**S2 Table.** Sequences of guide RNA targets, and primers used to amplify Repair Templates (RTs), for CRISPR/Cas9 editing of *HOC1* and *IRA1* genes.

(a) *HOC1* locus: Guide RNA targets and Repair Template primers for *HOC1* frameshift repair and *HOC1* disruption. In all primers, underlined nucleotides in red font indicate nucleotide substitutions introduced to alter PAM sites, and those in blue font indicate the 6x STOP codon cassette plus five additional nucleotides that together served as a reverse primer tag to screen for *HOC1* disruptants.

| **Guide target/Primer** | **Sequence (5'→3')** | **Purpose** |
|---|---|---|
| **Guide RNA target 1** | **GATCATCCCGATGCTTTTTG** | Repairing *HOC1* frameshift. |
| Forward primer left piece of RT1 | GAAGCTGATAATCGGCAGTACC | |
| Reverse primer left piece of RT1 | CTGAAAATGTCTCTCCAAAAAGCATCGGGATGATCATTGGAATACAAAAC | |
| Forward primer right piece of RT1 | GTTTTGTATTCCAATGATCATCCCGATGCTTTTTGGAGAGACATTTTCAG | |
| Reverse primer right piece of RT1 | CAGGTTAGATTTCTAAGGAACC | |
| **Guide RNA target 2** | **AACAACTCATGAACGAAACC** | Disruption of *HOC1*. |
| Forward primer left piece of RT2 | AATGTCAGCTAGTTCCAGTGAG | |
| Reverse primer left piece of RT2 | GGCTTCGAAGAATGCTGGTTAATGATGATAGTAATAGCGAGCTTCGTTCATGAGTTG | |
| Forward primer right piece of RT2 | CAACTCATGAACGAAGCTCGCTATTACTATCATCATTAACCAGCATTCTTCGAAGCC | |
| Reverse primer right piece of RT2 | CAGGTTAGATTTCTAAGGAACC | |

(b) *IRA1* locus: Guide RNA targets and Repair Template primers for SNP editing in *IRA1.* In all primers, underlined nucleotides in red font indicate nucleotide substitutions introduced to alter PAM sites, and those in blue font indicate incorporated SNPs.

| **Guide target/Primer** | **Sequence (5'→3')** | **Purpose** |
|---|---|---|
| **Guide RNA target 1** | **ACAAGACAAAATGGAACCTG** | Editing the 598A>G SNP (N200D). To introduce this SNP, the Right piece of RT1 was amplified from Pp2 genomic DNA. |
| Forward primer left piece of RT1 | ATGAGTGAATCTTTAGTGGCATC | |
| Reverse primer left piece of RT1 | CTCTTGAATAACTGCATTGGCTACAGCAGGTTCCATTTTGTCTTGTTTAAAC | |
| Forward primer right piece of RT1 | GTTTAAACAAGACAAAATGGAACCTGCTGTAGCCAATGCAGTTATTCAAGAG | |
| Reverse primer right piece of RT1 | CTTTGAGGCAAGCTTCACCAAGGCATTGTCAGGCCTATAAACAGACAATATGGC | |
| **Guide RNA target 2** | **TGACAATGCCTTGGTGAAGC** | Editing the 1177G>T SNP (V393L). |
| Forward primer left piece of RT2 | CTTTGAGTTCGTATCTAGCAAG | |
| Reverse primer left piece of RT2 | CTTTGAGGCAAGCTTCACCAAGGCATTGTCAGGCCTATAAACAGACAATATGGC | |
| Forward primer right piece of RT2 | GCCATATTGTCTGTTTATAGGCCTGACAATGCCTTGGTGAAGCTTGCCTCAAAG | |
| Reverse primer right piece of RT2 | GTAACATATCAACCAATGAATCG | |
| Forward primer left piece of RT3 | CTTTGAGTTCGTATCTAGCAAG | Editing the 1195G>A SNP (D399N). |
| Reverse primer left piece of RT3 | CTTTGAGGCAAGCTTCACCAAGGCATTGTTAGGCCTATAAACAGACACTATGGC | |
| Forward primer right piece of RT3 | GCCATAGTGTCTGTTTATAGGCCTAACAATGCCTTGGTGAAGCTTGCCTCAAAG | |
| Reverse primer right piece of RT3 | GTAACATATCAACCAATGAATCG | |
| **Guide RNA target 3** | **TACATATGACAACGAACTGT** | Editing the 4397G>A SNP (G1466D). To introduce this SNP, the Left piece of RT4 was amplified from Pp2 genomic DNA. |
| Forward primer left piece of RT4 | ACAGCTACTAATTGAATATGGC | |
| Reverse primer left piece of RT4 | GCTTTTGTGGGTGGCTAACAGTTCGTTGTCATATGTAGAGACAACATCGATA | |
| Forward primer right piece of RT4 | TATCGATGTTGTCTCTACATATGACAACGAACTGTTAGCCACCCACAAAAGC | |
| Reverse primer right piece of RT4 | GGAGGAATTAGTGAGTTGAGAC | |