

Table S1: Primers used in this study.

Integrase family	Name	Oligo Sequence	Specificity for prophage
Sa1	Sa1int-for	AAGCTAAGTTCGGGCACA	ΦETA
	Sa1int-rev	GTAATGTTTGGGAGCCAT	
Sa2	Sa2int-for	TCAAGTAACCCGTCAACTC	ΦSa2MW
	Sa2int-rev	ATGTCTAAATGTGTGCGTG	
Sa3	Sa3int-for	GAAAAACAAACGGTGCTAT	Φ13
	Sa3int-rev	TTATTGACTCTACAGGCTGA	
Sa4	Sa4int-for	ATTGATATTAACGGAACTC	ΦSa4ms
	Sa4int-rev	TAAACTTATATGCGTGTGT	
Sa5	Sa5int-for	AAAGATGCCAAACTAGCTG	Φ11
	Sa5int-rev	CTTGTGGTTTTGTTCTGG	
Sa6	Sa6int-for	GCCATCAATTCAAGGATAG	ΦL54a
	Sa6int-rev	TCTGCAGCTGAGGACAAT	
Sa6390	phi6390int-for	AGTCTTACCCTTATCATTATCC	Φ6390
	phi6390int-rev	CCCTCCTTTCTATTACGA	
-	Sak-for	GTGCATCAAGTTCATTTCGAC	
	Sak-rev	TAAGTTGAATCCAGGGTTTT	

Table S2: Resistance phenotype in correlation to sequence and SCC*mec* types.

Resistance phenotype	ST5 N = 49			ST225 N = 30	
	SCC <i>mec</i> II	SCC <i>mec</i> IV	SCC <i>mec</i> not typeable	SCC <i>mec</i> negative	SCC <i>mec</i> II
Oxa, Ery, Clin*, Cip	55% (27)			93% (28)	
Oxa, Ery, Clin, Cip, Gen	2% (1)			3% (1)	
Oxa, Ery, Clin, Cip, Tet				3% (1)	
Oxa, Ery, Clin, Cip, Ram	4% (2)				
Oxa, Ery, Clin	2% (1)				
Oxa, Ery, Clin, Cip, Ram, Fus	2% (1)				
Oxa, Cip	4% (2)	2% (1)	2% (1)		
Oxa				6% (3)	
Oxa, Ram				2% (1)	
Oxa, Cip, Gen, Ram				2% (1)	
Pen				8% (4)	
No resistance				8% (4)	

clin* inducible clindamycin resistance confirmed by D-zone test (3 isolates in each ST group)

Oxa: oxacillin, Ery: erythromycin, Clin: clindamycin, Cip: ciprofloxacin, Gen: gentamicin, Ram: rifampicin, Tet: tetracycline, Fus: fusidic acid