

Supplementary Table

Supplementary Table S1. Oligo Primers used.

| ID | Sequence | Purpose | Note |
|-------------------------------------|---|-------------------------------|-----------------------------------|
| 8892-8921 upper <i>Hind</i> III | GCCAAGCTTGCATGCCTGCAGGTCAACATG | TRV-GFP generation | |
| 1655-1679 lower <i>Bam</i> H I | ACCGGATCCCCATGGAGGCCTTCTA | TRV-GFP generation | |
| 1161-1172 <i>EGFP</i> upper overlap | CGTCCTAATCCC <u>ATGGTGAGCAAGGGC</u> | TRV-GFP generation | underline indicates EGFP sequence |
| 1157-1172 <i>EGFP</i> lower overlap | <u>TGCTCACCATGGGATTAGGACGTATC</u> | TRV-GFP generation | underline indicates EGFP sequence |
| <i>EGFP</i> 1176-1194 upper overlap | <u>GTACAAGTAAGGATTTAAGGACGTGAACT</u> | TRV-GFP generation | underline indicates EGFP sequence |
| <i>EGFP</i> 1176-1187 lower overlap | GTCCTTAAATCCT <u>TTACTTGTACAGCTCGTC</u> | TRV-GFP generation | underline indicates EGFP sequence |
| <i>NtPDS</i> upper 1 | CTGACGAGCTTTTCGATGCAGTGCAT | <i>NtPDS</i> silencing vector | |
| <i>NtPDS</i> lower 1 | ATATATGGACATTTATCACAGGAAC | <i>NtPDS</i> silencing vector | |
| <i>RhPDS</i> upper 1 | ATTTCTAGAGGACTGAACTCCGTCGTTCT | <i>RhPDS</i> silencing vector | |
| <i>RhPDS</i> lower 1 | ATTGAGCTCCGAAAAGTTACCCTTGCC | <i>RhPDS</i> silencing vector | |
| <i>TRV1</i> upper | TTACAGGTTATTTGGGCTAG | RT-PCR | |
| <i>TRV1</i> lower | CCGGGTTCAATTCCTTATC | RT-PCR | |
| <i>TRV2</i> upper | TGGGAGATGATACGCTGTT | RT-PCR | |
| <i>TRV2</i> lower | CCTAAAACCTTCAGACACG | RT-PCR | |
| <i>NtPDS</i> upper 2 | TCCAAGTGCCACGACCCGAAGA | RT-PCR | |

| | | |
|----------------------------|---------------------------|--------|
| <i>NtPDS</i> lower 2 | CAAAGCGGCTGAACTCCCCTGG | RT-PCR |
| <i>NtACT</i> upper | AGGGTTTGCTGGAGATGATG | RT-PCR |
| <i>NtACT</i> lower | CGGGTTAAGAGGTGCTTCAG | RT-PCR |
| <i>RhPDS</i> upper 2 | CGTTCTGGCGAACAACGAAG | RT-PCR |
| <i>RhPDS</i> lower 2 | TGAAGCATGCACCCA ACTCT | RT-PCR |
| <i>RhACT5</i> upper | AGGGTTTGCTGGAGATGATG | RT-PCR |
| <i>RhACT5</i> lower | CGGGTTAAGAGGTGCTTCAG | RT-PCR |
| <i>GFP</i> upper | ATGGTGAGCAAGGGCGAGGA | RT-PCR |
| <i>GFP</i> lower | CTTGTACAGCTCGTCCATGCC | RT-PCR |
| <i>CP-GFP</i> fusion upper | CGATGATGCCTCTACAGCTTTCC | RT-PCR |
| <i>CP-GFP</i> fusion lower | GGCTGTTGTAGTTGTACTCCAGC | RT-PCR |
| <i>AtACT2</i> upper | TGTTCCCAAGTATTGTTGGTCGTC | RT-PCR |
| <i>AtACT2</i> lower | GCTGAGGGATGCAAGGATTGATC | RT-PCR |
| <i>DgUbi</i> upper | CTAATGAATGCTTACTGTGACCGAC | RT-PCR |
| <i>DgUbi</i> lower | AGGCGAATCATCAGTACCAAGTG | RT-PCR |
| <i>FaACT</i> upper | TGGGTTTGCTGGAGATGAT | RT-PCR |
| <i>FaACT</i> lower | CAGTAGGAGAACTGGGTGC | RT-PCR |

Supplementary Figures

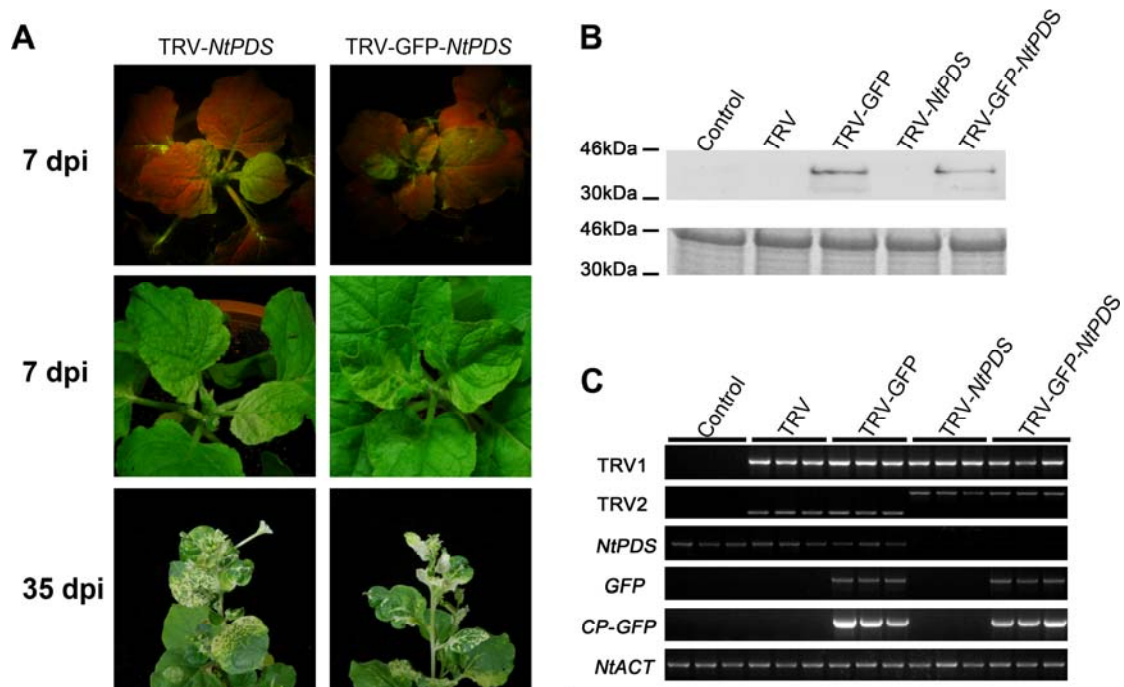


Figure S1. Validation of TRV-GFP vector in *N. benthamiana*. (A) TRV and TRV-GFP infiltrated plants. The 4-leaves stage plants were inoculated on axil by mixture of pTRV2-*NtPDS*/ pTRV2-GFP-*NtPDS* and pTRV1 (1:1, OD₆₀₀=4.0) using a syringe with needle. Plants were photographed under UV illumination and normal light. (B) CP-GFP protein levels in upper leaves 7 days after TRV vector inoculation. Ten microgram protein was used for Western blot in each lane and anti-GFP was used as antibody to detect CP-GFP fusion protein. Coomassie blue staining was used for confirmation of equal loading in each lane. (C) Semi-quantitative RT-PCR of *TRV1*, *TRV2*, *NtPDS*, *GFP* and *CP-GFP* in control and inoculated plants. *NtACT* was used as internal control.

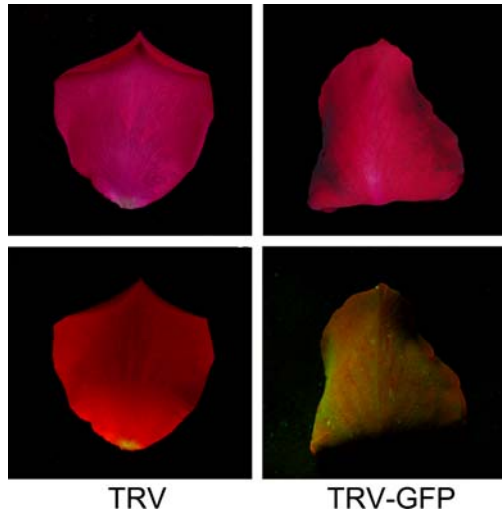


Figure S2. Validation of TRV-GFP in detached rose petals. Rose petals were inoculated by mixture of pTRV1 and pTRV2 (left) or pTRV1-GFP (right) (1:1, OD600=1.0) using vacuum-infiltration. The petals were photographed under normal light (upper panel) and UV illumination (bottom panel) at 7 dpi, respectively.