

Certificate of Analysis for NR-45906

Staphylococcus aureus, Strain COL

Catalog No. NR-45906

Product Description: Staphylococcus aureus (S. aureus), strain COL is an archaic methicillinresistant S. aureus (MRSA) strain from the United Kingdom. Strain COL is also reported to be resistant to tetracycline.

Lot¹: 62265030 Manufacturing Date: 18DEC2013

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology ²	Report results	Circular, low convex, entire, smooth
, 1 3,	'	and cream (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	Donost society	Namathia
	Report results	Negative Positive
Cefoxitin screen	Report results	
Benzylpenicillin Oxacillin	Resistant	Resistant (≥ 0.5 µg/mL)
Gentamicin	Resistant Sensitive	Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL)
	Sensitive	
Ciprofloxacin Levofloxacin	Report results	Sensitive (≤ 0.5 μg/mL) Sensitive (= 0.25 μg/mL)
Moxifloxacin	Report results	Sensitive (= 0.25 μg/mL) Sensitive (≤ 0.25 μg/mL)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Sensitive	Negative Sensitive (≤ 0.25 μg/mL)
Clindamycin	Sensitive	Sensitive (≤ 0.25 μg/mL) Sensitive (≤ 0.25 μg/mL)
Quinupristin/dalfopristin	Sensitive	Sensitive (≤ 0.25 µg/mL)
Linezolid	Sensitive	Sensitive (= 2 µg/mL)
Daptomycin	Report results	Sensitive (= 2 µg/mL) Sensitive (= 0.5 µg/mL)
Vancomycin	Sensitive	Sensitive (= 1 μg/mL)
Minocycline	Report results	Intermediate (= 8 µg/mL)
Tetracycline	Resistant	Resistant (≥ 16 µg/mL)
Nitrofurantoin	Report results	Sensitive (≤ 16 µg/mL)
Rifampicin	Report results	Sensitive (≤ 0.5 μg/mL)
Trimethoprim/sulfamethoxazole	Sensitive	Sensitive (≤ 10 µg/mL)
Etest [®] antibiotic test strips ⁶	255	(= 10 µg/=/
Chloramphenicol ⁷	Report results	Sensitive (= 3 µg/mL)
Teicoplanin ⁷	Sensitive	Sensitive (= 1.5 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	Consistent with S. aureus	Consistent with S. aureus
(~ 1400 base pairs) Riboprinter® Microbial Characterization System		
Riboprinter® Microbial Characterization System	Consistent with S. aureus	Consistent with S. aureus
Viability (post-freeze) ²	Growth	Growth

S. aureus, strain COL was deposited to BEI Resources as part of the NARSA collection. NR-45906 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 21 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 assessed

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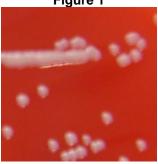
Tel: 800-359-7370 Fax: 703-365-2898



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for 7 days under propagation conditions.

Figure 1



Date: 26 MAR 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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²21 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 Nitrocefin dry slide (BBL™ 231749).

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