Certificate of Analysis for NR-45873

Staphylococcus aureus, Strain HIP08926

Catalog No. NR-45873

Product Description: *Staphylococcus aureus* (*S. aureus*), strain HIP08926 was isolated in 2000 from a bone or joint of a 72-year-old female patient in California, USA. *S. aureus*, strain HIP08926 is a vancomycin-intermediate *S. aureus* (VISA) strain.

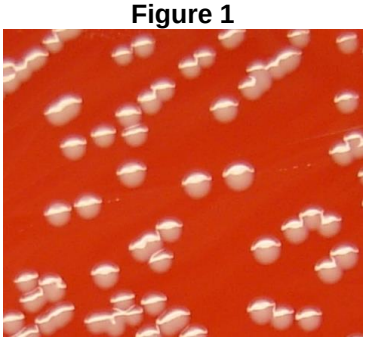
Lot[1]: 63406784 **Manufacturing Date: 01APR2015**

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology[2]	Report results	Circular, low convex, entire, smooth and cream (Figure 1)
Motility (wet mount)	Report results	Non-motile
Hemolysis[2]	Report results	Non-hemolytic[3]
Biochemical Characterization		
Catalase	Positive	Positive
Coagulase[4]	Report results	Positive
VITEK® 2 Compact (GP card)	Consistent with *S. aureus*	Consistent with *S. aureus*
Antibiotic Susceptibility Profile		
VITEK® (AST-GP71 card)[5]		
Beta-lactamase[6]	Report results	Positive
Cefoxitin screen	Report results	Positive
Benzylpenicillin	Report results	Resistant (≥ 0.5 µg/mL)
Oxacillin	Resistant	Resistant (≥ 4 µg/mL)
Gentamicin	Sensitive	Sensitive (≤ 0.5 µg/mL)
Ciprofloxacin	Resistant	Resistant (≥ 8 µg/mL)
Levofloxacin	Report results	Resistant (= 4 µg/mL)
Moxifloxacin	Report results	Resistant (= 2 µg/mL)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Report results	Resistant (≥ 8 µg/mL)
Clindamycin	Report results	Resistant (≥ 8 µg/mL)
Quinupristin/dalfopristin	Sensitive	Sensitive (= 0.5 µg/mL)
Linezolid	Report results	Sensitive (= 2 µg/mL)
Daptomycin	Non-susceptible	Non-susceptible (= 2 µg/mL)
Vancomycin	Intermediate	Sensitive (= 2 µg/mL)[7]
Minocycline	Report results	Sensitive (≤ 0.5 µg/mL)
Tetracycline	Sensitive	Sensitive (≤ 1 µg/mL)
Tigecycline	Report results	Sensitive (≤ 0.12 µg/mL)
Nitrofurantoin	Report results	Sensitive (≤ 16 µg/mL)
Rifampicin	Report results	Sensitive (≤ 0.5 µg/mL)
Trimethoprim/sulfamethoxazole	Resistant	Resistant (≥ 160 µg/mL)
Etest® antibiotic test strips[8]		
Chloramphenicol[9]	Report results	Sensitive (= 3 µg/ml)
Teicoplanin[9]	Sensitive	Sensitive (= 6 µg/ml)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 1500 base pairs)	Consistent with *S. aureus*	Consistent with *S. aureus*
Purity (post-freeze)[10]	Growth consistent with *S. aureus*	Growth consistent with *S. aureus*
Viability (post-freeze)[2]	Growth	Growth

BEI Resources
www.beiresources.org
E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898

[1]*S. aureus*, strain HIP08926 was deposited to BEI Resources as part of the NARSA collection. NR-45873 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 24 hours at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles which were grown 23 hours at 37°C in an aerobic atmosphere to produce this lot.
[2]21 hours at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood
[3]Limited β-hemolysis may be observed
[4]4 hours at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)
[5]Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)
[6]The production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650).
[7]*S. aureus*, strain HIP08926 was deposited as susceptible to vancomycin with a MIC of 4 ug/mL. Based on CLSI M100-S22 (2012) MIC Interpretation Guidelines, a vancomycin MIC of 4 ug/mL is considered to be intermediate. Antibiotic susceptibility testing performed by ATCC® and in duplicate determined that strain HIP08926 is susceptible to vancomycin. For additional information on susceptibility testing of VISA strains, please refer to Wootton, M., et al. "A Modified Population Analysis Profile (PAP) Method to Detect Hetero-Resistance to Vancomycin in *Staphylococcus aureus* in a UK Hospital." J. Antimicrob. Chemother. 47 (2001): 399-403. PubMed: 11266410.
[8]24 hours at 37°C in an aerobic atmosphere on Mueller Hinton agar
[9]For both chloramphenicol (bioMérieux Etest® 412308) and teicoplanin (bioMérieux Etest® 412459), a MIC ≤ 8 µg/mL is sensitive, a MIC = 16 µg/mL is intermediate, and a MIC ≥ 32 µg/mL is resistant.
[10]Purity of this lot was assessed for 7 days on Tryptic Soy agar with 5% defibrinated sheep blood at 37°C in an aerobic atmosphere.

Figure 1



Date: 05 JUN 2015 **Signature:**

BEI Resources Authentication

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.
You are authorized to use this product for research use only. It is not intended for human use.

Support Provided by NIAID

BEI Resources
www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898