**Supplementary File 1: *Saccharomyces cerevisiae* strains used in this work.**

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| Name | **Genotype** |
| WDHY55091 | *MATa-inc, ura3::LY-HOcs, lys2::LYover0, trp1::GAL-HO-hphMX, his3D200, can1-100, leu2-3,112, ade2-1, RAD5* |
| WDHY55111 | *MATα-inc, ura3::LY-HOcs, lys2::LYover0, trp1::GAL-HO-hphMX, his3D200, can1-100, leu2-3,112, ade2-1, RAD5* |
| WDHY53581 | *MATa-inc, ura3::LY-HOcs, lys2::LYover0, trp1::GAL-HO hphMX, his3, leu2-3,112, ade2-1, can1-100 RAD5, tid1::KanMX* |
| WDHY53591 | *MATα-inc, ura3::LY-HOcs, lys2::LYover0, trp1::GAL-HO hphMX, his3D200 or 11,15, leu2-3,112, ade2-1, can1-100 RAD5, tid1::KanMX* |
| WDHY53551 | *MATa-inc, ura3::LY-HOcs, lys2::LYover0, trp1::GAL-HO hphMX, his3D200 or 11,15, leu2-3,112, ade2-1, can1-100 RAD5, tid1-K352R* |
| WDHY53561 | *MATα-inc, ura3::LY-HOcs, lys2::LYover0, trp1::GAL-HO hphMX, his3D200 or 11,15, leu2-3,112, ade2-1, can1-100 RAD5, tid1-K352R* |
| WDHY49871 | *MATa-/α-inc, ura3::LY-HOcs/-, lys2::LYover0/-, trp1::GAL-HO hphMX/-, his3D200 or 11,15/-, leu2-3,112/-, ade2-1/-, can1-100/- RAD5/-* |
| WDHY53601 | *MATa-/α-inc, ura3::LY-HOcs/-, lys2::LYover0/-, trp1::GAL-HO hphMX/-, his3D200 or 11,15/-, leu2-3,112/-, ade2-1/-, can1-100/- RAD5/-, tid1::KanMX/-* |
| WDHY53701 | *MATa-/α-inc, ura3::LY-HOcs/-, lys2::LYover0/-, trp1::GAL-HO hphMX/-, his3D200 or 11,15/-, leu2-3,112/-, ade2-1/-, can1-100/- RAD5/-, tid1::tid1-K352R/-* |
| WDHY58242 (YAM072)3 | *MATa-inc, hoD, ade3::GAL-HO, HMLa-inc, MATa, MATZ2del MATZ1del148bp::Cg-TRP1, hml::MAT::NAT-inc->distal-KAN (148bp homology to MAT), RE-HPHMX, hmr::LEU2, bar1D::ADE3, nej1D::KANMX, ade1, leu2,3-112, trp1::hisG, ura3-52, thr4, lys5* |
| WDHY58252 (YAM075)3 | *MATa-inc, hoD, ade3::GAL-HO, HMLa-inc, MATa, hmr::LEU2, bar1D::ADE3, nej1D::KANMX, RE-HPHMX, HMLYαdel::NATMX-inc-2216bpMAT-distal-KANMX, ade1, leu2,3-112, trp1::hisG, ura3-52, thr4, lys5* |
| WDHY58492 | *MATa-inc, hoD, ade3::GAL-HO, HMLa-inc, MATa, MATZ2del MATZ1del148bp::Cg-TRP1, hml::MAT::NAT-inc->distal-KAN (148bp homology to MAT), RE-HPHMX, hmr::LEU2, bar1D::ADE3, nej1D::KANMX, ade1, leu2,3-112, trp1::hisG, ura3-52, thr4, lys5, tid1::URA3* |
| WDHY58502 | *MATa-inc, hoD, ade3::GAL-HO, HMLa-inc, MATa, hmr::LEU2, bar1D::ADE3, nej1D::KANMX, RE-HPHMX, HMLYαdel::NATMX-inc-2216bpMAT-distal-KANMX, ade1, leu2,3-112, trp1::hisG, ura3-52, thr4, lys5, tid1::URA3* |

1 W303 strain background.

2 S288c strain background.

3 Obtained from ([Mehta et al., 2017b](#_ENREF_35)).