ANTIMICROBIAL RESISTANCE BANK

# STAPHYLOCOCCUS AUREUS

AR-BANK#0217

STORAGE TEMPERATURE -70°C

BIOSAFETY LEVEL 2

## 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.

KNOWN RESISTANCE:

Elevated MIC to vancomycin

## MIC (µg/ml) RESULTS AND INTERPRETATION

| DRUG | MIC | INT | DRUG | MIC | INT |
|---|---|---|---|---|---|
| Cefoxitin[1] | >16 | R | Linezolid | ≤1 | S |
| Ceftaroline | 0.5 | S | Mupirocin | ≤4 | --- |
| Clindamycin | ≤0.25 | S | Oxacillin | 8 | R |
| Daptomycin | 4 | NS | Penicillin | >2 | R |
| Doxycycline | ≤1 | S | Rifampin | ≤0.5 | S |
| Erythromycin | ≤0.25 | S | Tetracycline | ≤1 | S |
| Gentamicin | ≤2 | S | Trimethoprim/sulfamethoxazole[5] | >8 | R |
| Levofloxacin | >16 | R | Vancomycin | 8 | I |

S – I –R Interpretation (INT) derived from *CLSI 2015 M100-S25*
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] High-level mupirocin resistance
[5] Reflects MIC of first component

SEQUENCING INFORMATION: No Sequencing information available at this time

| ACCESSION # | SEQUENCING SOURCE | LINK |
|---|---|---|
| | | |
| | | |

## 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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