The toxic guardians — Multiple toxin-antitoxin systems provide stability, avoid deletions and maintain virulence genes of *Pseudomonas syringae* virulence plasmids

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Table S1 List and application of primers used in this work.

Primer name[a]	Sequence[b]	5´pos[c]	Remarks
Cloning of putative stability determinants			
pPsv48A (accession no. FR820585)			
SD1_F	GGATCCGATGGTAACCGCCAATGTTC	21649*	Cloning of SD1 into pKMAG-C
SD1_R	GGATCCTTCTGGGATTCCGGCTTAC	20277	
TA1_F	GGATCCACATAGGCTTGCGATTCAGC	24281*	Cloning of TA1 into pKMAG-C
TA1_R	GGATCCTTGATTGCTAATTCCGACACTG	23449	
TA2_F	GGATCCTTCCATCTCGTTTGCTGATG	37991*	Cloning of TA2 into pKMAG-C
TA2_R	GGATCCCGTTCCTCTATCGGTCTTCG	37061	
SD2_F	GGATCCATGCACTTCATCGGGTAGATTTC	53332*	Cloning of SD2 into pKMAG-C
SD2_R	GGATCCCATGAGCGAAGTGTAGTGCAG	52067	
TA3_F	GGATCCCCACGTAGTAGCCCGATGC	53072	Cloning of TA3 into pKMAG-C

TA3_R	GGATCCTCAGGGAGCACGAAACATC	54708*	
TA4_F	GGATCCGATCACCGCTGACATCGAG	64737*	Cloning of TA4 into pKMAG-C
TA4_R	GGATCCCGGCCAAGAACAAGAAAGAC	63811	
SD3_F	GGATCCACCCGTGTAGCGGTTAATTC	79421	Cloning of SD3 into pKMAG-C
SD3_R	GGATCCTTCCAAAAAGCCCGGTTAC	79884*	
pPsv48B (accession no. FR820586)			
TA5_F	GGATCCCTTGGATACGCACCGAAAAC	11832*	Cloning of TA5 into pKMAG-C
TA5_R	GGATCCAGGTGTCAATTGGCGATACC	11108	
SD4_F	GGATCCCCCAAATAGACCCAGCATATC	11884	Cloning of SD4 into pKMAG-C
SD4_R	GGATCCGGATGGTTACCGCCATACC	13274*	
SD5_F	GGATCCACCGTCGAAGCCAAGGTG	31991	Cloning of SD5 into pKMAG-C
SD5_R	GGATCCGCTGCCGCACTCGAAATAG	32672*	
SD6_F	GGATCCAGCGCACACTTGACGCTAC	35775	Cloning of SD6 into pKMAG-C
SD6_R	GGATCCCTATGACACCCGCTGACTTTC	37405*	
pPsv48C (accession no. FR820587)			
TA6_F	GGATCCCTGCCAAGAAAGTCGTCAAG	1760	Cloning of TA6 into pKMAG-C
TA6_R	GGATCCCGAAGCATGAATACCAGCAC	2442*	

TA7_F	GGATCCTTTTCGACCGGAATTGATTG	4752*	Cloning of TA7 into pKMAG-C
TA7_R	GGATCCGTACCCCATCATGCGATTG	3866	
SD7_F	GGATCCCTTCATGGAAAATGCTACCG	11121	Cloning of SD7 into pKMAG-C
SD7_R	GGATCCCCTTAATAGGTAGGTGTGAGCTATCC	9861*	
TA8_F	GGATCCGCAATACAGTGCAAACCAATG	39466	Cloning of TA8 into pKMAG-C
TA8_R	GGATCCTGATCAACATCCCCCAACAG	40245*	
Regulated expression of toxin genes in E. coli			
pPsv48A			
TA1_tox_F	TATGGTACCAGCAAAGAAGCCCGCAAGAC	23850*	Cloning of toxin from TA1 into pBAD24
TA1_tox_R	TATCTGCAGGCCATTCCACAGGCATAAAG	23496	
TA2_tox_F	TATGGTACCAGAATTGAAGTGGACAAGCAAG	37340*	Cloning of toxin from TA2 into pBAD24
TA2_tox_R	TATCTGCAGCGTTCCTCTATCGGTCTTCG	37061	
TA3_tox_F	TATGGTACCAATCCTGCTCGATACGAACG	53548	Cloning of toxin from TA3 into pBAD24
TA3_tox_R	TATCTGCAGCCTGATTCAACACGACGTTTAC	53982*	
TA4_tox_F	TATGGTACCCGTGCTAACAATTCGCTG	64278*	Cloning of toxin from TA4 into pBAD24
TA4_tox_R	TAACTGCAGACGGTTCAAGGGTATTGCTG	63995	
pPsv48B			

TA5_tox_F	TATGGTACCGATGCGAGGTGACCTAGTCA	11434*	Cloning of toxin from TA5 into pBAD24
TA5_tox_R	TATCTGCAGGCGACACAAGGAAAAGGTGT	11094	
pPsv48C			
TA6_tox_F	TATGGTACCACTACCCATTTTCTGGCTAG	2108	Cloning of toxin from TA6 into pBAD24
TA6_tox_R	TATCTGCAGCGAAGCATGAATACCAGCAC	2442*	
TA7_tox_R	TATGGTACCACAAGTAATCGTCACAGAAG	4269*	Cloning of toxin from TA7 into pBAD24
TA7_tox_F	TATCTGCAGGTCGATCTTCTCGGCCAGTC	3938	
TA8_tox_F	TATGGTACCACAAATCATCTGGCGGCAAC	39831	Cloning of toxin from TA8 into pBAD24
TA8_tox_R	TATCTGCAGATCAACATCCCCCAACAGC	40243*	
Construction of pRK3A and pRK3C			
pPsv48A			
A1_R	GGATCCATCCCTGGCTTCGGTCATAG	23716	with TA1_F
A2_R	GGATCCGGCCAGAAACTCGTATAGCC	37281	with TA2_F
A3_R	GGATCCGCTGCGGTTCTGAAATTACG	53584*	with TA3_F
pPsv48C			
A6_R	GGATCCGTTCTGAAAGGGGCAGAACG	2240*	with TA6_F

A7_R	GGATCCAGCTTCTGGGTCCTTTGCAG	4189*	with TA7_F
A8_R	GGATCCGCTTGCGGGTCTTCGTTG	39907*	with TA8_F
PCR multiplex			
pPsv48C			
RepL_F	TACGCTACGCGAGCTCAATC	33336	Detection of PSPSV_C0043
RepL_R	TCTAGAGGCCTTCCTTATTCATGATGC	34355*	
7C_F	AAACAGCCCCCGACATTG	4142*	Detection of PSPSV_C0007
7C_R	GCCGAAATTTCCGTCAGG	3411	
RepJ_F	ATAGGCTCCTAGCGTCGAG	30484	Amplifies a region within RepJ replicon
RepJ_R	AGAGCGATTGACCATGCAC	31028*	
RepA_F	CAATAGCAGCTTGTCGCTCA	882	*repA* detection
RepA_R	GTTACCGTTGGCCTCTCGTC	1148*	
ipt_F	GCGTCTCCAGGAAGAATTGG	18715	To detect gene *idi* and estimate copy number
ipt_R	ACCTCATCCGGATTCAAGC	18870*	
Plasmid copy number estimation by qPCR			
Chromosome (accession nº CP008742)			
gyrA_F	GACGAGCTGAAGCAGTCCTACC	3774872*	Internal to *gyrA*

gyrA_R	TTCCAGTCGTTACCCAGCTCG	3774736	
pPsv48A			
ptz_F	AAGACCCATACTGGTGCGATAG	28623*	Internal to *ptz*
ptz_R	CCGCAACCAACTCGTCTAAC	28471	
pPsv48B			
AO1_F	AGGGAAACCGAAGACCAATG	10026	Internal to *hopAO1*
AO1_R	AACCAGCCAATTTCAGATCG	10176*	
pPsv48C			
ipt_F	GCGTCTCCAGGAAGAATTGG	18715	To detect gene *idi* and estimate copy number
ipt_R	ACCTCATCCGGATTCAAGC	18870*	
Other purposes			
pk18mob-km-sac_F	GATATCTTATGGACAGCAAGCGAACC		Used to amplify Km^R-*sacB* cassette from pK18*mobsacB*
pk18mob-km-sac_R	GATATCTCGTGGACTATGAGCACGTC		
IS801_R	ACGCATCAGCGTCTTCCTAC		Anneals 74 nt upstream of the 3´ end of CRR1; outwards
IS50_F	ACACAGATTTAGCCCAGTCG		Anneals in Tn*5*GDYN1

[a] The name of the primer is indicated, as well as the molecule used as target DNA and the purpose of designing each pair.

[b] Adaptors introduced in primers to facilitate cloning are underlined.

[c] The coordinates of the annealing point of the first nucleotide of each primer is indicated. Asterisks indicate that the primer anneals in the reverse strand of the DNA molecule.