STAPHYLOCOCCUS AUREUS
AR-BANK#0477

KNOWN RESISTANCE MECHANISMS:

mecA

### PROPAGATION

#### MEDIUM
Medium: Trypticase Soy Agar with 5% Sheep Blood (BAP)

#### GROWTH CONDITIONS
Temperature: 35°C
Atmosphere: Aerobic

#### PROPAGATION PROCEDURE
Remove the sample vial to a container with dry ice or a freezer block. Keep vial on ice or block. (Do not let vial content thaw).

Open vial aseptically to avoid contamination

Using a sterile loop, remove a small amount of frozen isolate from the top of the vial

Aseptically transfer the loop to BAP

Use streak plate method to isolate single colonies

Incubate inverted plate at 35°C for 18-24 hrs.

### MIC (µg/ml) RESULTS AND INTERPRETATION

<table>
<thead>
<tr>
<th>DRUG</th>
<th>MIC</th>
<th>INT</th>
<th>DRUG</th>
<th>MIC</th>
<th>INT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cefoxitin¹</td>
<td>16</td>
<td>R</td>
<td>Linezolid</td>
<td>2</td>
<td>S</td>
</tr>
<tr>
<td>Ceftaroline</td>
<td>≤0.25</td>
<td>S</td>
<td>Mupirocin</td>
<td>≤4</td>
<td>---</td>
</tr>
<tr>
<td>Clindamycin</td>
<td>≤0.25</td>
<td>R²</td>
<td>Oxacillin</td>
<td>4</td>
<td>R</td>
</tr>
<tr>
<td>Daptomycin</td>
<td>≤0.5</td>
<td>S</td>
<td>Penicillin</td>
<td>&gt;2</td>
<td>R</td>
</tr>
<tr>
<td>Doxycycline</td>
<td>≤1</td>
<td>S</td>
<td>Rifampin</td>
<td>≤0.5</td>
<td>S</td>
</tr>
<tr>
<td>Erythromycin</td>
<td>&gt;8</td>
<td>R</td>
<td>Tetracycline</td>
<td>≤1</td>
<td>S</td>
</tr>
<tr>
<td>Gentamicin</td>
<td>≤2</td>
<td>S</td>
<td>Trimethoprim/sulfamethoxazole⁴</td>
<td>≤0.5</td>
<td>S</td>
</tr>
<tr>
<td>Levofloxacin</td>
<td>≤0.5</td>
<td>S</td>
<td>Vancomycin</td>
<td>≤0.5</td>
<td>S</td>
</tr>
</tbody>
</table>

S – I – R Interpretation (INT) derived from CLSI 2016 M100-S26
NS = Nonsusceptible

¹ Cefoxitin is tested as a surrogate for mecA-mediated oxacillin resistance
² Inducible clindamycin resistance detected
³ No inducible clindamycin resistance detected
⁴ Reflects MIC of first component

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http://www.cdc.gov/drugresistance/resistance-bank/
BIOSAFETY LEVEL 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *BioSafety in Microbiological and Biomedical Laboratories* (HHS Publication No. (CDC) 21-1112) from the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, and National Institutes of Health.

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