

Table S1. Primers Used in This Study

Primer name	Primer sequence (5'-3')	Reference source
<i>BDUbc</i> -F	ATGGTGGACGTGTCGCGCGTGCAG	AGY80454.1
<i>BDUbc</i> -R	TCAGCCGGAGCAGAGCTTTTCAAG	AGY80454.1
<i>BDSKL1</i> -F	ACGGACTGCACTGCCAAGCGCAACAT	AIA26165.1
<i>BDSKL1</i> -R	CTAGAAGGGCCTTCCAGCAGCTTCCATC	AIA26165.1
q <i>BDUbc</i> -F	CTTGAAGACGGCGCTGCTAT	AGY80454.1
q <i>BDUbc</i> -R	GCACCTTTTCTTCCATGCCA	AGY80454.1
q <i>BDSKL1</i> -F	ATGTTCTTGAGGCAAGGGT	AIA26165.1
q <i>BDSKL1</i> -R	TGAGTTCATGACGGCACCAT	AIA26165.1
<i>GAPDH</i> -F	GATTTTGTCGGTGATTCAAGGTC	Li et al., 2021
<i>GAPDH</i> -R	ATGTGAGCGATCAGATCCAGAA	Li et al., 2021
<i>Actin</i> -F	TGACAATGGCACTGGAATGG	Li et al., 2021
<i>Actin</i> -R	CCCATCCCTACCATGACACC	Li et al., 2021
hyg501-F	GAGCATATACGCCCCGGAGTC	Luo et al., 2022
hyg501-R	CAAGACCTGCCTGAAACCGA	Luo et al., 2022
pCAMBIA1301-35SN- <i>BDUbc</i> -F	ACCGCGGTGGAGCTC <u>GGTACC</u> ATGGTGGACGTGTCGCGCGTGCAG	AGY80454.1
pCAMBIA1301-35SN- <i>BDUbc</i> -R	CTCGAGGGGGGGCCC <u>GGTACC</u> TCAGCCGGAGCAGAGCTTTTCAAG	AGY80454.1
pCAMBIA1301-35SN- <i>BDSKL1</i> -F	ACCGCGGTGGAGCTC <u>GGTACC</u> ACGGACTGCACTGCCAAGCGCAACAT	AIA26165.1
pCAMBIA1301-35SN- <i>BDSKL1</i> -R	CTCGAGGGGGGGCCC <u>GGTACC</u> CTAGAAGGGCC TTCCAGCAGCTTCCATC	AIA26165.1
pSuper1300-GFP- <i>BDUbc</i> -F	TTAAATACTAGTGGATCC <u>GGTACC</u> ATGGACTGC ACTGCCAAGCGCAACAT	AGY80454.1
pSuper1300-GFP- <i>BDUbc</i> -R	CTCGCCCTTGCTCACCAT <u>GGTACC</u> GAAGGGCCT TCCAGCAGCTTCCATC	AGY80454.1
pSuper1300-GFP- <i>BDSKL1</i> -F	TTAAATACTAGTGGATCC <u>GGTACC</u> ACGTGTCGC GCGTGCAG	AGY80454.1
pSuper1300-GFP-	CTCGCCCTTGCTCACCAT <u>GGTACC</u> GAAGGGCCTT	AGY80454.1

Note: The red part of the primers can be complementarily paired with sequences on the enzyme cleavage sites of the corresponding vectors, and the underline indicates the enzyme cleavage site. All primers were designed by PRIMER PREMIER 5.0 software. All sequences were obtained from whole genome and transcriptome databases. All accession numbers were obtained from GeneBank.

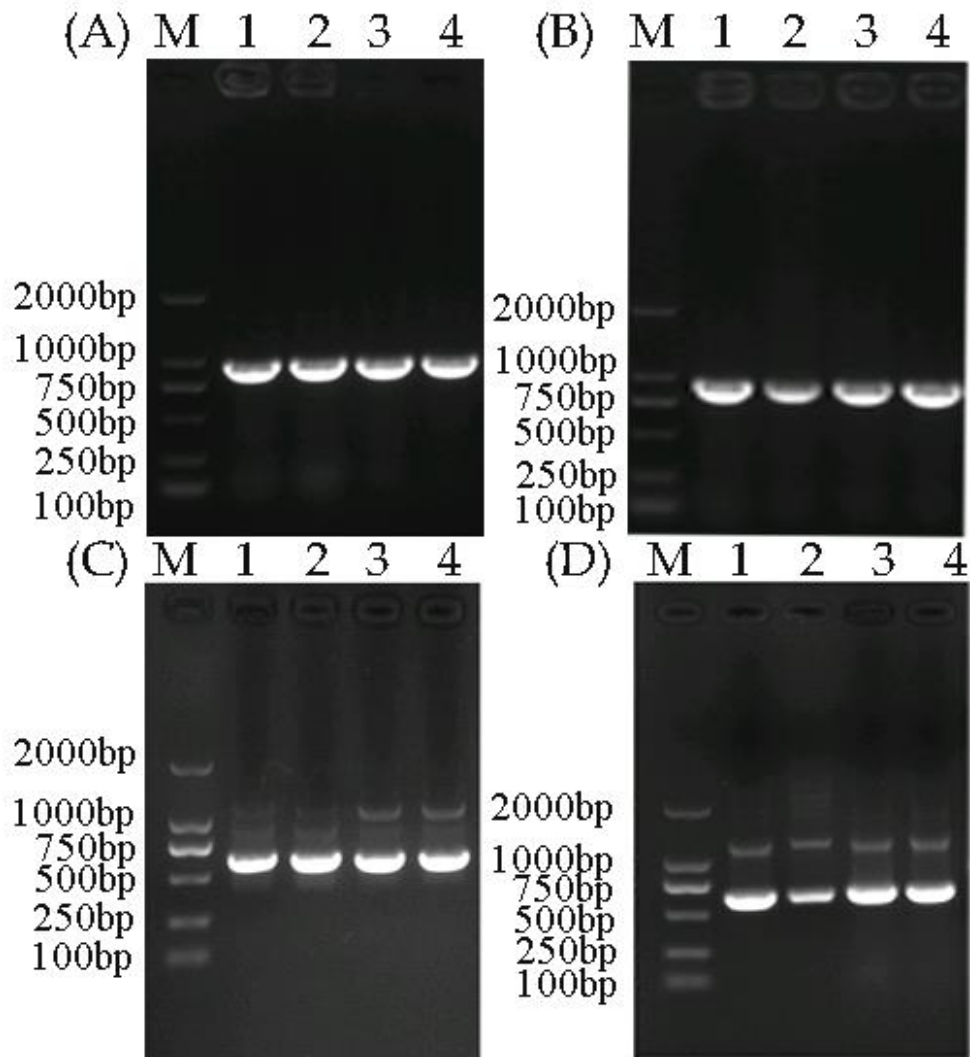


Figure S1. Colony PCR assay of vectors. (A) PCR assay of *E. coli* colonies with overexpression vector; (B) PCR assay of *A.tumefaciens* colonies with overexpression vector;(C) PCR assay of *E. coli* colonies with subcellularly localised vectors;(D) PCR assay of *A.tumefaciens* colonies with subcellularly localised vectors; 1, 2: *BDUbc*; 3, 4: *BDSKL1*.