

**Table S2.** List of the chemically synthesized oligonucleotide primers. The primers that were applied for the generation of pDEST-His<sub>6</sub>-MBP-mEYFP expression plasmids coding for the wild-type, P5, P4, P1, P2 and P1' variants of SFV nsP12 (EYHAGA↓GVVETP) cleavage site sequence are listed. Modified cleavage site residues are bold and red. FWD=forward, REV =reverse.

Cleavage site sequence	Oligonucleotide primers
EYHAGA↓GVVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTGGTGTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>Y</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTTATGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACATAAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>I</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTATTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACAATAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>Q</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTCAGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACCTGAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>N</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTAACGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACGTTAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>D</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTGATGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACATCAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>A</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTGCGGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACCGCAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>M</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTATGGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACCATAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>W</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTTGGGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACCCAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>F</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTTTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACAAAAGCACCAGCATGATATTCTTTAAT-3'
<b>E</b> QHAGA↓GVVETP	FWD:5'-TAAAGAACAGCATGCTGGTGCTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCACCAGCATGCTGTTCTTTAAT-3'
EY <b>E</b> AGA↓GVVETP	FWD:5'-TAAAGAATATGAAGCTGGTGCTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCACCAGCTTCATATTCTTTAAT-3'
EY <b>T</b> AGA↓GVVETP	FWD:5'-TAAAGAATATACCGCTGGTGCTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCACCAGCGGTATATTCTTTAAT-3'
EY <b>R</b> AGA↓GVVETP	FWD:5'-TAAAGAATATCGCGCTGGTGCTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCACCAGCGGATATTCTTTAAT-3'
EY <b>G</b> AGA↓GVVETP	FWD:5'-TAAAGAATATGGTGCTGGTGCTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCACCAGCACCATATTCTTTAAT-3'
EYH <b>A</b> A↓GVVETP	FWD:5'-TAAAGAATATCATGCTGCTGCTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCAGCAGCATGATATTCTTTAAT-3'
EYH <b>A</b> V↓GVVETP	FWD:5'-TAAAGAATATCATGCTGTGGCTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAGCCACAGCATGATATTCTTTAAT-3'
EYHAG <b>G</b> ↓GVVETP	FWD:5'-TAAAGAATATCATGCTGGTGGTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCACCAGCATGATATTCTTTAAT-3'
EYHAG <b>V</b> ↓GVVETP	FWD:5'-TAAAGAATATCATGCTGGTGTGGTGTGTTGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACAACACCAACACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>P</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTGGTCCGGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACCGGACCAGCACCAGCATGATATTCTTTAAT-3'
EYHAGA↓ <b>S</b> VVETP	FWD:5'-TAAAGAATATCATGCTGGTGCTGGTAGCGTTGAAACACCGG-3' REV:5'-CTAGCCGGTGTTCACCGTACCAGCACCAGCATGATATTCTTTAAT-3'