## S1 Table. Bacterial strains and plasmids used in this study.

Name	Description	Source / Reference
Strains		
Serratia ma	rcescens	
Db10	Wild type	[1]
SJC3	Db10 ΔtssH (ΔSMDB11_2274)	[2]
SJC11	Db10 ΔtssE (ΔSMDB11_2271)	[2]
FRA02	Db10 ΔvgrG1 (ΔSMDB11_2244)	This study
FRA01	Db10 Δ <i>vgrG</i> 2 (Δ <i>SMDB11</i> _2276)	This study
FRA03	Db10 $\Delta vgrG1\Delta vgrG2$	This study
FRC32	Db10 Δ <i>paar1</i> (Δ <i>SMDB11_2250</i> )	This study
MJF15	Db10 Δrhs1 (ΔSMDB11_2278)	[3]
JAD13	Db10 Δrhs2 (ΔSMDB11_1610)	[3]
JAD14	Db10 $\Delta rhs1\Delta rhs2$	[3]
FRC25	Db10 ΔpaarΔrhs1Δrhs2	This study
FRC27	Db10 $\Delta vgrG1\Delta paar1$	This study
FRC26	Db10 ΔvgrG2Δpaar1	This study
FRC28	Db10 $\Delta vgrGl\Delta rhsl$	This study
FRC29	Db10 $\Delta vgrG1\Delta rhs2$	This study
FRC30	Db10 $\Delta vgrG1\Delta rhs1\Delta rhs2$	This study
FRC31	Db10 $\Delta vgrG2\Delta rhs1\Delta rhs2$	This study
JAD12	Db10 ΔeagR1 (ΔSMDB11_2277)	[3]
JAD34	Db10 ΔeagR2 (ΔSMDB11_1609)	This study
FRC06	Db10 Δhcp1 (ΔSMDB11_2263)	This study
FRC07	Db10 Δhcp2 (ΔSMDB11_3455)	This study
FRC08	Db10 Δhcp3 (ΔSMDB11_3456)	This study
FRC21	Db10 VgrG1-His (encodes VgrG1 [SMDB11_2244] with a C-terminal His6 tag at the native chromosomal location)	This study
FRC17	Db10 VgrG2-His (encodes VgrG2 [SMDB11_2276] with a C-terminal His <sub>6</sub> tag at the native chromosomal location)	This study
FRC37	Db10 VgrG1-His, $\Delta vgrG2$ (encodes VgrG1 with a C-terminal His <sub>6</sub> tag in a $\Delta vgrG2$ background)	This study
FRC38	Db10 VgrG2-His, $\Delta vgrG1$ (encodes VgrG2 with a C-terminal His <sub>6</sub> tag in a $\Delta vgrG1$ background)	This study
FRC55	Db10 VgrG2-His, $\Delta tssE$ (encodes VgrG2 with a C-terminal His <sub>6</sub> tag in a $\Delta tssE$ background)	This study
FRC56	Db10 VgrG2-His, $\Delta rhs1$ (encodes VgrG2 with a C-terminal His <sub>6</sub> tag in a $\Delta rhs1$ background)	This study
FRC57	Db10 VgrG2-His, $\Delta rhs2$ (encodes VgrG2 with a C-terminal His <sub>6</sub> tag in a $\Delta rhs2$ background)	This study
FRC58	Db10 VgrG2-His, $\Delta rhs1\Delta rhs2$ (encodes VgrG2 with a C-terminal His <sub>6</sub> tag in a $\Delta rhs1\Delta rhs2$ background)	This study
JAD35	Db10 VgrG2-His, $\Delta rhs1\Delta eagR2$ (encodes VgrG2 with a C-terminal His <sub>6</sub> tag in a $\Delta rhs1\Delta eagR2$ background)	This study
FRC41	Db10 Ssp4-HA (encodes Ssp4 [SMDB11_3980] with a C-terminal HA tag at the native chromosomal location)	This study

FRC53	Db10 Ssp4-HA, $\Delta tssE$ (encodes Ssp4 with a C-terminal HA tag in a $\Delta tssE$ background)	This study
FRC54	Db10 Ssp4-HA, $\Delta tssE\Delta hcp1$ (encodes Ssp4 with a C-terminal HA tag in a $\Delta tssE$ , $\Delta hcp1$ [ $\Delta SMDB11~2263$ ] background)	This study
JAD18	Db10 FLAG-Rhs1 (encodes Rhs1 with an N-terminal 3xFLAG tag at the native chromosomal location)	This study
FRC34	Db10 Δslp (ΔSMDB11 0927)	This study
FRC39	Db10 Δ0927-0929 (ΔSMDB11 0927-SMDB11 0929)	This study
FRC40	Sm-resistant derivative of FRC39 ( $\Delta 0927$ -0929)	This study
JAD09	Db10 $\Delta rhsI1\Delta tssH$ , Sm-resistant (Rhs1-susceptible target strain)	[3]
JAD17	Db10 $\Delta rhs2\Delta rhs12$ , Sm-resistant (Rhs2-susceptible target strain)	[3]
KT63	Db10 $\triangle ssp2\triangle rap2a$ , Sm-resistant (Ssp2-susceptible target strain)	[4]
JAD06	Db10 $\triangle ssp4\triangle sip4$ , Sm-resistant (Ssp4-susceptible target strain)	[5]
SJC17	Sm-resistant derivative of <i>S. marcescens</i> ATCC 274	[2]
Pseudomonas		[-]
KT02	Sm-resistant derivative of <i>P. fluorescens</i> 55	[2]
Escherichia ca	•	[2]
MC4100	Model K-12 strain; Sm-resistant ( <i>rpsL150</i> )	[6]
CC118λ <i>pir</i>	Cloning host and donor strain for pKNG101-derived allelic exchange	[7]
-	plasmids ( $\lambda pir$ )	
HH26 pNJ5000	Mobilizing strain for conjugal transfer	[8]
	MG1655 ΔcyaA::apr	F. Sargent
Plasmids		
pKNG101	Suicide vector for allelic exchange (Sm <sup>R</sup> sacBR mobRK2 oriR6K)	[9]
pSUPROM	Vector for constitutive expression of cloned genes under the control of the $E$ . <i>coli tat</i> promoter ( $Kn^R$ )	[10]
pBAD18-Kn	Vector for arabinose-inducible expression of cloned genes under the control of the $P_{\text{ara}}$ promoter.	[11]
pUT18	Bacterial Two Hybrid plasmid (for fusion of protein of interest with C-terminal T18 fragment of CyaA; Ap <sup>R</sup> )	[12]
pT25	Bacterial Two Hybrid plasmid (for fusion of protein of interest with N-terminal T25 fragment of CyaA; Cm <sup>R</sup> )	[13]
pSC601		
	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11~2276~(\Delta vgrG2)$ deletion	This study
pSC602	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2276$ ( $\Delta vgrG2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of	This study This study
pSC602 pSC733	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2276$ ( $\Delta vgrG2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2244$ ( $\Delta vgrG1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of	•
	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2276$ ( $\Delta vgrG2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2244$ ( $\Delta vgrG1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2250$ ( $\Delta paar1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of	This study
pSC733	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2276$ ( $\Delta vgrG2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2244$ ( $\Delta vgrG1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2250$ ( $\Delta paarI$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_1609$ ( $\Delta eagR2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of pKNG101-derived allelic exchange plasmid for the generation of	This study This study
pSC733 pSC1050	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2276$ ( $\Delta vgrG2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2244$ ( $\Delta vgrG1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2250$ ( $\Delta paar1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_1609$ ( $\Delta eagR2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_12263$ ( $\Delta hcp1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of pKNG101-derived allelic exchange plasmid for the generation of	This study This study This study
pSC733 pSC1050 pSC706	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2276$ ( $\Delta vgrG2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2244$ ( $\Delta vgrG1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2250$ ( $\Delta paar1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_1609$ ( $\Delta eagR2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2263$ ( $\Delta hcp1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_3455$ ( $\Delta hcp2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_3455$ ( $\Delta hcp2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of	This study This study This study This study
pSC733 pSC1050 pSC706 pSC707	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2276$ ( $\Delta vgrG2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2244$ ( $\Delta vgrG1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2250$ ( $\Delta paarI$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_1609$ ( $\Delta eagR2$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2263$ ( $\Delta hcp1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_2263$ ( $\Delta hcp1$ ) deletion pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_3455$ ( $\Delta hcp2$ ) deletion	This study This study This study This study This study

pSC739	pKNG101-derived allelic exchange plasmid for the generation of chromosomal in-frame $\Delta SMDB11\_0927-0929$ deletion	This study
pSC727	pKNG101-derived allelic exchange plasmid for the incorporation of a <i>vgrG1</i> - <i>His</i> ( <i>SMDB11_2244-His</i> <sub>6</sub> ) allele at the normal chromosomal location	This study
pSC728	pKNG101-derived allelic exchange plasmid for the incorporation of a <i>vgrG2-His</i> ( <i>SMDB11_2276-His</i> <sub>6</sub> ) allele at the normal chromosomal location	This study
pSC754	pKNG101-derived allelic exchange plasmid for the incorporation of an <i>ssp4-HA</i> ( <i>SMDB11_3980-HA</i> ) allele at the normal chromosomal location	This study
pSC671	pKNG101-derived allelic exchange plasmid for the incorporation of a <i>FLAG-rhs1</i> (3xFLAG-SMDB11_2278) allele at the normal chromosomal location	This study
pSC622	Coding sequence for VgrG1 (SMDB11_2244) in pSUPROM	This study
pSC623	Coding sequence for VgrG2 (SMDB11_2276) in pSUPROM	This study
pSC715	Coding sequence for Hcp1 (SMDB11_2263) in pSUPROM	This study
pSC734	Coding sequence for Paar1 (SMDB11_2250) in pSUPROM	This study
pSC772	Coding sequence for Slp (SMDB11_0927) in pSUPROM	This study
pSC788	Coding sequence for Rhs2 + RhsI2 (SMDB11_1610 + 1611) in pSUPROM	This study
pSC643	Coding sequence for Rhs1 (SMDB11_2278) in pBAD18-Kn	[3]
pSC791	Coding sequence for Rhs1 + RhsI1 (SMDB11_2278 +2278A) in pBAD18-Kn	This study
pSC697	Coding sequence for FLAG-Rhs1 (SMDB11_2278) in pBAD18-Kn	This study
pSC699	Coding sequence for Rhs1 <sup>NT</sup> (SMDB11_2278; amino acids 1-422) in pUT18	This study
pSC700	Coding sequence for Rhs2 <sup>NT</sup> (SMDB11_1610; amino acids 1-363) in pUT18	This study
pSC688	Coding sequence for EagR1 (SMDB11_2277) in pT25	This study
pSC689	Coding sequence for EagR2 (SMDB11_1609) in pT25	This study
pSC048	Coding sequence for TssK (SMDB11_2253) in pUT18	This study
pSC053	Coding sequence for TssK (SMDB11_2253) in pT25	This study
pSC690	Coding sequence for Rhs1 <sub>NT</sub> (SMDB11_2278; amino acids 1-422) in pT25	This study
pSC686	Coding sequence for EagR1 (SMDB11_2277) in pUT18	This study
pSC1056	Coding sequence for EagR2 (SMDB11_1609) in pUT18	This study

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