

## Certificate of Analysis for NR-13370

## Genomic DNA from Francisella tularensis subsp. novicida, Strain APdpD

## Catalog No. NR-13370

**Product Description:** Genomic DNA was isolated from a preparation of *Francisella tularensis* (F. tularensis) subsp. novicida, strain  $\Delta PdpD$ . F. tularensis subsp. novicida, strain  $\Delta PdpD$  is a transposon mutant of the wild-type strain U112, in which the pdpD gene region has been replaced with a mini-Tn5 insert, rendering it resistant to kanamycin.

Lot<sup>1</sup>: 58607119 Manufacturing Date: 16JUN2009

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (~ 1370 bp)	Identical to BEI Resources NR-9721 Consistent with <i>F. tularensis</i>	Identical to BEI Resources NR-9721 Consistent with <i>F. tularensis</i>
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	4 to 6 μg in 25 to 100 μL per vial	6.4 μg in 37 μL per vial (171 μg/mL) <sup>2</sup>
Functional Activity by PCR Amplification 16S ribosomal RNA gene	~ 1500 bp amplicon	~ 1500 bp amplicon
Molecular Subtyping by PCR Amplification of Subspecies-Specific Sequence from Extracted DNA <sup>3</sup>	~ 1500 bp amplicon (subsp. <i>tularensis</i> ) ~ 900 bp amplicon (subsp. <i>holarctica</i> ) ~ 3300 bp amplicon (subsp. <i>novicida</i> )	~ 3300 bp amplicon (subsp. <i>novicida</i> )
OD <sub>260</sub> /OD <sub>280</sub> Ratio	1.7 to 1.9	1.8
Bacterial Inactivation 10% of total yield plated on Chocolate Agar <sup>4,5</sup>	No viable bacteria detected	No viable bacteria detected

<sup>&</sup>lt;sup>1</sup>NR-13370 was produced by inoculation of the deposited material into Brain Heart Infusion Broth and grown 24 hours at 37°C. Broth inoculum was added to Chocolate agar Kolles which were grown 24 hours at 37°C and genomic DNA was extracted using proprietary technology.

**Date:** 23 FEB 2011

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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<sup>&</sup>lt;sup>2</sup>The μg of DNA in the vials is greater than required by current specifications

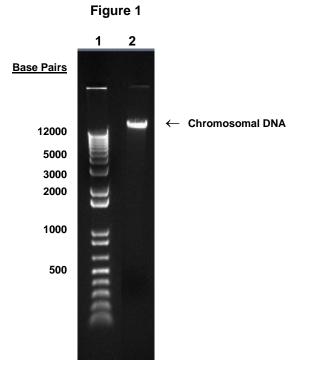
<sup>&</sup>lt;sup>3</sup>Broekhuijsen, M., et al. "Genome-Wide DNA Microarray Analysis of *Francisella tularensis* Strains Demonstrates Extensive Genetic Conservation within the Species but Identifies Regions that are Unique to the Highly Virulent *F. tularensis* subsp. *tularensis*." <u>J. Clin. Microbiol.</u> 41 (2003): 2924-2931. PubMed: 12843022.

<sup>&</sup>lt;sup>4</sup>Incubated for 7 days at 37°C and aerobic atmosphere

<sup>&</sup>lt;sup>5</sup>An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.



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Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder

Lane 2: 200 ng of NR-13370