

1 **Supplemental Table S1. Primers used in this study**

2

NOTE	Primer Name	Sequence (5'-3')
For generating Tm-2 ² -LIC/ tm-2-LIC vector	Tm-2 ² -LIC1-F	CGACGACAAGACCGT GACCATGGCTGAAATTCTT CTTACATCAG
	Tm-2 ² -NO STOP-LIC2-R	GAGGAGAAGAGCCGT CGTTTACTCAGCTTTTAA AGCCGTTC
	Tm-2 ² -STOP-LIC2-R	GAGGAGAAGAGCCGT CATTTACTCAGCTTTTAA GCCGTTC
For generating D481V mutant	D481V-F	GTCGCATACATGTCTTGTACATAG
	D481V-R	CTATGTAACAAGACATGTATGCGAC
For generating K191R mutant	K191R-F	CCGGTCTGGGGAGAACAACCTTTGC
	K191R-R	GCAAGAGTTGTTCTCCCCAGACCGG
For generating CC-LIC vector	Tm-2 ² -LIC1-F	see above
	CC-NO STOP-LIC2-R	see above
For generating NBS-LIC vector	NBS-LIC1-F	CGACGACAAGACCGT GACCATGGTTCTGCTGGA TCGGAGAAGATTA
	NBS-NO STOP-LIC2-R	GAGGAGAAGAGCCGT CGCTTAGCCAAGTCCACA CACAAC
For generating LRR-LIC vector	LRR-LIC1-F	CGACGACAAGACCGT CACCATGCGAGAGGCTGA GGATTTGGCGG
	Tm-2 ² -NO STOP-LIC2-R	see above
For generating ΔCC-LIC vector	NBS-LIC1-F	see above
	Tm-2 ² -NO STOP-LIC2-R	see above
For generating ΔLRR15-LIC vector	Tm-2 ² -LIC1-F	see above
	ΔLRR15-NO STOP-LIC2-R	GAGGAGAAGAGCCGT CGATCCGTGCACGTTACT TCAGAC
For generating TMV MP-LIC vector	MP-LIC1-F	CGACGACAAGACCGT CACCATGGCTCTAGTTGTT AAAGGAAAAG
	MP-NO STOP-LIC2-R	GAGGAGAAGAGCCGT CGAAACGAATCCGATTCCG GCGACAG
For generating MP N5-LIC vector	N5-LIC1-F	CGACGACAAGACCGT CACCATGGCTAAAGGAAA AGTGAATATCAATGAG
	MP-NO STOP-LIC2-R	see above
For generating MP C81-LIC vector	MP-LIC1-F	see above
	C81-NO STOP-LIC2-R	GAGGAGAAGAGCCGT CGGGGCCCTCCGTCTCTC ACGTTTGT
For generating p50-LIC vector	p50-LIC1-F	CGACGACAAGACCGT CACCATGGAGATAGAGTC TTTAGAGCAG
	P50-LIC2-R	GAGGAGAAGAGCCGT CGTTGTGTTCTGCATCG ACCTTATAC

For generating Tm-2 ² -cYFP-LIC and tm-2-cYFP-LIC vectors	Tm-2 ² -LIC1-F	see above
	Tm-2 ² -cYFP-Fusion-R	acctccgccagatgagccacctccTTTACTCAGCTTTTAA AGCCGTTC
	cYFP-Fusion-F	ggaggtggctcatctggcggaggtGACAAGCAGAAGAA CGGCATC
	cYFP-LIC2-R	GAGGAGAAGAGCCGT CGCTTGTACAGCTCGTCC ATGCCGAG
For generating MP-nYFP-LIC vector	MP-LIC1-F	see above
	MP-nYFP-Fusion-R	acctccgccagatgagccacctccCGAAACGAATCCGAT TCGGCGACAG
	nYFP-Fusion-F	ggaggtggctcatctggcggaggtGTGAGCAAGGGCGA GGAGCTG
	nYFP-LIC2-R	GAGGAGAAGAGCCGT CGGGCCATGATATAGACG TTGTGG
For generating p50-nYFP-LIC vector	p50-LIC1-F	see above
	p50-nYFP-Fusion-R	acctccgccagatgagccacctccTTGTGTTCTGCATCG ACCTTATAC
	nYFP-Fusion-F	see above
	nYFP-LIC2-R	see above

3 Sequences in bold represent for LIC1 or LIC2 adaptor sequence.