

Staphylococcus aureus, Strain HIP13419

Catalog No. NR-46413

Product Description:

Staphylococcus aureus (*S. aureus*), strain HIP13419 was isolated in 2004 in New York, USA, from a polymicrobial infected nephrostomy tube exit site of a 64-year-old female who had no recent history of vancomycin therapy. *S. aureus*, strain HIP13419 is a vancomycin-resistant *S. aureus* (VRSA) strain and is reported to be resistant to a number of other antimicrobial agents. NR-46413 lot 70032751 was produced by inoculation of seed material into Tryptic Soy broth containing 6 µg/mL vancomycin and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar containing 6 µg/mL vancomycin kolles and grown for 1 day at 37°C in an aerobic atmosphere.

Lot: 70032751

Manufacturing Date: 05FEB2020

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 6 µg/mL vancomycin Motility (wet mount) Hemolysis Biochemical characterization Catalase Coagulase VITEK® 2 Compact GP card	Gram-positive cocci Report results Report results Report results Positive Negative <i>S. aureus</i> (≥ 89.9%)	Gram-positive cocci Circular, convex, entire, smooth and cream (Figure 1) Non-motile Beta-hemolytic Positive Positive <i>S. aureus</i> (95%)
Antibiotic Susceptibility Profile¹ Etest® antibiotic test strips 1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar Teicoplanin Chloramphenicol Daptomycin VITEK® AST-GP67 card Cefoxitin screen Benzylpenicillin Oxacillin Gentamicin Ciprofloxacin Levofloxacin Moxifloxacin Clindamycin (inducible resistance) Erythromycin Clindamycin Quinupristin/dalfopristin Linezolid Vancomycin Tetracycline Tigecycline Nitrofurantoin Rifampicin Trimethoprim/sulfamethoxazole	Resistant Sensitive Sensitive Positive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Negative Resistant Resistant Sensitive Sensitive Resistant Resistant Sensitive Sensitive Resistant Resistant Sensitive Sensitive Sensitive	Intermediate (12 µg/mL) ² Sensitive (6 µg/mL) Resistant (125 µg/mL) ³ Positive Resistant (≥ 0.5 µg/mL) Resistant (≥ 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (4 µg/mL) Negative Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (2 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 0.12 µg/mL) ⁴ Sensitive (≤ 16 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 10 µg/mL)

TEST	SPECIFICATIONS	RESULTS
Cefinase™ Paper Disc Beta-lactamase	Positive	Positive
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	≥ 99% sequence identity to <i>S. aureus</i> type strain (GenBank: CP000253.1)	99.9% sequence identity to <i>S. aureus</i> type strain (GenBank: CP000253.1)
Purity (post-freeze) 7 days at 37°C in an aerobic atmosphere with 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze) 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 6 µg/mL vancomycin	Growth	Growth

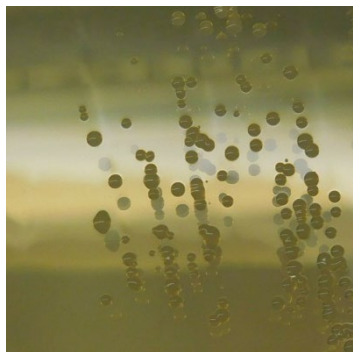
¹Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

²*S. aureus*, strain HIP13419 was deposited as resistant to teicoplanin, but showed a MIC of 12 µg/mL (interpreted as intermediate) for teicoplanin during QC testing. Testing was performed in duplicate.

³*S. aureus*, strain HIP13419 was deposited as sensitive to daptomycin, but showed a MIC of 125 µg/mL (interpreted as resistant) for daptomycin during QC testing. Testing was performed in duplicate.

⁴MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

Figure 1: Colony Morphology



/Heather Couch/
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