|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Allele** | **sgRNA plasmids** | **sgRNA target sequences (PAM sites in bold)** | **Repair template** | **PCR primer 1**  **for edit detection** | **PCR primer 2**  **for edit detection** |
| *his-69(uge55[his-69::gfp]) III* | pKD026 | TTTTCAGTAGGATGTGTCC**CGG** | pKD037 | TTGAAGGCCCAGAAACATCG | GAAGCGTTCAACTAGCAGAC |
| *his-70(uge31[his-70::gfp]) III* | pKD027  pKD028 | TTCTCACTTTTAGCCACGA**TGG**  TGCTTGGTTCGAGCCATCG**TGG** | pKD038 | GAAGCGAAGATCCTGTTTGACG | GAAGCGTTCAACTAGCAGAC |
| *his-71 (uge45[his-71::gfp]) X* | pKD029  pKD030 | AGGTGAACCAGAATTGAAA**TGG**  GTACGAGCCATTTCAATTC**TGG** | pKD039 | AAACATCCCGTTGCGAAGC | GAAGCGTTCAACTAGCAGAC |
| *his-72(uge30 [his-72::gfp]) III* | pKD031  pKD032 | TCAATTTCCAGAACAACAA**TGG**  GTACGAGCCATTGTTGTTC**TGG** | pKD040 | GAAGACACCGAGAACAAGAAGC | GAAGCGTTCAACTAGCAGAC |
| *his-74(uge16[his-74::gfp]) V* | pKD005  pKD006 | TTAAATATTTCCAGAACTA**TGG**  TTGGTACGAGCCATAGTTC**TGG** | pCGS17 | CACCTTCAAACTTGACTTCAGC | GCTTTAATTTGGCCGTGTCGAG |
| *his-69&his-70(uge44) III* | pKD020  pKD021  pKD022  pKD023 | TTCTCACTTTTAGCCACGA**TGG**  TGCTTGGTTCGAGCCATCG**TGG**  ATCCATTTTAGGAGCTTTT**GGG**  TTCCCAAAAGCTCCTAAAA**TGG** | none | AAATGTGGCAAGTACGCTCC\* | TTGAAATCACCGGAACCACG\* |
| *his-74(uge18) V* | pKD005  pKD006 | TTAAATATTTCCAGAACTA**TGG**  TTGGTACGAGCCATAGTTC**TGG** | oKD0075 | TTGCGAGCGGTTTCGCTAGC | GAGTTTCACAAGCAGGCATG |
| *K10D2.1(uge29) III* | pKD033  pKD034  pKD035  pKD036 | AAAGTATACAGCTTCTGAC**AGG**  CTGCAAAACTCAATAAAGT**TGG**  TTGCAGCAAGAATTGTCGC**TGG**  AGAATTGTCGCTGGTGTAG**CGG** | none | TCGCAAACAGGTGCTATGAG\* | TCCACTGCGAGCATCATAAC\* |
| *his-72(uge50[his-72::gfp AAIGtoSAVM]) III* | pKD051 | GCTTCCAGTCGGCTGCCAT**CGG** | oKD0271 | GACTACTGAAGCACACGAAAC\*\* | CGACCGCAACGCGTAGGGC\*\* |
|  |  |  |  |  |  |
| **Gene** |  | **Source** |  | **PCR primer 1** | **PCR primer 2** |
| *act-1* |  | LY et al. 2015 |  | ACGCCAACACTGTTCTTTCC | GATGATCTTGATCTTCATGGTTGA |
| *hsp-70* |  | LY et al. 2015 |  | CGGTATTTATCAAAATGGAAAGGTT | TACGAGCGGCTTGATCTTTT |
| *hsp-16.2* |  | This study |  | CCATCTGAGTCTTCTGAGATTG | GATTGATAGCGTACGACCATCC |

**Table S2. Reagents used for allele generation by CRISPR/Cas9 and quantitative PCR.**

\*Short PCR product only amplified when deletion is present.

\*\*Same size PCR product in wildtype and *uge29*, but *uge29* contains a *Pst*I restriction site.