**Supplementary information**



**Fig. S1. Alignment of the sequencing results of TRV2-Sp*PDS* and the inserted *PDS* fragments**

P-A, sequencing result of TRV2-*SpPDS.* P-B, sequencing result of insert *PDS* fragment. Alignment of the sequencing results of TRV2- *SpPDS* (P-A)and the inserted *PDS* (P-B)fragment showed that the two sequences shared 100% similarity.



**Fig. S2. Alignment of the sequencing results of TRV2-Sp*ChlH* and the inserted *ChlH* fragments**

C-A, sequencing result of TRV2-*SpChlH.* C-B, sequencing result of insert *ChlH* fragment. Alignment of the sequencing results of TRV2- *SpChlH* (C-A)and the inserted *ChlH* (C-B) fragment showed that the two sequences shared 100% similarity.

**Supplementary Table S 1. Primers used in this study.**

|  |  |
| --- | --- |
| **Primers name** | **Primer sequence (5´-3´)** |
| SpACTIN-FSp ACTIN-R | 5´-CAGCCACTCGTCTGTGATAAT-3´5´-TAACCACGCTCCGTCAAGAT-3´ |
| SpGAPDH-FSpGAPDH-R | 5´-TCTCAAACCTACCGCCTCCC-3´5´-TCGTTCACTCCCACCACAAA-3´ |
| sSpUBQ-FSpUBQ-RSpPDS-1-F | 5´-TTGGCAAGCAACAATCAT-3´5´-GCAGATGGACAGCAGGAC-3´5´-GTGGGTATCTCGCAAAGGGC-3´ |
| SpPDS-1-RSpChlH-FSpChlH-RSpPDS-GSP-F | 5´-AGTCACTGCGAGATACCCAC-3´5´-CAGCAGTCCAAATCTTAACGTA -3´5´-ATGGTATTCGCATAACTCCTTC-3´5´-CTGGAGAAATTAGTCGGAGTACCTG-3´ |
| SpPDS-nest-FOligo dT PrimerNested PrimerTRV2\_insert\_yz-FTRV2\_insert\_yz-RPDS\_insert\_EcoRI-FPDS\_insert\_EcoRI-RChlH\_insert\_SmaI-FChlH\_insert\_SmaI-RpTRV1-FpTRV1-RpTRV2-FpTRV2-R | 5´-AATTGAGGGAGATGCGTTTGTG-3´5´-GCTGTCAACGATACGCTACGTAACGGCATGACAGTG(T)24-3´5´-CGCTAGTAACGGCATGACAGTG-3´5´-TAGATAATGGTTTGGTGGTC-3´5´-TAGTTTAATGTCTTCGGGAC-3´5´-TTCTGTGAGTAAGGTTACCGGCCATGTCAAAGGCACTTAA-3´5´-CCCATGGAGGCCTTCTAGAGAGTCACTGCGAGATACCCAC-3´5´-CACGCGTCTC GAGGCCCCAGCAGTCCAAATCTTAACGTA-3´5´-TAATGTCTTC GGGACATGCC CATGGTATTCGCATAACTCCTTC-3´5´-AGCAGCAACCGACGACTT-3´5´-ACCAACTCCTTCTTCTCAGACT-3´5´-ATATTCCTGCGAATCCAAACAC-3´5´-GAA ACTCAAATGCTACCAACGA-3´ |