

## **Certificate of Analysis for NR-573**

## Francisella tularensis subsp. novicida, Strain KM14S

Catalog No. NR-573

**Product Description:** Francisella tularensis (F. tularensis) subsp. novicida is a Gram-negative, facultative intracellular bacterium which displays a moderate degree of human virulence.

Lot<sup>1</sup>: 4059342 Manufacturing Date: 24FEB2005

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative coccobacillus	Gram-negative coccobacillus
Colony morphology <sup>2</sup>	Report results	Circular, convex, entire, opaque, and glistening
Hemolysis	Non-hemolytic	Non-hemolytic
Motility	Non-motile	Non-motile
X- and V-factor requirements	Negative	Negative
Biochemical tests		
Catalase	Positive	Positive
Oxidase	Negative	Negative
Urease	Negative	Negative
Sucrose	Positive	Positive
Hydrogen sulfide production	Report results	Positive
Nitrate	Report results	Negative
Glucose	Report results	Positive
Maltose	Report results	Positive
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 480 bp)	Consistent with <i>F. tularensis</i> subsp. <i>novicida</i>	Consistent with <i>F. tularensis</i> subsp. <i>novicida</i> <sup>3</sup>
Viability (post-freeze) <sup>2</sup>	Growth on agar	Growth on agar

<sup>&</sup>lt;sup>1</sup>F. tularensis subsp. novicida, strain KM14S was deposited by Francis E. Nano, Ph.D., Department of Biochemistry and Microbiology, University of Victoria, Victoria, British Columbia, Canada. NR-573 was prepared by broth/agar culture of the deposited material.

**Date:** 25 JUL 2007 **Signature:** Signature on File

**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.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

Fax: 703-365-2898

800-359-7370

<sup>&</sup>lt;sup>2</sup>24 hours at 37°C and aerobic atmosphere with 5% CO₂ on Difco™ Cystine Heart Agar (BD 247100) plus 5% defibrinated rabbit blood.

<sup>&</sup>lt;sup>3</sup>Also consistent with other *F. tularensis* subspecies.