Table S1. PCR primers and programs used in the current study

Primer code / sequence (5'→3') [a]	**Annealing temp (°C)** [b]	**Restriction enzyme (°C)** [c]	**Use of primers**
TAIL-PCR	NA	NA	TAIL-PCR amplification
SP1: ATGCAACTTTCCAAAATTACTTTCGCTAT			
SP2: GGCAACACTGAGGTCGCAACCATCT			
SP3: GGCAGCGATGATTCCGACGCGTATT			
SP4: AATACGCGTCGGAATCATCGCTGCC			
SP5: AGATGGTTGCGACCTCAGTGTTGCC			
SP6: ATAGCGAAAGTAATTTTGGAAAGTTGCAT			
AD: STTGNTASTNCTNTGC			
The key primer			
***AvrPii*-J/C-CDS**	58	NA	J/C-CDS amplification
F: ATGCAACTTTCCAAAATTAC			
R: TTAGTTGCATTTATGATTA			
***AvrPii*-J-FL/GT**	58	NA/*Asc* I (37)	J-FL/GT amplification
F: TTGGCGCGCCTGGTAGATATCCGCTGAC			(*AvrPii*-J cloning)
R: TTGGCGCGCCCAGATTTGGAACTTTGGT			
***AvrPii*-J-RS**	58	NA	J-RS amplification
F: TGGTAGATATCCGCTGACTGG			(*AvrPii*-J resequencing)
R: TAGCCATTATCCAAGGGTTGCTCCACTCT			
***AvrPii*-J-MK1**	58	NA	J-MK1 amplification
F: GTATAATTCCTTTTCTTCCCTCCTT			(*AvrPii*-J genotyping)
R: CTAATTTAAATCGTGCGCTTTCAGA			
***AvrPii*-J-MK2**	58	NA	J-MK2 amplification
F: TGGTAGATATCCGCTGACTGG			(*AvrPii*-J genotyping)
R: CATATAATGCAATAGCGAAAGTAAT			
***AvrPii*-C-FL/RS**	58	NA	C-FL/RS amplification
F: AAGGCATAATAATTTCGTAAAAAGCGGTCTAA			(*AvrPii*-C resequencing)
R: ATGTATGCCTGGCCGTGACAATAACCC			
***AvrPii*-C-GT**	58	*Asc* I (37)	C-GT amplification
F: TTGGCGCGCCTCAGCGGATATTCACC			(*AvrPii*-C cloning)
R: TTGGCGCGCCTAGATTTTCAGGGTGC			
***AvrPii*-C-MK1**	58	NA	C-MK1 amplification
F: TCGTTATATTTCCATTGCTATTCAT			(*AvrPii*-C genotyping)
R: TAAAAATGAGTTAAATTATGCGTT			
***AvrPii*-C-MK2**	58	NA	C-MK2 amplification
F: CATAATAATTTCGTAAAAAGCGGTC			(*AvrPii*-C genotyping)
R: CATATAATGCAATAGCGAAAGTAAT			
Domain swapping			
J_{pro}	58	NA	J_{pro} amplification
F: TGGTAGATATCCGCTGAC			

R: AATTTTGGAGAGTTGCATTTTGGTAAATTGGAA			
$C_{CDS+3'}$	58	NA	$C_{CDS+3'}$ amplification
F: TTCCAATTTACCAAAATGCAACTCTCCAAAATT			
R: TAGATTTTCAGGGTGC			
J_{pro}-F/$C_{CDS+3'}$-R	58	*Asc* I (37)	Mai1 construction
F: TTGGCGCGCCTGGTAGATATCCGCTGAC			
R: TTGGCGCGCCTAGATTTTCAGGGTGC			
C_{pro}	58	NA	C-pro amplification
F: TCAGCGGATATTCACC			
R: AATTTTGGAAAGTTGCATTTTGGTAAGTTGGAA			
$J_{CDS+3'}$	58	NA	$J_{CDS+3'}$ amplification
F: TTCCAACTTACCAAAATGCAACTTTCCAAAATT			
R: CAGATTTGGAACTTTGGT			
C_{pro}-F/$J_{CDS+3'}$-R	58	*Asc* I (37)	Mai2 construction
F: TTGGCGCGCCTCAGCGGATATTCACC			
R: TTGGCGCGCCCAGATTTGGAACTTTGGT			
J/C-1	58	NA	Mai3 construction
F: CATTATATGCAGTCGGAATCGCAGCACTT			
R: CAATAGCGAAAGTAATTTTGGAGAGTTGCAT			
J/C-2	58	NA	Mai4 construction
F: CATCTCCGACGTTAAACTTGGACCCCGCA			
R: GTTGCGACCTCAGTGTTGCCATTTAGGCAGGC			
J/C-3	58	NA	Mai5 construction
F: ATGCGGCTTCGGCAGCGATGATTCC			
R: TTGGAGCAATAATAATAAGTCTTGTCGC			
$J_{pro+CDS}$	58	NA	$J_{pro+CDS}$ amplification
F: TGGTAGATATCCGCTGAC			
R: AGATATCAACTTACATTAGTTGCATTTATGA			
$C_{3'}$	58	NA	$C_{3'}$ amplification
F: TCATAAATGCAACTAATGTAAGTTGATATCT			
R: TAGATTTTCAGGGTGC			
$J_{pro+CDS}$-F/$C_{3'}$-R	58	*Asc* I (37)	Mai6 construction
F: TTGGCGCGCCTGGTAGATATCCGCTGAC			
R: TTGGCGCGCCTAGATTTTCAGGGTGC			
$C_{pro+CDS}$	58	NA	$C_{pro+CDS}$ amplification
F: TCAGCGGATATTCACC			
R: CAGATTTTAACTTACATTACTTGCACTTG			
$J_{3'}$	58	NA	$J_{3'}$ amplification
F: CAAGTGCAAGTAATGTAAGTTAAAATCTG			
R: CAGATTTGGAACTTTGGT			
$C_{pro+CDS}$-F/$J_{3'}$-R	58	*Asc* I (37)	Mai7 construction
F: TTGGCGCGCCTCAGCGGATATTCACC			

R: TTGGCGCGCCCAGATTTGGAACTTTGGT			
Others			
HYG	58	NA	Genotyping of
F: TTGGCTGGAGCTAGTGGAGGT			transgenic progeny
R: TCTGCTGCTCCATACAAGCCAAC			

The specific program for TAIL-PCR system

Reaction round	**Number of cycle**	**Cycle parameter**
I	1	94°C/2 min; 95°C/1 min.
	5	94°C/15 s; 62°C/1 min; 72°C/2 min.
	1	94°C/15 s; 25°C/3 min; up to 72°C by 0. 2°C/s; 72°C/2 min.
	15	94°C/10 s; 62°C/1 min; 72°C/2 min; 94°C/10 s; 62°C/1 min; 72°C/2 min; 94°C/10 s; 44°C/1 min; 72°C 2 min.
	1	72°C/2 min.
II	15	94°C/10 s; 62°C/1 min; 72°C/2 min; 94°C/10 s; 62°C/1 min; 72°C/2 min; 94°C/10 s; 44°C/1 min; 72°C/2 min.
	1	72°C/2 min
III	15	94°C/10 s; 62°C/1 min; 72°C/2 min; 94°C/10 s; 62°C/1 min; 72°C/2 min; 94°C/10 s; 44°C/1 min; 72°C/2 min.
	1	72°C/5 min.

[a] For transformation test, sequence underlined was responding to the common restriction enzyme *Asc* I for ligating fragments (*AvrPii* and its mutants) into the binary vectors, pBHT2-AscI. F, forward; R, reverse.
[b] The regular PCR system was initiated by a 95°C/3 min denaturation, followed by 35 cycles of 95°C/15 s, 58°C/15 s, 72°C/1 min and a final extension step of 72°C/2 min. The Tail-PCR system was according to the specific program shown above. Amplicons were electrophoresed through a 1% agarose gel.
[c] The number shown in parentheses refers to the temperature at which the restriction digestion reaction was run.