

Certificate of Analysis for NR-45917

Staphylococcus aureus, Strain FRI913

Catalog No. NR-45917

Product Description: Staphylococcus aureus (S. aureus), strain FRI913 was isolated from food associated with an outbreak of staphylococcal food poisoning in the United States. S. aureus, strain FRI913 is a methicillin-sensitive S. aureus (MSSA) strain.

Lot¹: 62466438 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 and white (Figure 1)
Motility (wet mount)	Report results	Non-motile
Hemolysis ²	Report results	β-hemolytic
Biochemical characterization	report reduce	
Catalase	Positive	Positive
Coagulase ³	Report results	Positive
VITEK® 2 Compact (GP card)	Consistent with S. aureus	Consistent with S. aureus
VITEK® MS (MALDI-TOF)	Consistent with S. aureus	Consistent with S. aureus
Antibiotic Susceptibility Profile		
VITEK [®] (AST-GP71 card) ⁴		
Beta-lactamase ⁵	Report results	Negative
Cefoxitin screen	Report results	Negative
Benzylpenicillin	Report results	Sensitive (= 0.06 µg/mL)
Oxacillin	Sensitive	Sensitive (≤ 0.25 μg/mL)
Gentamicin	Sensitive	Sensitive (≤ 0.5 µg/mL)
Ciprofloxacin	Sensitive	Sensitive (≤ 0.5 µg/mL)
Levofloxacin	Report results	Sensitive (≤ 0.12 μg/mL)
Moxifloxacin	Report results	Sensitive (≤ 0.25 μg/mL)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Sensitive	Sensitive (≤ 0.25 μg/mL)
Clindamycin	Sensitive	Sensitive (≤ 0.25 μg/mL)
Quinupristin/dalfopristin	Sensitive	Sensitive (≤ 0.25 μg/mL)
Linezolid	Sensitive	Sensitive (= 2 µg/mL)
Daptomycin	Report results	Sensitive (= 0.25 µg/mL)
Vancomycin	Sensitive	Sensitive (= 1 µg/mL)
Minocycline	Report results	Sensitive (≤ 0.5 µg/mL)
Tetracycline	Report results	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	Sensitive	Sensitive (≤ 10 µg/mL)
Etest [®] antibiotic test strips ⁶		, , ,
Chloramphenicol ⁷	Report results	Sensitive (= 2 µg/mL)
Teicoplanin ⁷	Sensitive	Sensitive (= 1 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 FRI913 was deposited to BEI Resources as part of the NARSA collection. NR-45917 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 29 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 21 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.

³4 hours at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)

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

Figure 1



Date: 16 JUL 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 in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood

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).

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.