SUPPORTING INFECTIOUS DISEASE RESEARCH

Staphylococcus aureus, Strain CA-126

Catalog No. NR-46171

Product Description: *Staphylococcus aureus* (*S. aureus*), strain CA-126 was isolated in June 2005 from the blood an 89-year-old male in California, USA. *S. aureus*, strain CA-126 is a methicillin-resistant *S. aureus* (MRSA) strain.

Lot¹: 62436016

Manufacturing Date: 21MAR2014

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology ²	Report results	Circular, low convex, entire, smooth
, i 0,		and tan (Figure 1)
Motility (wet mount)	Report results	Non-motile
Hemolysis ²	Report results	β-hemolytic
Biochemical characterization		
Catalase	Positive	Positive
Coagulase ³	Report results	Positive
VITEK [®] 2 Compact (GP card)	Consistent with S. aureus	Consistent with S. aureus
Antibiotic Susceptibility Profile		
VITEK [®] (AST-GP71 card) ⁴		
Beta-lactamase ⁵	Report results	Positive
Cefoxitin screen	Report results	Positive
Benzylpenicillin	Report results	Resistant (≥ 0.5 µg/mL)
Oxacillin	Resistant	Resistant ($\geq 4 \ \mu g/mL$)
Gentamicin	Sensitive	Sensitive ($\leq 0.5 \ \mu g/mL$)
Ciprofloxacin	Report results	Resistant ($\geq 8 \ \mu g/mL$)
Levofloxacin	Resistant	Resistant ($\geq 8 \ \mu g/mL$)
Moxifloxacin	Report results	Resistant ($\geq 8 \ \mu g/mL$)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Resistant	Resistant (≥ 8 µg/mL)
Clindamycin	Resistant	Resistant ($\geq 8 \ \mu g/mL$)
Quinupristin/dalfopristin	Report results	Sensitive ($\leq 0.25 \mu$ g/mL)
Linezolid	Sensitive	Sensitive (= 1 μ g/mL)
Daptomycin	Sensitive	Sensitive (= $0.5 \mu g/mL$)
Vancomycin	Sensitive	Sensitive (≤ 0.5 µg/mL)
Minocycline	Report results	Sensitive ($\leq 0.5 \ \mu g/mL$)
Tetracycline	Sensitive	Sensitive (≤ 1 µg/mL)
Tigecycline	Report results	Sensitive (≤ 0.12 µg/mL)
Nitrofurantoin	Report results	Sensitive (≤ 16 µg/mL)
Rifampicin	Sensitive	Sensitive (≤ 0.5 µg/mL)
Trimethoprim/sulfamethoxazole	Sensitive	Sensitive (≤ 10 µg/mL)
Etest [®] antibiotic test strips ⁶		
Chloramphenicol ⁷	Resistant	Intermediate (= 16 μ g/mL) ⁸
Teicoplanin ⁷	Report results	Sensitive (= 1.5 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	Consistent with S. aureus	Consistent with S. aureus
(~ 1490 base pairs)		
Viability (post-freeze) ²	Growth	Growth

S. aureus, strain CA-126 was deposited to BEI Resources as part of the NARSA collection. NR-46171 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 23 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. Purity of this lot was

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assessed for 7 days under propagation conditions.

²22 hours at 37°C and 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)

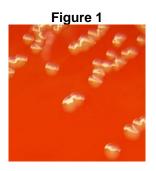
⁴Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

⁵The production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650).

⁶24 hours at 37°C and aerobic atmosphere on Mueller Hinton agar

⁷For 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.

⁸S. aureus, strain CA-126 was deposited as being resistant to chloramphenicol. ATCC[®] quality control determined that S. aureus, strain CA-126 has an intermediate susceptibility to chloramphenicol. Repeat testing confirmed ATCC[®]'s results.



Date: 10 JUN 2014

Signature:

Title:

Technical Manager, BEI Authentication or designee

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.

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