What is claimed is:

1. A method of detecting in a sample a methicillin-resistant *Staphylococcus aureus* (MRSA) having an insertion of an SCCmec cassette within *Staphylococcus aureus* chromosomal DNA, comprising

performing on the sample an amplification and detection reaction utilizing

a. a first primer capable of specifically hybridizing in an extremity junction region of the SCCmec cassette,

b. a second primer capable of specifically hybridizing in an extremity junction region of chromosomal *Staphylococcus aureus* DNA, and

c. a first probe capable of specifically hybridizing to a region of the SCCmec cassette between the region with which the first primer is capable of hybridizing and the junction,

wherein each of the first primer and the second primer is oriented such that, under amplification conditions, the junction is amplified, and

wherein if the sample contains MRSA, hybridization of the probe is detected.

2. The method of claim 1, wherein the first probe comprises more than one probe, each capable of hybridizing specifically to a different type of MRSA.

3. The method of claim 1, wherein the first probe comprises five or more probes, each capable of hybridizing specifically to a different type of MRSA.

4. The method of claim 1, wherein the first primer comprises more than one primer capable of hybridizing in an extremity junction region of the SCCmec cassette.

5. The method of claim 1, wherein the extremity junction region is the right extremity junction region.

6. The method of claim 5, wherein the second primer comprises the nucleic acid set forth as SEQ ID NO: 13.

7. The method of claim 5, wherein the first probe comprises a sequence selected from the group consisting of: SEQ ID NO: 7, 8, 9, 10, 11, and 12.

8. The method of claim 5, wherein the first probe comprises at least five nucleic acids, each comprising one of SEQ ID NO: 7, 8, 9, 10, 11, and 12.

9. The method of claim 5, wherein the first primer comprises a nucleic acid comprising a sequence selected from the group consisting of: SEQ ID NO: 1, 2, 3, 4, 5, and 6.

10. The method of claim 5, wherein the first primer comprises at least five nucleic acids, each comprising one of SEQ ID NO: 1, 2, 3, 4, 5, and 6.

11. The method of claim 1, further comprising performing on the sample an amplification and detection reaction that detects the presence of mecA gene, wherein if the sample contains MRSA, the presence of both the target junction and mecA in the sample is detected.

12. The method of claim 11, wherein the amplification of mecA utilizes a mecA primer comprising a nucleic acid selected from the group consisting of SEQ ID NO: 15 and 16.

13. The method of claim 11, wherein detection of mecA utilizes a mecA probe comprising the nucleic acid set forth in SEQ ID NO: 14.

14. The method of claim 11, wherein the method comprises performing on the sample a multiplex amplification reaction wherein the amplification reaction comprises

a. amplifying and detecting the presence of a junction of an inserted SCCmec cassette and *Staphylococcus aureus* chromosomal DNA utilizing

1) a first primer capable of specifically hybridizing in an extremity junction region of the SCCmec cassette,

2) a second primer capable of specifically hybridizing in an extremity junction region of chromosomal *Staphylococcus aureus* DNA, and

3) a first probe capable of specifically hybridizing to a region of the SCCmec cassette between the region with which the first primer is capable of hybridizing and the junction,

wherein each of the first primer and the second primer is oriented such that, under amplification conditions, the junction is amplified and

b. amplifying and detecting the presence of mecA gene, wherein if the sample contains MRSA, the presence of both the target junction and mecA in the sample is detected.

15. A method of detecting in a sample a methicillin-resistant *Staphylococcus aureus* (MRSA) having an insertion of an SCCmec cassette within *Staphylococcus aureus* chromosomal DNA, the method comprising

a. performing on a sample a multiplex amplification reaction which can amplify both (1) a junction of an inserted SCCmec cassette and *Staphylococcus aureus* chromosomal DNA and (2) a region of mecA, and

b. detecting, within the products of the amplification, the presence or absence of each of the junction and mecA,

wherein if the sample contains MRSA, the presence of both the junction and mecA in the sample is detected.

16. The method of claim 15, wherein the amplification of the junction is performed utilizing

1) a first primer capable of specifically hybridizing in an extremity junction region of the SCCmec cassette,

2) a second primer capable of specifically hybridizing in an extremity junction region of chromosomal *Staphylococcus aureus* DNA, and

3) a first probe capable of specifically hybridizing to a region of the SCCmec cassette between the region with which the first primer is capable of specifically hybridizing and the junction,

wherein each of the first primer and the second primer is oriented such that, under amplification conditions, the junction is amplified.

17. The method of claim 16, wherein the first primer comprises more than one primer capable of hybridizing in an extremity junction region of the SCCmec cassette.

18. The method of claim 16, wherein the first probe comprises more than one probe, each capable of hybridizing specifically to a different type of MRSA.

19. The method of claim 16, wherein the first probe comprises five or more probes, each capable of hybridizing specifically to a different type of MRSA.

20. The method of claim 16, wherein the extremity junction region is the right extremity junction region.

21. The method of claim 20, wherein the second primer comprises the nucleic acid set forth in SEQ ID NO: 13.

22. The method of claim 16, wherein the amplification of a region of mecA utilizes a mecA primer, which mecA primer comprises a nucleic acid selected from the group consisting of SEQ ID NO: 15 and 16.

23. The method of claim 16, wherein the first probe comprises a sequence selected from the group consisting of: SEQ ID NO: 7, 8, 9, 10, 11, and 12.

24. The method of claim 16, wherein detection is performed using, as the first probe, at least five nucleic acids, each comprising one of SEQ ID NO: 7, 8, 9, 10, 11, and 12.

25. The method of claim 16, wherein amplification is performed using, as the first primer, a nucleic acid comprising a sequence selected from the group consisting of: SEQ ID NO: 1, 2, 3, 4, 5, and 6.

26. The method of claim 16, wherein amplification is performed using as the first primer at least five nucleic acids, each comprising one of SEQ ID NO: 1, 2, 3, 4, 5, and 6.