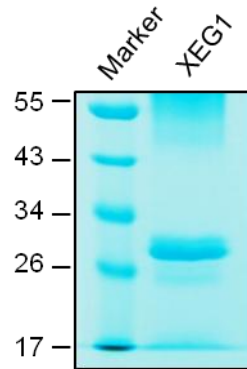
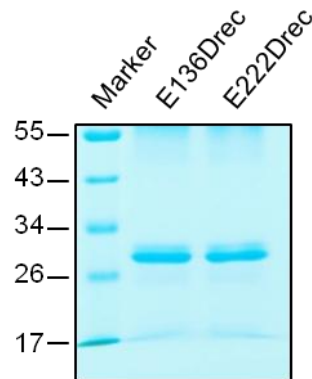


Supplemental Data. Ma et al. (2015). Plant Cell 10.1105/tpc.15.00390

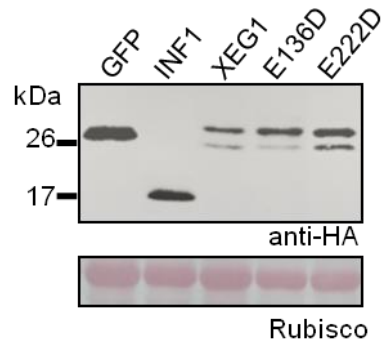
Supplemental Figure 1. SDS-PAGE of Ps109681rec from *P. pastoris* stained with Coomassie Blue. Left lane, molecular weight markers; right lane, isolated Ps109681 protein (at 27 kDa).



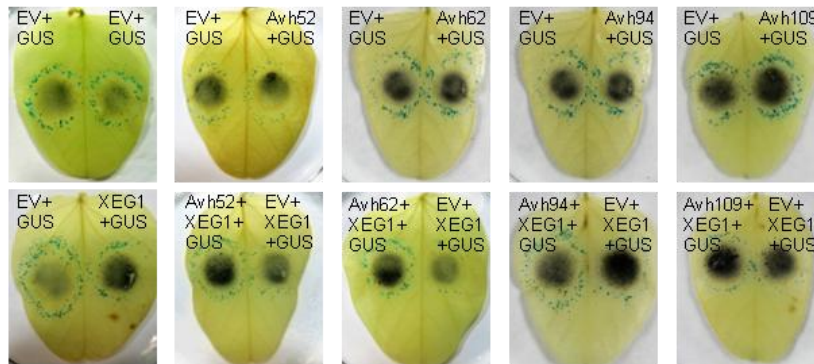
Supplemental Figure 2. SDS-PAGE analysis E136Drec and E222Drec protein stained with Coomassie Blue. Left lane, molecular weight markers; right lanes, isolated E136Drec protein and E222Drec protein (at 27 kDa).



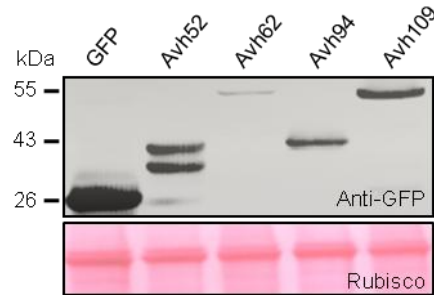
Supplemental Figure 3. Immunoblot analysis of GFP, INF1 and XEG1 wild type and mutant proteins produced in *N. benthamiana* during the experiments shown in Figure 6D. Upper panel, detection with anti-HA antibodies; lower panel, staining of the Rubisco band with Ponceau S.



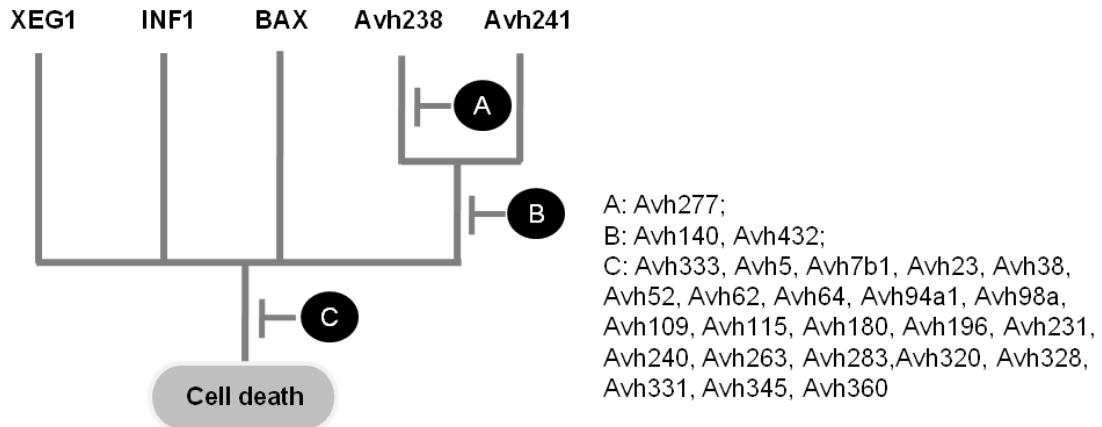
Supplemental Figure 4. Representative soybean leaves for suppression of XEG1-triggered cell death in soybean by Avh52, Avh62, Avh94 or Avh109. Experimental design using the double-barreled particle bombardment assay. Leaves bombarded with the pairs of DNA mixtures indicated.



Supplemental Figure 5. Immunoblot analysis of GFP, Avh52, Avh62, Avh94 and Avh109 produced in *N. benthamiana* during the experiments shown in Figure 9. Upper panel, detection with anti-GFP antibodies; lower panel, staining of the Rubisco band with Ponceau S.



Supplemental Figure 6. Classification of *P. sojae* effectors based on suppression of cell death triggered by BAX, RXLR effectors, or the PAMPs INF1 and XEG1.



Supplemental Table 1. The MS/MS sequencing information of the proteins according to peak 3 after ultrafiltration.

Hits	Prote in Mass	No. of Peptide	Scan No.	Peptide Mass	Peptide sequence	gi number ^a	JGI ID (<i>Phytophthora sojæ</i> v1.1) ^b	Sequence Header
1	2659 8.7	4	2658	836.4	SYANAALK	49476326	109281	>gi 49476326 gb
			3024	1471.7	QTTYTFEADLRK			AAT66504.1 cell
			3048	1115.6	FDPVQVANVK			12A
			3114	1343.6	QTTYTFEADLR			endoglucanase [<i>Phytophthora sojæ</i>]
2	2559 7.7	4	3060	1236.6	TITNFSADLQK	78127394	109681	>gi 78127394 gb
			3072	1185.6	SYSNAALVFSK			ABB22029.1 cell
			3078	870.5	FLSYLTK			12A
			3586	2734.4	NQGLPSSQYLITLEAGT EPFVGTNAK			endoglucanase [<i>Phytophthora sojæ</i>]
3	4268 1.4	2	3092	1327.7	AIVDSGTSLIAGPK	66270071	158318	>gi 66270071 gb
			3870	1994.0	FDGLFGLAFDTSVDHL K			AAY43365.1 aspartic protease [<i>Phytophthora infestans</i>] gi 31070 4916 gb ADP0819 1.1 aspartic protease 1 [<i>Phytophthora infestans</i>]
4	6596 3.6	1	3742	2445.2	VNLWTFNEPLSFTTAG YATGR	301120678	137930	>gi 301120678 ref XP_002908066.1 beta-glucosidase, putative [<i>Phytophthora infestans</i> T30-4] gi 2621030 97 gb EEY61149. 1 beta-glucosidase, putative [<i>Phytophthora infestans</i> T30-4]

^agi number: Gene IDs of *Phytophthora sojæ*; identical at <http://www.ncbi.nlm.nih.gov/genbank/>

^bJGI ID: Gene IDs of *Phytophthora sojæ*; identical at http://genome.jgi-psf.org/Physo1_1/Physo1_1.home.html

Supplemental Table 2. Information of Primers Used.

Primer name	Primer 5'-3' ^a	Purpose
pGR107-Cla I-109281-F	ccatcgatATGAAGCTCTCTGCTGCTG	Clone 109281 for expression in <i>N. benthamiana</i>
pGR107-109281-Sma I-R	gggGGCCGTGTGGACGGCGGC	Clone 109281 for expression in <i>N. benthamiana</i>
pGR107-Cla I-109681-F	ccatcgatATGAAGGGATTCTTCGCCG	Clone 109681 for expression in <i>N. benthamiana</i>
pGR107-109681-Sma I-R	gggGTTGACCGCAGCCGAGAAC	Clone 109681 for expression in <i>N. benthamiana</i>
pGR107-Cla I-158318-F	ccatcgatATGCTGCGCTGCTCGCTGC	Clone 158318 for expression in <i>N. benthamiana</i>
pGR107-158318-Not I-R	ataagaatgcggccgcCTTGTCTGAGGTATTCTCTTG	Clone 158318 for expression in <i>N. benthamiana</i>
pGR107-Cla I-137930-F:	ccatcgatATGCAGAGGCTTCTCCATC	Clone 137930 for expression in <i>N. benthamiana</i>
pGR107-137930-Sma I-R	gggCAGCAAGCGAGTTGCTTCG	Clone 137930 for expression in <i>N. benthamiana</i>
pGR107-Cla I-GFP-F	ccatcgatATGGTGAGCAAGGGCGAGG	Clone GFP for expression in <i>N. benthamiana</i>
pGR107-GFP-Sma I- R	gggTCACTTGTACAGCTCGTCCATG	Clone GFP for expression in <i>N. benthamiana</i>
pGR107-Cla I-INF1-F	ccatcgatATGAACCTTCGTGCTCTGT	Clone INF1 for expression in <i>N. benthamiana</i>
pGR107-INF1-Sma I- R	gggTCATAGCGACGCACACGTAGAC	Clone INF1 for expression in <i>N. benthamiana</i>
pPICZaA-EcoRI-109681-F	ggaatccGGAGACTACTGCGGCCAGTGGGA	Expression of XEG1 E136D and XEG1 E222D in <i>Pichia pastoris</i> for purification
pPICZaA-109681-NotI-R	ataagaatgcggccgcGTTGACCGCAGCCGAGAACGAG GA	Expression of XEG1 E136D and XEG1 E222D in <i>Pichia pastoris</i> for purification
pGR107-PR1-SP-109681 ²⁰⁻²⁴¹ -F1	ccatcgatATGGGATTGTCTCTTTTCGCA	Expression of PR1-SP-XEG1 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
pGR107-PR1-SP-109681 ²⁰⁻²⁴¹ -R1	TGGCCAGTCCCACTGGCCGAGTAGTCTCCGG CACGGCAAGAGTGGGATAT	Expression of PR1-SP-XEG1 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
pGR107-PR1-SP-109681 ²⁰⁻²⁴¹ -F2	GGAGACTACTGCGGCCAGTGGGACTG	Expression of PR1-SP-XEG1 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
pGR107-PR1-SP-109681 ²⁰⁻²⁴¹ -R2	gggGTTGACCGCAGCCGAGAACGAGGA	Expression of PR1-SP-XEG1 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
pGR107-109681 ²⁰⁻²⁴¹ -F	ccatcgatGGAGACTACTGCGGCCAGTGGGACTG	Expression of XEG1 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
pGR107-109681 ²⁰⁻²⁴¹ -R	gggGTTGACCGCAGCCGAGAACGAGGA	Expression of XEG1 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
NbSerk3-qRT-F	TCCTGACGGACCATCTCCTCTTT	RT-qPCR for validation of the Serk3/Bak1 gene transcription level
NbSerk3-qRT-R	GCTCATAACTGGGCAAGGGGCTT	RT-qPCR for validation of the Serk3/Bak1 gene transcription level
NbSerk1-Sil-EcoRI-F	ggaattcGCCCTTAACTGGGCAACGGGCT	Silencing of Serk1 in <i>N. benthamiana</i>
NbSerk1-Sil-BamHI-R	cgggatccGTGAGGGTGGTGAGCAGGATAA	Silencing of Serk1 in <i>N. benthamiana</i>
GFP-Sil-EcoRI-F	ggaattcGTGAGCAAGGGCGAGGAGCTGT	Negative control for silencing of Serk1 in <i>N. benthamiana</i>
GFP-Sil-EcoRI-F	cgggatccGTCCTTGAAGAAGATGGTGCCT	Negative control for silencing of Serk1 in <i>N. benthamiana</i>
pGR107-ClaI-144813-F1	ccatcgatATGAAGAGCTTTCTCCAACCTCGT	Clone 144813 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-144813-SmaI-R2	gggGTTGACAGCGCGGAGAACGAGGA	Clone 144813 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-ClaI-119627-F	ccatcgatATGAAGGTTGCGTTGCTACT	Clone 119627 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-119627-SmaI-R	gggGACGCGACGAACACTGCGGCTA	Clone 119627 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-ClaI-138787-F	ccatcgatATGAAGGTTCTGTTCCGCACTGCT	Clone 138787 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-138787-Sma I-R	gggCTCGCGACGAACGCGACGGAGCA	Clone 138787 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-ClaI-140300-F	ccatcgatATGAAGCTCTCCGTCGCCATCGCCT	Clone 140300 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-140300-Sma I-R	gggCGCCGAGTTGACTGCTACTGAGTA	Clone 140300 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-ClaI-140302-F	ccatcgatATGAAGAGCTCCGCCGCTCCTCGCT	Clone 140302 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-140302-Sma I-R	gggCTGCTGCTGGACCTGCGAGTACT	Clone 140302 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-ClaI-109280-F	ccatcgatATGAAGTTCTGCTCCCCGCCA	Clone 109280 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-109280-Sma I-R	gggCTTGACCTGCACGGAGTAGGACGA	Clone 109280 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-ClaI-109281-F	ccatcgatATGAAGCTCTGCTGCTGTTCT	Clone 109281 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>

pGR107-109281-Sma I-R	gggGGCCGTGTGGACGGCGCCGAGTA	Clone 109281 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-140301-F	ccatcgatATGCAGATCTCCACCGTTCTCACT	Clone 140301 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-140301-Sma I-R	gggGTTGGCGCCGGCCGTGTGGACT	Clone 140301 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-140303-F	ccatcgatATGAAGTTCTCGCTTACTGCCGT	Clone 140303 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-140303-Not I-R	ataagaatcgggccgcATTCTGAGAGAAGCCGACGTCT	Clone 140303 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
C		
pGR107-Clal-140289-F	ccatcgatATGAAGTTCCTGCTCCCCGCCAC	Clone 140289 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-140289-Sma I-R	gggCTTGACCTGCACTGAGTAGGACGA	Clone 140289 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc111741-F	ccatcgatATGAAGGGCTTCTTCACTGGTGT	Clone 111741 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc111741-Smal-R	gggGTTGACAGCAGCCGAGAATGA	Clone 111741 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc98553-F	ccatcgatATGAAAGTGCTTTTCACTGTGG	Clone 98553 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc98553-Smal-R	gggCACACGACGAACACGTCGGCT	Clone 98553 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc99469-F	ccatcgatATGAAGTCTTCTTCGCTGCT	Clone 99469 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc99469-Smal-R	gggGTCACGACGGACGCGACGAAG	Clone 99469 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc107440-F	ccatcgatATGAAGCTCTCCGTGCCAT	Clone 107440 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc107440-Smal-R	gggAGCCGTGTGACCCGCCGCGA	Clone 107440 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc107334-F	ccatcgatATGAAGCTTTCGCGCTGCT	Clone 107334 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc107334-Smal-R	gggGACCGCTGGACTGCCGAGA	Clone 107334 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc106898-F	ccatcgatATGAAGTTCCTCTCCAGTT	Clone 106898 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc106898-Smal-R	gggCTTCACCTGCACCGAATACG	Clone 106898 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc107122-F	ccatcgatATGAAACTCTTACCATTATC	Clone 107122 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc107122-Smal-R	gggAACAGTGTGGACAGCCGCGT	Clone 107122 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc15454-F	ccatcgatATGAAACTCTTACCATTATC	Clone 15454 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc15454-Smal-R	gggAACAGTGTGGACAGCCGCGT	Clone 15454 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc15453-F	ccatcgatATGAAACTTTTCGCCATTATC	Clone 15453 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc15453-Smal-R	gggAACAGTGTGAACAGCAGCCGT	Clone 15453 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc107461-F	ccatcgatATGAAGTCTCTACTATCTTC	Clone 107461 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc107461-Smal-R	gggCGCAGTGTGAACAGCAGCGGT	Clone 107461 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc15451-F	ccatcgatATGAAGTTCCTTATCCCGCTA	Clone 15451 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc15451-Smal-R	gggGTTGACCTTGATGAGTAGGACT	Clone 15451 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-Pc7335-F	ccatcgatATGAAGTTCCTTCTGCCGCCA	Clone 7335 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Pc7335-Smal-R	gggTGCAGGCTCACAGAGACTTTGA	Clone 7335 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-PPIG19377-F	ccatcgatATGAAGGGACTTCTCGCAGGTACCA	Clone PPTG_19377 for expression in <i>N. benthamiana</i>
pGR107-PPIG19377-Sma I-R	gggGTTGACAGCAGCCGAGTACGACGA	Clone PPTG_19377 for expression in <i>N. benthamiana</i>
pGR107-Clal-PPIG19378-F	ccatcgatATGAAGAGCTTCTCATCGCGAT	Clone PPTG_19378 for expression in <i>N. benthamiana</i>
pGR107-PPIG19378-Smal-R	gggGTTGACGCGCCGAGTAGGAA	Clone PPTG_19378 for expression in <i>N. benthamiana</i>
pGR107-Clal-PPIG16567-F	ccatcgatATGATAATGCTTTACGCTGCTA	Clone PPTG_16567 for expression in <i>N. benthamiana</i>
pGR107-PPIG16567-Smal-R	gggCGCACGACGAACACGACGGCT	Clone PPTG_16567 for expression in <i>N. benthamiana</i>
pGR107-Clal-PPIG16566-F	ccatcgatATGAAGGTGTTCTTTGCTGCT	Clone PPTG_16566 for expression in <i>N. benthamiana</i>
pGR107-PPIG16566-Smal-R	gggGTCACGACGGACGCGACGAA	Clone PPTG_16566 for expression in <i>N. benthamiana</i>
pGR107-Smal-PPIG19220-F	gggATGAAGTTCCTGCCATCGCT	Clone PPTG_19220 for expression in <i>N. benthamiana</i>
pGR107-PPIG19220-NotI-R	ataagaatcgggccgcAACGGTGTGGACCGCGCAG	Clone PPTG_19220 for expression in <i>N. benthamiana</i>
pGR107-Clal-PPIG16273-F	ccatcgatATGAAGATCTCTATCGCCAT	Clone PPTG_16273 for expression in <i>N. benthamiana</i>
pGR107-PPIG16273-Smal-R	gggAGCCGACTTGACTGCTGCCGA	Clone PPTG_16273 for expression in <i>N. benthamiana</i>
pGR107-Clal-PPIG16272-F	ccatcgatATGAAGCTTTCCTTCGCTGCTG	Clone PPTG_16272 for expression in <i>N. benthamiana</i>
pGR107-PPIG16272-Smal-R	gggAACTGTGTGGACAGCGGCCGA	Clone PPTG_16272 for expression in <i>N. benthamiana</i>
pGR107-Smal-PPIG19219-F	gggATGAAGTTCCTATCGCCATT	Clone PPTG_19219 for expression in <i>N. benthamiana</i>
pGR107-PPIG19219-NotI-R	ataagaatcgggccgcAGTAGTCATTTTGAAGAAT	Clone PPTG_19219 for expression in <i>N. benthamiana</i>

pGR107-Clal-PPIG16267-F	ccatcgatATGAAGTTCCTGATCCCTGCT	Clone PPTG_16267 for expression in <i>N. benthamiana</i>
pGR107-PPIG16267-Smal-R	gggCTTGACTTGACCCGAGTAGGT	Clone PPTG_16267 for expression in <i>N. benthamiana</i>
pGR107-Clal-PPIG16271-F	ccatcgatATGAAGTTCCTGATCCCTGCT	Clone PPTG_16271 for expression in <i>N. benthamiana</i>
pGR107-PPIG16271-Smal-R	gggGTTGACCTTCGACGAGTACGA	Clone PPTG_16271 for expression in <i>N. benthamiana</i>
pGR107-Smal-PPIG19278-F	gggATGAAGTTCCTTTTCGCTGTT	Clone PPTG_19278 for expression in <i>N. benthamiana</i>
pGR107-PPIG19278-NotI-R	ataagaatgcgccgcATTAATTGAGGGAGAAGATG	Clone PPTG_19278 for expression in <i>N. benthamiana</i>
pGR107-Clal-PITG06962-F	ccatcgatATGAAGGTGTTCTTCGCTGCTGCT	Clone PITG_06962 for expression in <i>N. benthamiana</i>
pGR107-PITG06962-Sma I-R	gggTCGTCCCCTGAAGAAGTCGGAGA	Clone PITG_06962 for expression in <i>N. benthamiana</i>
pGR107-Clal-PITG16991-F	ccatcgatATGAAGTTTACTGTCGTCATTGCT	Clone PITG_16991 for expression in <i>N. benthamiana</i>
pGR107-PITG16991-Sma I-R	gggCGAATTGACTGCTGCCGAGTA	Clone PITG_16991 for expression in <i>N. benthamiana</i>
pGR107-Clal-PITG08944-F	ccatcgatATGAAGCTCCTGATCCCTGCTACT	Clone PITG_08944 for expression in <i>N. benthamiana</i>
pGR107-PITG08944-Sma I-R	gggGTTACCTTCGACGAGTACGATT	Clone PITG_08944 for expression in <i>N. benthamiana</i>
pGR107-Smal-PITG16992-F	gggATGAAGCTCGTGTGGCCCT	Clone PITG_16992 for expression in <i>N. benthamiana</i>
pGR107-PITG16992-NotI-R	ataagaatgcgccgcAGCTGTGTGAAGTGCAGTCGA	Clone PITG_16992 for expression in <i>N. benthamiana</i>
pGR107-Clal-PITG14060-F	ccatcgatATGAAACTCTCTGCTGCCCT	Clone PITG_14060 for expression in <i>N. benthamiana</i>
pGR107-PITG14060-Smal-R	gggCGTCGAGGCAGTGTAAACCG	Clone PITG_14060 for expression in <i>N. benthamiana</i>
pGR107-Clal-PITG13560-F	ccatcgatATGAAGCTCCCTCTTGTTCAT	Clone PITG_13560 for expression in <i>N. benthamiana</i>
pGR107-PITG13560-Sma I-R	gggTAATGGCGTCTTTCGCTGGGTCGT	Clone PITG_13560 for expression in <i>N. benthamiana</i>
pGR107-Clal-MGG10972-F	ccatcgatATGATCAAGACCCTTACAGCCGCT	Clone MGG_10972 for expression in <i>N. benthamiana</i>
pGR107-MGG10972-Smal-R	gggTGAGCACTGAGAGTACCACTGGT	Clone MGG_10972 for expression in <i>N. benthamiana</i>
pGR107-Clal-MGG00677-F	ccatcgatATGAAGACCTCCGCAGCGCTCCT	Clone MGG_00677 for expression in <i>N. benthamiana</i>
pGR107-MGG00677-Smal-R	gggCTGGACGTTGGCTCCGAACGA	Clone MGG_00677 for expression in <i>N. benthamiana</i>
pGR107-Clal-MGG08537-F	ccatcgatATGCTCCCCGCTAGCCACGGT	Clone MGG_08537 for expression in <i>N. benthamiana</i>
pGR107-MGG08537-Smal-R	gggAACCTGAACCTCCGCCTGGAAA	Clone MGG_08537 for expression in <i>N. benthamiana</i>
pGR107-Clal-Vd07406-F	ccatcgatATGAAGTTCATCACAGTCCCT	Clone VDAG_07406 for expression in <i>N. benthamiana</i>
pGR107-Vd07406-Smal-R	gggACTGCACTGGGAGTACCACT	Clone VDAG_07406 for expression in <i>N. benthamiana</i>
pGR107-Clal-Vd04017-F	ccatcgatATGAAGTTCGACCCCTCCTC	Clone VDAG_04017 for expression in <i>N. benthamiana</i>
pGR107-Vd04017-Smal-R	gggAGAAACAGAAACCTGGTACGA	Clone VDAG_04017 for expression in <i>N. benthamiana</i>
pGR107-Clal-Vd07289-F	ccatcgatATGAAGCTCCTCGGATTGATCGCT	Clone VDAG_07289 for expression in <i>N. benthamiana</i>
pGR107-Vd07289-Smal-R	gggTAGAAAGTGCAGGTGCTTCCAGCA	Clone VDAG_07289 for expression in <i>N. benthamiana</i>
pGR107-Clal-Vd02125-F	ccatcgatATGATCAACACTCCTTTTAAG	Clone VDAG_02125 for expression in <i>N. benthamiana</i>
pGR107-Vd02125-Smal-R	gggGAAACCAAACGCAACCCAGTG	Clone VDAG_02125 for expression in <i>N. benthamiana</i>
pGR107-Clal-FGSG05851-F	ccatcgatATGAAGTTCCTTAGCATTGTT	Clone FGSG_05851 for expression in <i>N. benthamiana</i>
pGR107-FGSG05851-Sma I-R	gggGTTGACAGACAGACTGTAGGCA	Clone FGSG_05851 for expression in <i>N. benthamiana</i>
pGR107-Clal-FGSG11037-F	ccatcgatATGAAGCCTCTGTGCGATTCC	Clone FGSG_11037 for expression in <i>N. benthamiana</i>
pGR107-FGSG11037-Sma I-R	gggGTTGATGTGAGCGTTGAAGTTG	Clone FGSG_11037 for expression in <i>N. benthamiana</i>
pGR107-Clal-FGSG07892-F	ccatcgatATGACAATTTCGTTCTCGTCA	Clone FGSG_07892 for expression in <i>N. benthamiana</i>
pGR107-FGSG07892-Sma I-R	gggAGCCTTCTTCCAACGTTTATTG	Clone FGSG_07892 for expression in <i>N. benthamiana</i>
pGR107-Clal-Xo58580699-F	ccatcgatATGCACACCCGCCATCCAGA	Clone 58580699 of <i>X. oryzae</i> for expression in <i>N. benthamiana</i>
pGR107-Xo58580699-Sma I-R	gggAAGCCCGCTCGGCCGCGCAGGTA	Clone 58580699 of <i>X. oryzae</i> for expression in <i>N. benthamiana</i>
pGR107-Clal-109681-E136D-F1	ccatcgatATGAAGGGATTCTTCGCC	Expression the mutation (E136D) of XEG1 in <i>N. benthamiana</i>
pGR107-109681-E136D-R1	GGCCAGCCAGATCATGATATCGTACTCGTTGCTGC CGCT	Expression the mutation (E136D) of XEG1 in <i>N. benthamiana</i>
pGR107-109681-E136D-F2	TACGATATCATGATCTGGCTGGCC	Expression the mutation (E136D) of XEG1 in <i>N. benthamiana</i>
pGR107-109681-E136D-Sma I-R2	gggGTTGACCGCAGCCGAGAACGA	Expression the mutation (E136D) of XEG1 in <i>N. benthamiana</i>
pGR107-Clal-109681-E222D-F1	ccatcgatATGAAGGGATTCTTCGCCGGT	Expression the mutation (E222D) of XEG1 in <i>N. benthamiana</i>
pGR107-109681-E222D-R1	GTGCCGCTCGAGCGTGAT	Expression the mutation (E222D) of XEG1 in <i>N. benthamiana</i>
pGR107-109681-E222D-R2	TCATCTTGCGTTCGTGCCACGAACGGATCCGT	Expression the mutation (E222D) of XEG1 in <i>N. benthamiana</i>

	GCCGGCCTCGAGCGTG	
pGR107-109681-E222D-R3	CGAGAACGAGGATACGGTCATCTGGCGTTCGTG	Expression the mutation (E222D) of XEG1 in <i>N. benthamiana</i>
	CCCACG	
pGR107-109681-E222D-Smal-R4	gggGTTGACCGCAGCCGAGAACGAGGATACGGT	Expression the mutation (E222D) of XEG1 in <i>N. benthamiana</i>
Q-RT-NbCyp71D20-F	GTTGACGCCATTGTTGAG	RT-qPCR for validation of <i>Cyp71D20</i> gene transcription level for <i>N. benthamiana</i> leaves treated peptides
Q-RT-NbCyp71D20-R	ATCTTCGCCTCCTAATGC	RT-qPCR for validation of <i>Cyp71D20</i> gene transcription level for <i>N. benthamiana</i> leaves treated peptides
Q-RT-109681-F	CACCAAGACCATCACCAA	RT-qPCR for validation of XEG1 gene transcription level in silencing lines and overexpressing lines, also wild type P6497 different stages of development
Q-RT-109681-R	ATGAGGTA CTGGCTGGAA	RT-qPCR for validation of XEG1 gene transcription level in silencing lines and overexpressing lines, also wild type P6497 different stages of development
Q-RT-119627-F	CTACATCATCTACAACAACCTG	RT-qPCR for validation of 119627 gene transcription level in silencing lines and overexpressing lines
Q-RT-119627-R	GGCGAACGACTTGACATT	RT-qPCR for validation of 119627 gene transcription level in silencing lines and overexpressing lines
Q-RT-138787-F	CTACATCATCTACAACAACCTG	RT-qPCR for validation of 138787 gene transcription level in silencing lines and overexpressing lines
Q-RT-138787-R	GAACGACTTGACGCTCTT	RT-qPCR for validation of 138787 gene transcription level in silencing lines and overexpressing lines
Q-RT-109280-F	TTGGCCTCTAACCGACAG	RT-qPCR for validation of 109280 gene transcription level in silencing lines and overexpressing lines
Q-RT-109280-R	GACTTCTTGGCGACGTAC	RT-qPCR for validation of 109280 gene transcription level in silencing lines and overexpressing lines
Q-RT-144813-F	AACTCGTTGTCGTGCTCG	RT-qPCR for validation of 144813 gene transcription level in silencing lines and overexpressing lines
Q-RT-144813-R	CTTGTTCCAGAGGTTGTTGTAG	RT-qPCR for validation of 144813 gene transcription level in silencing lines and overexpressing lines
Q-RT-140300-F	CTGGCAGGTCAAGTCGTT	RT-qPCR for validation of 140300 gene transcription level in silencing lines and overexpressing lines
Q-RT-140300-R	TCGTGAAGAGGTCGTAGG	RT-qPCR for validation of 140300 gene transcription level in silencing lines and overexpressing lines
Q-RT-140302-F	GCAACATGACGGTCTACT	RT-qPCR for validation of 140302 gene transcription level in silencing lines and overexpressing lines
Q-RT-140302-F	CGATGGTGAGATTCTGG	RT-qPCR for validation of 140302 gene transcription level in silencing lines and overexpressing lines
pTORM-XbaI-109681-Sil-F	gctctagaATGAAGGATTCTTCGCCG	Silencing of XEG1 in <i>P. sojae</i>
pTORM-109681-Sil-EcoRI-R	cggaaattcTCAGTTGACCGCAGCCGAGAACGA	Silencing of XEG1 in <i>P. sojae</i>
pTORM-EcoR I-109681-OE-F	ggaattcacaacaATGAAGGATTCTTCGCCG	Over-expression of XEG1 in <i>P. sojae</i>
pTORM-109681-OE-Xba I-R	gctctagaTCAGTGATGGTGATGGTGATGGTTGACCG CAGCCGAGAAC	Over-expression of XEG1 in <i>P. sojae</i>
TRV2-Smal-LeEIX2-F	gggATCTGCCAGCTTCAATTTCTTCAG	Silencing of <i>EIX2</i> in tomato
TRV2-LeEIX2-BamHI-R	cgggatccGATAAGTGGTTGTTCCGATAAGTC	Silencing of <i>EIX2</i> in tomato
pBINPLUS-KpnI-Avh52-F	ggggatccCTCACGTTGACCAAGGATTCCA	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pBINPLUS-Avh52-BamHI-R	cgggatccTCAGTTGGCCGCCTTATAAACCT	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pBINPLUS-KpnI-Avh62-F	ggggatccGTCCAGGAATCGACTGAGACGCA	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pBINPLUS-Avh62-BamHI-R	cgggatccTTATCTGGTAATTTGCCGCAAC	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI

pBINPLUS-KpnI-Avh94-F	ggggatccGCCAACACCAAGGTGGAGTCGT	triggered by XEG1 Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI
pBINPLUS-Avh94-BamHI-R	cgggatccCTAAGCGGTGTCTCTCTCTCTCT	triggered by XEG1 Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI
pBINPLUS-SmaI-Avh109-F	gggCTTCAGGTCCTCCCAATTCCG	triggered by XEG1 Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI
pBINPLUS-Avh109-BamHI-R	cgggatccTTAATCAGCGTTTGTGCGCTGT	triggered by XEG1 Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI
pFF19-BamH I-109681-F	cgggatccATGAAGGGATTCTTCGCCG	Bombardment assays in Soybean
pFF19-109681-Sph I-R	acatgcatgcTCAGTTGACCGCAGCCGAGAAC	Bombardment assays in Soybean
pFF19-BamH I-Avh52-F	cgggatccCTCACGTTGACCAAGGATTCCA	Bombardment assays in Soybean
pFF19-Avh52-Sph I-R	acatgcatgcTCAGTTGGCCGCTTATAAACCT	Bombardment assays in Soybean
pFF19-BamH I-Avh62-F	cgggatccGTCCAGGAATCGACTGAGACGCA	Bombardment assays in Soybean
pFF19-Avh62-Sph I-R	acatgcatgcTTATCTGGTAATTGCCGCAAC	Bombardment assays in Soybean
pFF19-BamH I-Avh94-F	cgggatccGCCAACACCAAGGTGGAGTCGT	Bombardment assays in Soybean
pFF19-Avh94-Sph I-R	acatgcatgcCTAAGCGGTGTCTCTCTCTCTCT	Bombardment assays in Soybean
pFF19-BamH I-Avh109-F	cgggatccCTTCAGGTCCTCCCAATTCCG	Bombardment assays in Soybean
pFF19-Avh109-Sph I-R	acatgcatgcTTAATCAGCGTTTGTGCGCTGT	Bombardment assays in Soybean

^aUpper case bases match the template, lower case bases do not.

Supplemental Table 3. Plasmid constructs used in the study.

Plasmid name	Vector	Purpose
pGR107::109281	pGR107	Clone 109281 for expression in <i>N. benthamiana</i>
pGR107::109681	pGR107	Clone 109681 for expression in <i>N. benthamiana</i>
pGR107::137930	pGR107	Clone 137930 for expression in <i>N. benthamiana</i>
pGR107::GFP	pGR107	Clone GFP for expression in <i>N. benthamiana</i>
pGR107::INF1	pGR107	Clone INF1 for expression in <i>N. benthamiana</i>
pPICZaA::109681	pPICZaA	Expression of 109681 in <i>Pichia pastoris</i> for purification
pPICZaA::E136D	pPICZaA	Expression of E136D in <i>Pichia pastoris</i> for purification
pPICZaA::E222D	pPICZaA	Expression of E222D in <i>Pichia pastoris</i> for purification
pGR107::PR1-SP-109681 ²⁰⁻²⁴¹	pGR107	Expression of PR1-SP-109681 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
pGR107::109681 ²⁰⁻²⁴¹	pGR107	Expression of 109681 ²⁰⁻²⁴¹ in <i>N. benthamiana</i>
pGR107::144813	pGR107	Clone 144813 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::119627	pGR107	Clone 119627 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::138787	pGR107	Clone 138787 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::140300	pGR107	Clone 140300 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::140302	pGR107	Clone 140302 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::109280	pGR107	Clone 109280 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::109281	pGR107	Clone 109281 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::140301	pGR107	Clone 140301 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::140303	pGR107	Clone 140303 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::140289	pGR107	Clone 140289 of <i>P. sojae</i> for expression in <i>N. benthamiana</i>
pGR107::Pc111741	pGR107	Clone 111741 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc98553	pGR107	Clone 98553 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc99469	pGR107	Clone 99469 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc107440	pGR107	Clone 107440 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc107334	pGR107	Clone 107334 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc106898	pGR107	Clone 106898 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc107122	pGR107	Clone 107122 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc15454	pGR107	Clone 15454 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc15453	pGR107	Clone 15453 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc107461	pGR107	Clone 107461 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc15451	pGR107	Clone 15451 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::Pc7335	pGR107	Clone 7335 of <i>P. capsici</i> for expression in <i>N. benthamiana</i>
pGR107::PPIG19377	pGR107	Clone PPTG_19377 for expression in <i>N. benthamiana</i>
pGR107::PPIG19378	pGR107	Clone PPTG_19378 for expression in <i>N. benthamiana</i>
pGR107::PPIG16567	pGR107	Clone PPTG_16567 for expression in <i>N. benthamiana</i>
pGR107::PPIG16566	pGR107	Clone PPTG_16566 for expression in <i>N. benthamiana</i>
pGR107::PPIG19220	pGR107	Clone PPTG_19220 for expression in <i>N. benthamiana</i>
pGR107::PPIG16273	pGR107	Clone PPTG_16273 for expression in <i>N. benthamiana</i>
pGR107::PPIG16272	pGR107	Clone PPTG_16272 for expression in <i>N. benthamiana</i>
pGR107::PPIG19219	pGR107	Clone PPTG_19219 for expression in <i>N. benthamiana</i>
pGR107::PPIG16267	pGR107	Clone PPTG_16267 for expression in <i>N. benthamiana</i>
pGR107::PPIG16271	pGR107	Clone PPTG_16271 for expression in <i>N. benthamiana</i>
pGR107::PPIG19278	pGR107	Clone PPTG_19278 for expression in <i>N. benthamiana</i>
pGR107::PITG06962	pGR107	Clone PITG_06962 for expression in <i>N. benthamiana</i>

pGR107::PITG16991	pGR107	Clone PITG_16991 for expression in <i>N. benthamiana</i>
pGR107::PITG08944	pGR107	Clone PITG_08944 for expression in <i>N. benthamiana</i>
pGR107::PITG16992	pGR107	Clone PITG_16992 for expression in <i>N. benthamiana</i>
pGR107::PITG14060	pGR107	Clone PITG_14060 for expression in <i>N. benthamiana</i>
pGR107::PITG13560	pGR107	Clone PITG_13560 for expression in <i>N. benthamiana</i>
pGR107::MGG10972	pGR107	Clone MGG_10972 for expression in <i>N. benthamiana</i>
pGR107::MGG00677	pGR107	Clone MGG_00677 for expression in <i>N. benthamiana</i>
pGR107::MGG08537	pGR107	Clone MGG_08537 for expression in <i>N. benthamiana</i>
pGR107::Vd07406	pGR107	Clone VDAG_07406 for expression in <i>N. benthamiana</i>
pGR107::Vd04017	pGR107	Clone VDAG_04017 for expression in <i>N. benthamiana</i>
pGR107::Vd07289	pGR107	Clone VDAG_07289 for expression in <i>N. benthamiana</i>
pGR107::Vd02125	pGR107	Clone VDAG_02125 for expression in <i>N. benthamiana</i>
pGR107::FGSG05851	pGR107	Clone FGSG_05851 for expression in <i>N. benthamiana</i>
pGR107::FGSG11037	pGR107	Clone FGSG_11037 for expression in <i>N. benthamiana</i>
pGR107::FGSG07892	pGR107	Clone FGSG_07892 for expression in <i>N. benthamiana</i>
pGR107::Xo58580699	pGR107	Clone 58580699 of <i>X. oryzae</i> for expression in <i>N. benthamiana</i>
pGR107::E136D	pGR107	Expression the mutation (E136D) of 109681 in <i>N. benthamiana</i>
pGR107::E222D	pGR107	Expression the mutation (E222D) of 109681 in <i>N. benthamiana</i>
pGR107::109681 ¹⁻²²¹	pGR107	Expression the C-terminal deletions mutation (109681 ¹⁻²²¹) of XEG1 in <i>N. benthamiana</i>
pGR107::109681 ¹⁻¹⁹⁻⁴⁰⁻²⁴¹	pGR107	Expression the N-terminal deletions mutation (109681 ¹⁻¹⁹⁻⁴⁰⁻²⁴¹) of XEG1 in <i>N. benthamiana</i>
pGR107::109681 ¹⁻⁹⁷	pGR107	Expression the N-terminal deletions mutation (109681 ¹⁻⁹⁷) of XEG1 in <i>N. benthamiana</i>
pTORM::109681 ²⁴¹⁻¹	pTORM	Silencing of 109681 in <i>P. sojae</i>
pTORM::109681 ^{1-241-6^{HIS}}	pTORM	Over expressing of 109681 in <i>P. sojae</i>
TRV1	TRV1	Silencing of <i>Serk1</i> in <i>N.benthamiana</i>
TRV2::PDS	TRV2	Reference for silencing of <i>Serk1</i> in <i>N.benthamiana</i>
TRV2::GFP	TRV2	Negative control for silencing of <i>Serk1</i> in <i>N.benthamiana</i>
TRV2::Serk1	TRV2	Silencing of <i>Serk1</i> in <i>N.benthamiana</i>
pGR107::Avr3a	pGR107	Agroinfiltration in <i>N.benthamiana</i> of silencing <i>Serk1</i>
pGR107::Rps3a	pGR107	Agroinfiltration in <i>N.benthamiana</i> of silencing <i>Serk1</i>
pGR107::Avh5	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh7b1	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh23	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh38	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh52	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh62	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh64	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh94a1	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh98a	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh109	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh115	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh140	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh180	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh196	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh231	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh240	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1

pGR107::Avh263	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh277	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh283	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh320	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh328	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh331	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh333	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh345	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh360	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pGR107::Avh432	pGR107	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of HR triggered by XEG1
pBINPLUS::GFP	pBINPLUS	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pBINPLUS::Avh52	pBINPLUS	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pBINPLUS::Avh62	pBINPLUS	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pBINPLUS::Avh94	pBINPLUS	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pBINPLUS::Avh109	pBINPLUS	Agroinfiltration in <i>N.benthamiana</i> and suppressing assay of PTI triggered by XEG1
pFF19::109681	pFF19	Bombardment assays in Soybean
pFF19::Avh52	pFF19	Bombardment assays in Soybean
pFF19::Avh62	pFF19	Bombardment assays in Soybean
pFF19::Avh94	pFF19	Bombardment assays in Soybean
pFF19::Avh109	pFF19	Bombardment assays in Soybean
pFF19::GUS	pFF19	Bombardment assays in Soybean
TRV2::EIX2	TRV2	Silencing of <i>EIX2</i> in tomato
TRV2::PDS	TRV2	Reference for silencing of <i>EIX2</i> in tomato
pGR107::EIX	pGR107	Clone EIX for expression in <i>N. benthamiana</i>
