

| Sample | Nucleotide polymorphism | | | Amino acid polymorphism | | |
|--------------------------------|-------------------------|------------|----------|-------------------------|-----------------|----------|
| | Reference VPg | SNP | Position | Reference VPg | AA substitution | Position |
| wild-type 1 | A | R (A or G) | 338 | D (GAC) | G (GGC) | 113 |
| wild-type 2 | | | | | | |
| wild-type 3 | | | | | | |
| wild-type 4 | | | | | | |
| wild-type 5 | A | R (A or G) | 358 | N (AAU) | D (GAU) | 120 |
| wild-type 6 | C | Y (C or U) | 341 | S (UCA) | L (UUA) | 114 |
| <i>eif4e1</i> ^{KO} 1 | | | | | | |
| <i>eif4e1</i> ^{KO} 2 | | | | | | |
| <i>eif4e1</i> ^{KO} 3 | | | | | | |
| <i>eif4e1</i> ^{KO} 4 | | | | | | |
| <i>eif4e1</i> ^{KO} 5 | | | | | | |
| <i>eif4e1</i> ^{KO} 6 | A | R (A or G) | 358 | N (AAU) | D (GAU) | 120 |
| <i>eif4e1</i> ^{KO} 7 | A | R (A or G) | 310 | M (AUG) | V (GUG) | 104 |
| <i>eif4e1</i> ^{KO} 8 | | | | | | |
| <i>eif4e1</i> ^{KO} 9 | C | Y (C or U) | 341 | S (UCA) | L (UUA) | 114 |
| <i>eif4e1</i> ^{KO} 10 | A | M (A or C) | 344 | N (AAU) | T (ACU) | 115 |

Supplementary table 1. Recapitulative table of detected single nucleotide polymorphisms (SNP) at the TuMV VPg coding sequence and the associated amino acid substitutions at relative to the reference TuMV-GFP UK1 VPg sequence (GenBank ID: EF028235.1) obtained from six wild-type and ten *eif4e1*^{KO} TuMV-GFP UK1-inoculated plants. The identical polymorphisms corresponding to the amino acid substitutions N120G and S114L observed in TuMV VPg sequences obtained from both wild-type and *eif4e1*^{KO} plants are highlighted in green and blue, respectively.