

Staphylococcus aureus, Strain HT 20020376

Catalog No. NR-46051

Product Description: *Staphylococcus aureus* (*S. aureus*), strain HT 20020376 was isolated in 2002 from a wound of a 5-month-old female with bullous impetigo. *S. aureus*, strain HT 20020376 is a methicillin-sensitive *S. aureus* (MSSA) strain.

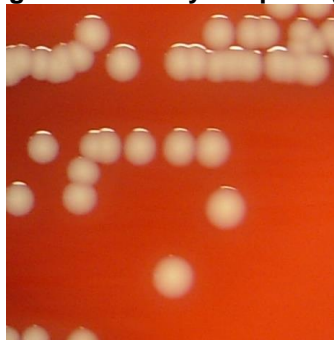
Lot¹: 63689612

Manufacturing Date: 13AUG2015

| TEST | SPECIFICATIONS | RESULTS |
|---|---|---|
| Phenotypic Analysis Cellular morphology Colony morphology ² Motility (wet mount) Hemolysis ² Biochemical Analysis Catalase Coagulase ³ VITEK [®] 2 Compact (GP card) | Gram-positive cocci Report results Report results Report results Positive Report results Consistent with <i>S. aureus</i> | Gram-positive cocci Circular, flat, entire, smooth and gray (Figure 1) Non-motile β-hemolytic Positive Positive Consistent with <i>S. aureus</i> |
| Antibiotic Susceptibility Profile VITEK [®] (AST-GP71 card) ⁴ Beta-lactamase ⁵ Cefoxitin screen Benzylpenicillin Oxacillin Gentamicin Ciprofloxacin Levofloxin Moxifloxacin Clindamycin (inducible resistance) Erythromycin Quinupristin/dalfopristin Linezolid Daptomycin Vancomycin Minocycline Tetracycline Tigecycline Nitrofurantoin Rifampicin Trimethoprim/sulfamethoxazole Etest [®] antibiotic test strips ⁸ Chloramphenicol ⁹ Teicoplanin ⁹ | Report results Report results Report results Sensitive Sensitive Sensitive Report results Report results Report results Report results Resistant Sensitive Sensitive Report results Sensitive Report results Report results Report results Report results Report results Sensitive Report results Sensitive | Positive Negative Resistant (≥ 0.5 µg/mL) Sensitive (= 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 0.25 µg/mL) Positive ⁶ Resistant (≥ 8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (= 2 µg/mL) Sensitive (= 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.12 µg/mL) ⁷ Sensitive (≤ 16 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 10 µg/mL) |
| Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1500 base pairs) | Consistent with <i>S. aureus</i> | Consistent with <i>S. aureus</i> |
| Purity (post-freeze)¹⁰ | Consistent with expected colony morphology | Consistent with expected colony morphology |
| Viability (post-freeze)² | Growth | Growth |

- ¹*S. aureus*, strain HT 20020376 was deposited to BEI Resources as part of the NARSA collection. NR-46051 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolle which was grown 1 day at 37°C in an aerobic atmosphere to produce this lot.
- ²1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood
- ³4 hours at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)
- ⁴Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)
- ⁵The production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650).
- ⁶The VITEK® AST-GP71 card tests for both clindamycin resistance and inducible clindamycin resistance (ICR). A positive ICR test is indicative of inducible MLS_B resistance, which confers resistance to macrolides, lincosamides, and type B streptogramin and the isolate should be considered resistant to clindamycin. *S. aureus*, strain HT 20020376 was found to be sensitive to clindamycin but had a positive ICR test and therefore is considered resistant to clindamycin.
- ⁷MIC Interpretation Guideline: EUCAST Version 4.0 (2014)
- ⁸1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar
- ⁹For 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.
- ¹⁰Purity 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: Colony Morphology



Date: 25 NOV 2015

Signature:

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