Supplementary material

Supplementary table S1: The different SCCmec type profiles based on the multiplex PCR (mPCR)

SCCmec types	PCR1 (a, b) [1]							PCR2			PCR3		PCR4		
	mecA (286bp)	type 1 ccr [2]	type 2 ccr	type 3 ccr	type 4 ccr	type 5 ccr	type 7 ccr	class A mec	class B mec	class C2 mec	mecA (533pb)	class C1 mec	mecC	class E mec	type 8 ccr
I	+	+							+		+				
II	+		+					+			+				
III	+			+				+			+				
III+SCChg	+			+	+			+			+				
IV	+		+						+		+				
V	+					+				+	+				
VI	+				+				+		+				
VII	+					+					+	+			
VIII	+				+			+			+				
IX	+	+								+	+				
X	+						+				+	+			
XI													+	+	+
II/IV	+		+					+	+		+				
VII/X	+					+	+				+	+			

[1] + = PCR positive result, [2] ccr = cassette chromosome recombinase-encoding gene

SCC*mec* types	*ccr* complex genes [2]												*mec* complex genes								Reference strains
	ccrA	*ccrB*	*ccrA1*	*ccrB1*	*ccrA2*	*ccrB2*	*ccrA3*	*ccrB3*	*ccrA4*	*ccrB4*	*ccrC*	*ccrC2*	*mecA*	*mecC*	*mecR1*	Δ*mecR1* [3]	Ψ*mecR1* [4]	*mecI*	IS*431* [5]	IS*1272*	
I (1B)			+	+									+			+			+	+	NCTC10442
II (2A)					+	+							+		+			+	+		N315
III (3A)(Hg)							+	+			(+)	(+)	+				+	+	+		85/2082
IVa (2B)					+	+							+			+			+		CA05
V (5C2)											+	+	+			+			+(2x)		WIS
VI (4B)									+	+			+			+			+		HDE288
VII (5C1)											+	+	+			+			+(2x)		JCSC6082
VIII (4A)	+								+	+			+		+			+	+		C10682
IX (1C2)		+	+										+			+			+(2x)		JCSC6943
X (7C1)		+	+										+			+			+(2x)		JCSC6945
XI (8E)		+					+							+	+			+			LGA251
XII (9C2)		+										+	+			+			+(3x)		BA01611
XIII (9A)											+	+	+		+			+			SS-99-44
New ?													+							+	C128 ?

[1] + = more than 95% sequence homology, [2] *ccr* = cassette chromosome recombinase gene, [3] Δ*mecR1* = *mecR1* gene with a deletion in the C-terminal inducer domain, [4] Ψ*mecR1* = gene coding for truncated signal transducer protein MecR1, [5] IS = insertion sequence

Supplementary table S3: Identification with SCC*mec*Finder 1.2 after whole genome sequencing (WGS) of the SCC*mec* types in the 9 staphylococci untypeable with the multiplex PCR (mPCR)

Staphylococus species	Host species	*ccr* complex genes [1]		*mec* complex genes				Other	SCC*mec* type
		ccrA2	*ccrB2*	*mecA*	*mecR1*	Δ*mecR1* [3]	*mecI*	IS1272 [4]	
B231 (*S. aureus*)	cow	99.93 [2]	100	100		100		100	IVa(2B)
B524 (*S. aureus*)	cow	100	100	100		100		99.95	IVa(2B)
C128 (*S. haemolyticus*)	cow			100				99.75	None
EQ02 (*S. aureus*)	human	100	100	100		100		100	IVa(2B)
EQ06 (*S. aureus*)	human	100	100	99.95		100		99.94	IVa(2B)
EQ13 (*S. aureus*)	human	99.93	100	100		100		100	IVa(2B)
EQ17 (*S. aureus*)	human	100	100	100		100		100	IVa(2B)
J215 (*S. aureus*)	cat	100	100	100	100		100		II(2A)
J231 (*S. aureus*)	cat	100	100	100				99.62	IVa(2B)

[1] *ccr* = cassette chromosome recombinase gene, [2] % homology of the identified genes to genes present in the reference strains (see Suppl. Table 2), [3] Δ*mecR1* =

mecR1 gene with a deletion in the C-terminal inducer domain, [4] IS = insertion sequence