|  |  |  |  |
| --- | --- | --- | --- |
| **Table S1** |  |  |  |
|  |  |  |  |
| Strain  | Mating Type | Genotype |  |
|  |  | All strains *his3∆1 leu2Δ0 ura3∆0* |
| mmy622 | *Mat****a*** | *lys2∆0 PGAL-JHD2::kanMX4* |
| mry0062 | *Mat****a*** | *lys2∆0 PGAL-JHD2(H427A)::kanMX4* |
| kly2053 | *Mat****α*** | *jhd2∆::hygMX6* |
| kly2056 | *Mat****α*** | *PGAL-JHD2::hygMX6* |
| kly2058 | *Mat****α*** | *PGAL-JHD2::hygMX6 set2∆::natMX6* |
| kly1981 | *Mat****a*** | *set2∆::natMX6* |
| kly1982 | *Mat****a*** | *set2∆::natMX6 jhd2∆::hygMX6* |
| kly2109 | *Mat****α*** | *spn1-K192N::kanMX4* |
| kly3552 | *Mat****a*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K36R)-URA3* |
| kly3553 | *Mat****α*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K36R)-URA3* |
| kly3554 | *Mat****a*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K36R)-URA3 set2∆::hygMX6* |
| kly3555 | *Mat****α*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K36R)-URA3 set2∆::hygMX6* |
| kly3495 | *Mat****a*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K4R)-URA3* |
| kly3496 | *Mat****α*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K4R)-URA3* |
| kly3497 | *Mat****a*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K4R)-URA3 rco1∆::hygMX6* |
| kly3498 | *Mat****α*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3K4R)-URA3 rco1∆::hygMX6* |
| kly3491 | *Mat****a*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3WT)-URA3* |
| kly3492 | *Mat****α*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3WT)-URA3* |
| kly3493 | *Mat****a*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3WT)-URA3 rco1∆::hygMX6* |
| kly3494 | *Mat****α*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3WT)-URA3 rco1∆::hygMX6* |
| kly2786 | *Mat****a*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3WT)-URA3 set2∆::hygMX6* |
| kly2787 | *Mat****α*** | *spn1-K192N::kanMX4 hht1-hhf1∆::natMX6 HHTS-HHFS (H3WT)-URA3 set2∆::hygMX6* |
| kly2110 | *Mat****a*** | *spn1-K192N::kanMX4 jhd2∆::hygMX6* |
| kly2430 | *Mat****a*** | *spn1-K192N::kanMX4 jhd2∆::hygMX6 pho23∆::natMX6* |
| kly1826 | *Mat****a*** | *spn1-K192N::kanMX4 PGAL-JHD2::hygMX6* |
| kly1830 | *Mat****a*** | *spn1-K192N::kanMX4 PGAL-JHD2::hygMX6 set2∆::natMX6* |
| kly1834 | *Mat****a*** | *spn1-K192N::kanMX4 PGAL-JHD2(H427A)::hygMX6* |
| kly1838 | *Mat****a*** | *spn1-K192N::kanMX4 PGAL-JHD2(H427A)::hygMX6 set2∆::natMX6* |
| kly2339 | *Mat****α*** | *spn1-K192N::kanMX4 pho23∆::natMX6* |
| kly2538 | *Mat****a*** | *spn1-K192N::kanMX4 rpd3∆::natMX6* |
| kly2539 | *Mat****a*** | *spn1-K192N::kanMX4 rpd3∆::natMX6 jhd2∆::hygMX6* |
| kly2119 | *Mat****α*** | *spn1-K192N::kanMX4 rph1∆::natMX6* |
| kly2120 | *Mat****α*** | *spn1-K192N::kanMX4 rph1∆::natMX6 jhd2∆::hygMX6* |
| kly2959 | *Mat****a*** | *spn1-K192N::kanMX4 rph1∆::natMX6 set2∆::hygMX6* |
| kly3052 | *Mat****α*** | *spn1-K192N::kanMX4 set1∆::natMX6* |
| kly3049 | *Mat****a*** | *spn1-K192N::kanMX4 set2∆::hygMX6* |
| kly3053 | *Mat****a*** | *spn1-K192N::kanMX4 set2∆::hygMX6 set1∆::natMX6* |
| kly2113 | *Mat****α*** | *spn1-K192N::kanMX4 set2∆::natMX6* |
| kly2114 | *Mat****a*** | *spn1-K192N::kanMX4 set2∆::natMX6 jhd2∆::hygMX6* |
| kly2445 | *Mat****α*** | *spn1-K192N::natMX6* |
| kly2988 | *Mat****a*** | *spn1-K192N::natMX6* |
| kly2905 | *Mat****a*** | *spn1-K192N::natMX6 dep1∆::hygMX6* |
| kly2992 | *Mat****a*** | *spn1-K192N::natMX6 dep1∆::kanMX4* |
| kly2993 | *Mat****α*** | *spn1-K192N::natMX6 dep1∆::kanMX4* |
| kly2694 | *Mat****α*** | *spn1-K192N::natMX6 eaf3∆::kanMX4* |
| kly2852 | *Mat****a*** | *spn1-K192N::natMX6 eaf7∆::kanMX4* |
| kly2853 | *Mat****α*** | *spn1-K192N::natMX6 eaf7∆::kanMX4* |
| kly2446 | *Mat****a*** | *spn1-K192N::natMX6 jhd2∆::hygMX6* |
| kly2851 | *Mat****α*** | *spn1-K192N::natMX6 jhd2∆::hygMX6* |
| kly2769 | *Mat****a*** | *spn1-K192N::natMX6 jhd2∆::hygMX6 dep1∆::kanMX4* |
| kly2854 | *Mat****a*** | *spn1-K192N::natMX6 jhd2∆::hygMX6 eaf7∆::kanMX4* |
| kly2855 | *Mat****α*** | *spn1-K192N::natMX6 jhd2∆::hygMX6 eaf7∆::kanMX4* |
| kly2450 | *Mat****a*** | *spn1-K192N::natMX6 jhd2∆::hygMX6 rco1∆::kanMX4* |
| kly2631  | *Mat****a*** | *spn1-K192N::natMX6 PGAL-JHD2::hygMX6* |
| kly2695 | *Mat****a*** | *spn1-K192N::natMX6 PGAL-JHD2::hygMX6 eaf3∆::kanMX4* |
| kly2531 | *Mat****a*** | *spn1-K192N::natMX6 PGAL-JHD2::hygMX6 rco1::kanMX4* |
| kly3067 | *Mat****a*** | *spn1-K192N::natMX6 Rco1-∆PHD-TAP::HIS3MX6* |
| kly3068 | *Mat****α*** | *spn1-K192N::natMX6 Rco1-∆PHD-TAP::HIS3MX6* |
| kly3069 | *Mat****a*** | *spn1-K192N::natMX6 Rco1-∆PHD-TAP::HIS3MX6 jhd2∆::hygMX6* |
| kly3070 | *Mat****a*** | *spn1-K192N::natMX6 Rco1-∆PHD-TAP::HIS3MX6 jhd2∆::hygMX6* |
| kly3059 | *Mat****a*** | *spn1-K192N::natMX6 Rco1-TAP::HIS3MX6* |
| kly3060 | *Mat****a*** | *spn1-K192N::natMX6 Rco1-TAP::HIS3MX6* |
| kly3061 | *Mat****a*** | *spn1-K192N::natMX6 Rco1-TAP::HIS3MX6 jhd2∆::hygMX6* |
| kly3062 | *Mat****α*** | *spn1-K192N::natMX6 Rco1-TAP::HIS3MX6 jhd2∆::hygMX6* |
| kly2449 | *Mat****α*** | *spn1-K192N::natMX6 rco1∆::kanMX4* |
| kly3277 | *Mat****a*** | *spn1-K192N::natMX6 rco1∆::kanMX4* |
| kly2909 | *Mat****a*** | *spn1-K192N::natMX6 rco1∆::kanMX4 dep1∆::hygMX6* |
| kly2826 | *Mat****a*** | *spn1-K192N::natMX6 rpd3∆::hygMX6* |
| kly2830 | *Mat****a*** | *spn1-K192N::natMX6 rpd3∆::hygMX6 rco1∆::kanMX4* |
| kly3275 | *Mat****a*** | *spn1-K192N::natMX6 rph1∆::hygMX6* |
| kly3276 | *Mat****α*** | *spn1-K192N::natMX6 rph1∆::hygMX6* |
| kly3279 | *Mat****a*** | *spn1-K192N::natMX6 rph1∆::hygMX6 rco1∆::kanMX4* |
| kly3280 | *Mat****α*** | *spn1-K192N::natMX6 rph1∆::hygMX6 rco1∆::kanMX4* |
| kly2990 | *Mat****a*** | *spn1-K192N::natMX6 set2∆::hygMX6* |
| kly2991 | *Mat****α*** | *spn1-K192N::natMX6 set2∆::hygMX6* |
| kly2994 | *Mat****a*** | *spn1-K192N::natMX6 set2∆::hygMX6 dep1∆::kanMX4* |
| kly2995 | *Mat****α*** | *spn1-K192N::natMX6 set2∆::hygMX6 dep1∆::kanMX4* |
| kly2101 | *Mat****α*** | *spt6-14::kanMX4* |
| kly2103 | *Mat****α*** | *spt6-14::kanMX4 jhd2∆::hygMX6* |
| kly1810 | *Mat****a*** | *spt6-14::kanMX4 PGAL-JHD2::hygMX6* |
| kly1814 | *Mat****a*** | *spt6-14::kanMX4 PGAL-JHD2::hygMX6 set2∆::natMX6* |
| kly2105 | *Mat****α*** | *spt6-14::kanMX4 set2∆::natMX6* |
| kly2107 | *Mat****a*** | *spt6-14::kanMX4 set2∆::natMX6 jhd2∆::hygMX6* |
| kly2172 | *Mat****α*** | *WT* |  |