**S3 Table. The primer pairs used to ensure the correct deletion mutants.**

|  |  |  |
| --- | --- | --- |
| Fragment a | Primers | Sequences |
| 1 | 1-F  1-R | 5’-CGCATCGTCAACCTTAGAA-3’  5’-CGCAACTTAGTAGGGGACAT-3’ | |
| 2 | 2-F  2-R | 5’-CTTGGCTGGAGCTAGTGGAGGT-3’  5’-GGATGCCTCCGCTCGAAGTA-3’ | |
| 3 | 3-F  3-R | 5’-GGGTGACGGACGTTAGTT-3’  5’-GGATGCCTCCGCTCGAAGTA-3’ | |
| 4 | 4-F  4-R | 5’-TCTGGACCGATGGCTGTGTAG-3’  5’-ATGACAGCCGATGGGATA-3’ | |

1. The corresponding amplified fragments were marked in Fig 3B.