b|e|i RESOURCES
SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-13368

Genomic DNA from *Francisella tularensis* subsp. *novicida*, Strain ΔPdpC

Catalog No. NR-13368

Product Description: Genomic DNA was isolated from a preparation of *Francisella tularensis* (*F. tularensis*) subsp. *novicida*, strain ΔPdpC. *F. tularensis* subsp. *novicida*, strain ΔPdpC is a transposon mutant of the wild-type strain U112, in which the *pdpC* gene region has been replaced with a mini-Tn*5* insert, rendering it resistant to kanamycin

Lot[1]: 58795919 **Manufacturing Date: 20NOV2009**

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (~ 1400 base pairs)	Identical to BEI Resources NR-9719 Consistent with *F. tularensis*	Identical to BEI Resources NR-9719 Consistent with *F. tularensis*
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	5.8 µg in 32 µL per vial (181 µg/mL)
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[2]	~ 1500 bp amplicon (subsp. *tularensis*) ~ 900 bp amplicon (subsp. *holarctica*) ~ 3300 bp amplicon (subsp. *novicida*)	~ 3300 bp amplicon (subsp. *novicida*)
OD_{260}/OD_{280} Ratio	1.7 to 1.9	1.9
Bacterial Inactivation 10% of total yield plated on Chocolate Agar[3,4]	No viable bacteria detected	No viable bacteria detected

[1]NR-13368 was produced by inoculation of the deposited material into Chocolate 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.
[2]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*." J. Clin. Microbiol. 41 (2003): 2924-2931. PubMed: 12843022.
[3]Incubated for 7 days at 37°C and aerobic atmosphere
[4]An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.

Date: 01 MAR 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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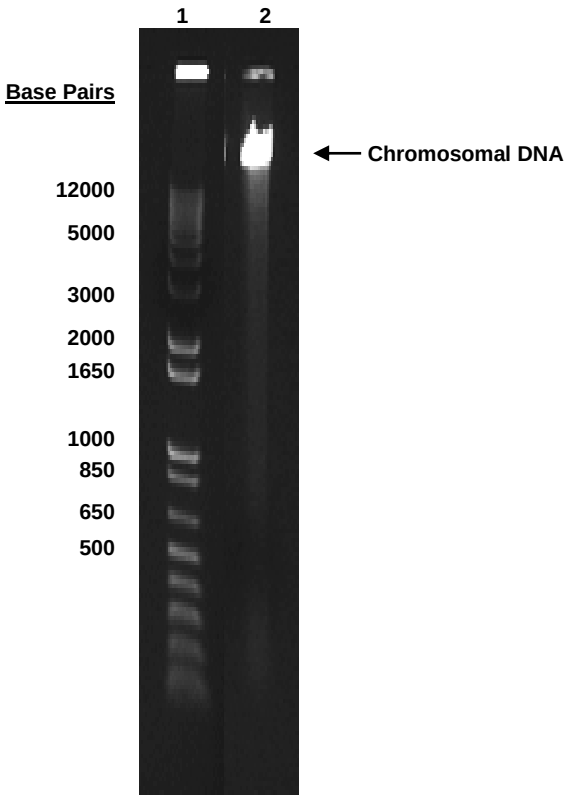
Figure 1



Lane 1: Invitrogen™ TrackIt 1 Kb Plus DNA Ladder™
Lane 2: 200 ng of NR-13368

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