

Table 3H. Oxacillin Salt Agar Test for Detecting Methicillin (Oxacillin) Resistance in *Staphylococcus aureus*^a

Test	Oxacillin Salt Agar
Test method	Agar dilution
Medium	MHA with 4% NaCl
Antimicrobial concentration	6 µg/mL oxacillin
Inoculum	Colony suspension to obtain 0.5 McFarland turbidity Using a 1-µL loop that was dipped in the suspension, spot an area 10-15 mm in diameter. Alternatively, using a swab dipped in the suspension and the excess liquid expressed, spot a similar area or streak an entire quadrant.
Incubation conditions	33 to 35°C; ambient air ^b
Incubation length	24 h; read with transmitted light
Results	Examine carefully with transmitted light. > 1 colony or light film of growth = methicillin (oxacillin) resistant
Additional testing and reporting	MRS are resistant to currently available β-lactam agents, except ceftaroline, and these agents should be reported as resistant or should not be reported. ^c
QC recommendations – routine ^d	<i>S. aureus</i> ATCC ^{®e} 29213 – methicillin (oxacillin) susceptible (≤ 1 colony)
QC recommendations – lot/shipment ^f	<i>S. aureus</i> ATCC [®] 43300 – methicillin (oxacillin) resistant (> 1 colony)

Abbreviations: ATCC[®], American Type Culture Collection; h, hour(s); IQCP, individualized quality control plan; MHA, Mueller-Hinton agar; MRS, methicillin (oxacillin)-resistant *Staphylococcus* spp.; NaCl, sodium chloride; QC, quality control.

Table 3H. (Continued)**Footnotes**

- a. Including members of the *S. aureus* complex (see Table 2C, general comment [3]).
- b. Testing at temperatures above 35°C may not detect MRS.
- c. Testing of other β -lactam agents, except ceftaroline, is not advised.
- d. QC recommendations – routine

Test negative (susceptible) QC strain:

- With each new lot/shipment of testing materials
- Daily if the test is performed less than once per week and/or an IQCP justifying less frequent QC has not been developed
- Less frequent than daily if the test is performed at least once per week and an IQCP has been developed

- e. ATCC® is a registered trademark of the American Type Culture Collection.
- f. QC Recommendations – lot/shipment

Test positive (resistant) QC strain at minimum with each new lot/shipment of testing materials.