

Certificate of Analysis for NR-13

Francisella tularensis subsp. novicida, Strain Utah 112

Catalog No. NR-13

Product Description:

Francisella tularensis (F. tularensis) subsp. novicida, strain Utah 112 was isolated from the saltwater of Ogden Bay, Utah, in 1950. NR-13 was produced by inoculation of BEI seed lot 3670416 into Mueller Hinton broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Cystine Heart agar with 5% defibrinated rabbit blood kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

Lot: 70062244 Manufacturing Date: 04AUG2023

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative bacilli	Gram-negative bacilli
1 day at 37°C in an aerobic atmosphere on		
Chocolate agar		
Colony morphology	Report results	Circular, convex, entire, smooth and
1 day at 37°C in an aerobic atmosphere on		gray (Figure 1)
Chocolate agar		
Motility (wet mount)	Report results	Non-motile
Hemolysis	Non-hemolytic	Non-hemolytic
Biochemical tests		
Catalase	Positive	Positive
Glucose	Positive	Positive
Glycerol	Report results	Negative
Maltose	Negative	Negative
Oxidase	Negative	Negative
Sucrose	Positive	Positive
Growth in the absence of cysteine	Positive	Positive
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	≥ 99% sequence identity to	100% sequence identity to
(~ 1430 base pairs)	F. tularensis subsp. novicida, strain	F. tularensis subsp. novicida, strain
	Utah 112 (GenBank: CP000439.1)	Utah 112 (GenBank: CP000439.1)
Purity (post-freeze)	Growth consistent with expected	Growth consistent with expected
7 days at 37°C in an aerobic atmosphere with	colony morphology	colony morphology
and without 5% CO ₂ on Chocolate agar		
Viability (post-freeze)	Growth	Growth

Figure 1: Colony Morphology



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15 FEB 2024

Technical Manager or designee, ATCC Federal Solutions

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