myc	DAO119	*MATa/MATa, ho::hisG / ho::hisG, ura3(PstI-SmaI)::hisG/ ura3(PstI-SmaI)::hisG his4/his4 lys2/lys2, REV3-13myc::TRP1/ REV3-13myc:TRP1*	This study
Rev7-Myc	DAO16-1	*MATa/MATa, ho::hisG/ ho::LYS2 ura3/ura3 ade2/ADE2 his4-X::LEU2-BamH1/his4-B::LEU2 REV7-9myc::TRP1/ REV7-9myc::TRP1*	This study
Rev1-Myc	DAO137	*MATa/MATa, ho::hisG /ho::hisG, ura3(PstI-SmaI)::hisG/ ura3(PstI-SmaI)::hisG lys2/lys2 leu2/leu2 REV1-13myc::TRP1/ REV1-*	This study

Dmc1-HA		*13myc::TRP1 DMC1-3HA::kanMX4/DMC1-3HA:: kanMX4*	
Rev1-Myc Rad30-HA	DAO172	*MATa/MATα, ho::hisG/ho::hisG, ura3(PstI-SmaI)::hisG/ ura3(PstI-SmaI)::hisG URA3/URA3 lys2/lys2 his4-X::LEU2/ his4-B::LEU2 REV1-13myc::TRP1/REV1-13myc:TRP1 RAD30-3HA: kanMX4/ RAD30-3HA: kanMX4*	This study
Rev3-Myc Rad30-HA	DAO178	*MATa/MATα, ho::LYS2 / ho::hisG, his4-X::LEU2/his4-B::LEU2 ura3/ URA3 LYS2/lys2 REV3-13myc::TRP1/REV3-13myc::TRP1 RAD30-3HA::kanMX4/RAD30-3HA::kanMX4*	This study
Rev1-Myc Tid1-HA	DAO180	*MATa/MATα, ho::hisG / ho::hisG, ura3(PstI-SmaI)::hisG/ ura3(PstI-SmaI)::hisG lys2/lys2 his4-X::LEU2/his4-B::LEU2 REV1-13myc::TRP1/REV1-13myc::TRP1 TID1-3HA::kanMX4/ TID1-3HA::kanMX4*	This study
Rev1-Myc Ime2-HA	DAO212	*MATa/MATα, ho::LYS2/ho::hisG, ura3(PstI- SmaI)::hisG/ ura3(PstI-SmaI)::hisG trp1::hisG/ trp1::hisG leu2::hisG / leu2::hisG his4-B::LEU2/his4-X::LEU2 REV1-13myc::TRP1/REV1 IME2-3HA::KanMX/IME2*	This study
ndt80D-a	661	*MATa ho::LYS2 lys2 leu2::hisG trp1::hisG ndt80::kanMX4 LexA(op)-LacZ::URA3*	S. Keeney
ndt80D-a	662	*MATα ho::LYS2 lys2 leu2::hisG trp1::hisG ndt80::kanMX4 LexA(op)-LacZ::URA3*	S. Keeney

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