

Oligonucleotides used as PCR primers in this study

| Name | Sequence (5' to 3') | Location ^a |
|---|-------------------------------------|-----------------------|
| Oligonucleotides designed on the 28S rRNA genes | | |
| #03 | GGGTAAACGGCGGGAGTAACTATGACTCTC | -34 → -5 |
| #05 | AAGCCCGTTCCTTGGCTGTGGTTTCGCTA | 109 → 80 |
| #06 | TACTAATTAGATGACGAGGCATTTGGCTA | 32 → 3 |
| #011 | ATTCAGGTGAGGGATGTACGTG | -528 → -507 |
| #013 | CGTTCAACGGTCAGCTCAGAAC | -184 → -163 |
| #015 | GTCACCACTCTGCACGCTTGGAAACG | 333 → 309 |
| #016 | AGGAGAGATCTTATGTCGATGCGG | -858 → -835 |
| #017 | ATGAAGCCGGAGATCTGATGACGG | -1342 → -1319 |
| Oligonucleotides designed inside R2Bm | | |
| A | TCCAGTCGTCTTAATCTGGTGACCAG | 36 → 61 |
| B | GGCCGTACGCCGGCGAAATTGGATCAGTAGA | 4083 → 4053 |
| #25 | TGCCACAAAACCAGTAGACAAAAGCGCAG | 1498 → 1527 |
| #26 | TAAGATTTCGTAAGAACTGCGGTGGGCCTG | 3094 → 3123 |
| #27 | CTGCAGTCTTGGGTCTCATAGC | 1460 → 1439 |
| #28 | ACACTTCTTGTACAGTTCCTGC | 1567 → 1546 |
| #210 | TTTTCATCGCCGGATCATCATGCCATCG | 4185 → 4158 |
| ORF-s | ATGATGGCGAGCACCGCACTGTCCCTTATGGGACG | 596 → 630 |
| ORF-as | TCAACCAACGCCGCCCCCATGACGGACGTCATC | 3940 → 3907 |
| 212Wt | CCCGGCCACAGTGGGTTTTTTTCC | 772 → 795 |
| 212Mu ^b | CCCGGCCACGGTGGGTTATTTACT | 772 → 795 |

^a Positions of each oligonucleotide on the 28S rRNA genes are measured in the direction from 5' to 3' as a plus from the presumed cleaved site on the sense strand of the rRNA gene in C65 cell genome. Positions of each oligonucleotide inside R2Bm are measured from the beginning of R2Bm.

^b 212Mu was designed at the same position of 212Wt in the frame-shifting mutant (see Fig. 6).