**S1 Table: Yeast strains used in the current study**

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| --- | --- | --- |
| **Strain** | **Genotype** | **Reference** |
| JKM139 | *MATa ho∆ hml∆::ADE1 hmr∆::ADE1 ade1-100 leu2-3;112 lys5 trp1::hisG ura3-52 ade3::GAL-HO* | [1] |
| QY2211 | JKM139 *bar1∆::NATMX* | This study |
| QY2212 | JKM139 *bar1∆::NATMX* *rad9∆::KANMX* | This study |
| QY2213 | JKM139 *bar1∆::NATMX yku80∆*::*TRP1* | This study |
| QY2214 | JKM139 *bar1∆::NATMX* *rad9∆::KANMX yku80∆*::*TRP1* | This study |
| QY2231 | JKM139 *bar1∆::LEU2* *rad9∆::KANMX yku80∆*::*TRP1 esa1-L254P::NATMX* | This study |
| QY2215 | JKM139 *bar1∆::NATMX nej1∆*::*TRP1* | This study |
| QY2216 | JKM139 *bar1∆::NATMX xrs2∆*::*TRP1* | This study |
| QY2217 | JKM139 *bar1∆::NATMX* *rad9∆::KANMX xrs2∆*::*TRP1* | This study |
| QY2218 | JKM139 *bar1∆::NATMX* *rad9∆::KANMX xrs2∆*::*TRP1 yku80∆*::*HPHMX* | This study |
| QY2219 | JKM139 *bar1∆::NATMX mre11-H125N::HPHMX* | This study |
| QY2220 | JKM139 *bar1∆::NATMX* + (pRS416) | This study |
| QY2221 | JKM139 *bar1∆::NATMX xrs2∆*::*TRP1* + (pRS416) | This study |
| QY2222 | JKM139 *bar1∆::NATMX xrs2∆*::*TRP1* + (pRS416 *MRE11-NLS*) | This study |
| QY2223 | JKM139 *bar1∆::NATMX* *rad9∆::KANMX xrs2∆*::*TRP1 yku80∆*::*HPHMX* + (pRS416 *MRE11-NLS*) | This study |
| QY2260 | JKM139 *bar1∆::NATMX xrs2∆*::*TRP1* + (pRS416 *MRE11-NLS-X85*) | This study |
| QY2261 | JKM139 *bar1∆::NATMX* *rad9∆::KANMX xrs2∆*::*TRP1 yku80∆*::*HPHMX* + (pRS416 *MRE11-NLS-X85*) | This study |
| QY1603 | JKM139 *sml1::NATMX* | [2] |
| QY2224 | QY1603 + (pRS416) | This study |
| QY2259 | QY1603 *xrs2∆::LEU2* + (pRS416) + (pRS424 *TRP1 2μ ori*) | This study |
| QY2258 | QY1603 *xrs2∆::LEU2* + (pRS416 *MRE11-NLS*) + (pRS424 *TRP1 2μ ori*) | This study |
| QY2256 | QY1603 *xrs2∆::LEU2* + (pRS416 *MRE11-NLS*) + (pRS424 *EXO1 TRP1 2μ ori*) | This study |
| QY2257 | QY1603 *xrs2∆::LEU2* + (pRS416 *MRE11-NLS*) + (pRS424 *EXO1-D173A TRP1 2μ ori*) | This study |
| QY1604 | JKM139 *sml1::NATMX lcd1::KANMX* | [2] |
| QY2225 | QY1604 + (pRS416) | This study |
| QY-2226 | QY1604 *xrs2∆::LEU2* + (pRS416) | This study |
| QY2227 | QY1604 *xrs2∆::LEU2* + (pRS416 *MRE11-NLS*) | This study |
| QY2228 | QY2227 + (pRS424 *TRP1 2μ ori*) | This study |
| QY2229 | QY2227 + (pRS424 *EXO1 TRP1 2μ ori*) | This study |
| QY2230 | QY2227 + (pRS424 *EXO1-D173A TRP1 2μ ori*) | This study |
| QY2600 | BY4741 *MATa his3∆1 leu2∆0 met15∆0 ura3∆0 nej1∆*::*KANMX* | This study |
| QY2232 | QY2600 + (pRS413) | This study |
| QY2233 | QY2600 + (pRS413 *NEJ1*) | This study |
| QY2234 | QY2600 + (pRS413 *NEJ1-K18R-K192R-K234R*) | This study |
| QY2235 | QY2600 + (pRS413 *NEJ1-K18Q-K192Q-K234Q*) | This study |
| QY2236 | QY2215 + (pRS416) | This study |
| QY2237 | QY2215 + (pRS416 *NEJ1*) | This study |
| QY2238 | QY2215 + (pRS416 *NEJ1-K18R-K192R-K234R*) | This study |
| QY2239 | QY2215 + (pRS416 *NEJ1-K18Q-K192Q-K234Q)* | This study |
| QY3572 | JKM139 *fpr1Δ::HphMX tor1-1::URA3 RPL13A-2\*FKBP12::TRP1 FRB-ESA1::KanMX* | [3] |
| QY2240 | QY3572 *YKU80-13MYC::NATMX* | This study |
| QY2241 | QY3572 *NEJ1-13MYC::NATMX* | This study |
| QY2054 | BY4741 *MATa his3∆1 leu2∆0 met15∆0 ura3∆0* +pEGH(GAL-GST-Nej1) | Open Biosystem |
| QY2058 | BY4741 *MATa his3∆1 leu2∆0 met15∆0 ura3∆0 esa1∆::KanMX* +pSAPE5(HA-*esa1-L254P LEU2 ARS/CEN*) +pEGH(GAL-GST-Nej1) | This study |
| tNS2333 | hoΔ hmlΔ::ADE1 mat**a**Δ::hisG hmrΔ::ADE1 his4::[NAT-leu2(Asp718-SalI)] leu2::HOcs ade3::GAL::HO ade1 lys5 ura3-52 Ty*∆* | [4] |
| QY2266 | tNS2333 *rad51∆::KAN* | This study |
| QY2264 | tNS2333 *esa1-L254P::NATMX* | This study |
| QY2267 | tNS2333 *esa1-L254P::NATMX rad51∆::KAN* | This study |
| QY2265 | tNS2333 *rad52∆::NAT* | This study |

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