

**Table S1.** Primers sequences used for cloning of transgenes and testing the viral infection.

| Gene | Primers | Product Size (bp) | tests |
|----------------|--|-------------------|---------------|
| <i>eIF4G</i> | 5'-GGCGAGGGATTATGTCCCAGCG-3' 5'-CGCTGGGACATAAATCCCTCAA-3' | oligo | CRISPR clone |
| <i>eIF4G</i> | 5'-CAAGGTTCGCTCCCCTTTTTCCC-3' 5'-GGAGCTGAGCTTGCCTGGCAGGGA-3' | 1620 | PCR |
| <i>eIF4G-N</i> | 5'-GGGGACAAGTTGTACAAAAAAAGCAGG CTTCTATGTCCCAGCGAGGGGACAGG -3' 5'-GGGGACCACCTTGATACAAGAAAGCTGGGT CTTATTGATGATGGTGTGAAT -3' | 1053 | Gateway clone |
| <i>P8</i> | 5'-GGGGACAAGTTGTACAAAAAAAGCAGG CTTCTATGACTGGCACCCATGACGA-3' 5'-GGGGACCACCTTGATACAAGAAAGCTGGGT CTACAATAATCGAGGAAGCTT-3' | 1773 | Gateway clone |
| <i>P9-1</i> | 5'-AAGAGCGGAGAACGTTGGA-3' 5'-CGAAGATGCCGTATCGAGT-3' | 150 | qRT-PCR |
| <i>eIF4G</i> | 5'-CCTGGGATGCCCATGTCAAT-3' 5'-TGCATCATTGTTGGCGGTTG-3' | 209 | qRT-PCR |
| <i>SP</i> | 5'-TTGTCACTCATTCTATCACACCTG-3' 5'-TTCTTCCACACTTCTCATCTT-3' | 237 | qRT-PCR |
| <i>UBQ10</i> | 5'-TGGTCAGTAATCAGCCAGTTGG-3' 5'-GCACCAACAAATCTGACGAACAG-3' | 65 | qRT-PCR |
| <i>Cas9</i> | 5'-AAAGACCGAGGTGCAGACAG-3' 5'-CGATCCGTGTCTCGTACAGG-3' | 794 | PCR |

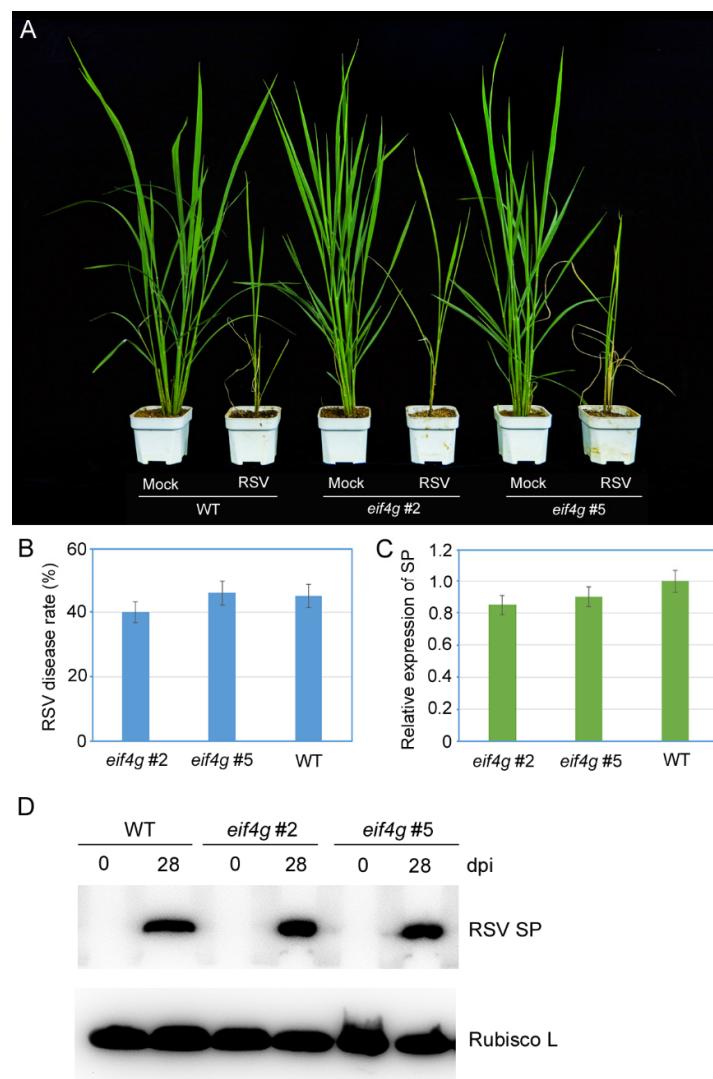


Figure S1. Evaluation of rice stripe virus (RSV) resistance of rice *eif4g* mutant lines. (A) Disease symptoms of mock-inoculated and RSV-infected *eif4g* mutant lines (*eif4g* #2, *eif4g* #5) and wild-type (WT, Nipponbare) rice plants. Photographs were taken at 28 days postinoculation (dpi). (B) Incidence of RSV disease rate in *eif4g* mutant lines (*eif4g* #2, *eif4g* #5) and wild-type (WT, Nipponbare) rice plants at 28 dpi. (C) qRT-PCR analysis of RSV SP mRNA transcription levels in *eif4g* mutant lines (*eif4g* #2, *eif4g* #5) and WT rice plants at 28 dpi. Signal intensities for each transcript were normalized to the signal intensity for UBQ. (D) Western blot analysis of RSV-encoded SP protein accumulation in virus-infected *eif4g* mutant lines (*eif4g* #2, *eif4g* #5) and wild-type (WT, Nipponbare) rice plants using a SP-specific antibody. The rubisco large subunit level served as a loading control. Rice plants were all collected at 28 dpi. All data are means \pm SD (n = 3).