**Table S5.** List of primer used for *tafrq* replacement cassette, complementation cassette and diagnostics PCR.

 (Fw: direct orientation; Rv: reverse orientation).

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| --- | --- | --- | --- | --- |
| Target DNA  | Primer Name  | Orientation  | Sequence 5’- 3’  | Size (bp)  |
| 5’ flank upstream *tafrq* gene  | oL3867 oL3884  | Fw Rv  | AGCGGATAACAATTTCACACAGGAAACAGCACTTCCACCAGCCCACTCCT AAAAATGCTCCTTCAATATCATCTTCTGTCAAATGCCTACCTAGGCTTGC  | 600  |
| 3’ flank downstream *tafrq* gene  | oL3807 oL3808  | Fw Rv  | GACCGGGATCCACTTAACGTTACTGAAATCAATTAGGGATTCCCTCCCCCC GTAACGCCAGGGTTTTCCCAGTCACGACGGAAATGCGTCGAGTGCCTGT  | 527  |
| *hph*   | oL768 oL769  | Fw Rv  | GACAGAAGATGATATTGAAGGAGC GATTTCAGTAACGTTAAGTGGAT  | 1435  |
| Construct amplification  | oL83 oL84  | Fw Rv  | GGCAGTGAGCGCAACGCAAT  ATTCAGGCTGCGCAACTGTT   | 2562  |
| Upstream integration   | oL1269 oL3908  | Fw Rv  | GCACCAAGCAGCAGATGATA AAACAAAAAAAAAACAGGGCCAGTATGGTACAGTGTATACGCGCATACAG  | 1680  |
| Downstream integration  | oL32 oL3804  | Fw Rv  | ATGGCTGTGTAGAAGTACTC GTAACGCCAGGGTTTTCCCAGTCACGACGAAAGTGAGACGAGATAAAGGG  | 909  |
| *tafrq* ORF  | oL3915 oL3916  | Fw Rv  | GAAAATTTGCAGGTCGGCATGCCCGTCGGAACCAGGCTAGCCAAACGGCA ATAACAAATACGTCGTAGGGG  | 1080  |
| 5’ flank upstream *tafrq* gene for complementation   | oL3867-promotor-frq-rev  | Fw Rv  | AGCGGATAACAATTTCACACAGGAAACAGCACTTCCACCAGCCCACTCCT TTTCGGAGGATTGCCCTCTGTCGGCTGCATTGTAGGTTCAGGTTATTTAC  | 995  |
| *tafrq*-V5His6  | oL3857-oL1586  | Fw Rv  | ATGCAGCCGACAGAGGGCAA TCAATGGTGATGGTGATGAT  | 3143  |
| 3’ UTR with V5 and *bleoR* tail  | ol5096-oL5214  | Fw rv  | CGTACCGGTCATCATCACCATCACCATTGATTGTACGGGACATTTCATAT AATGGAAGTATTAGGGTAGGGTAGGGTAGGATAACAAAAGCTCATTAAAC  | 299  |
| *bleoR*  | oL5091-oL5090  | Fw Rv  | CAAGCTTGCAAATTAAAGCC CCTACCCTACCCTACCCTAA  | 1307  |
| 3’ flank downstream *tafrq* gene for complementation  | oL5213 oL3799  | Fw Rv  | GACGCTCGAAGGCTTTAATTTGCAAGCTTGGCCAGTTTAAGGCTATACTG GTAACGCCAGGGTTTTCCCAGTCACGACGAAAGTGAGACGAGATAAAGGG  | 498  |