

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

Catalog No. NR-13356

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

Lot¹: 58607115

Manufacturing Date: 17JUN2009

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (1400 bp)	Identical to BEI Resources NR-9707 Consistent with <i>F. tularensis</i>	Identical to BEI Resources NR-9707 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	5.4 µg in 39 µL per vial (138 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 DNA²	~ 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>)
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 1.9	1.8
Bacterial Inactivation 10% of total yield plated on Chocolate Agar ^{3,4}	No viable bacteria detected	No viable bacteria detected

¹NR-13356 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 Koles which were grown 24 hours at 37°C and genomic DNA was extracted using proprietary technology.

²Broekhuijsen, 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.

³Incubated for 7 days at 37°C and aerobic atmosphere

⁴An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.

Date: 17 FEB 2011

Signature:



Title: Technical Manager, BEI Authentication or designee

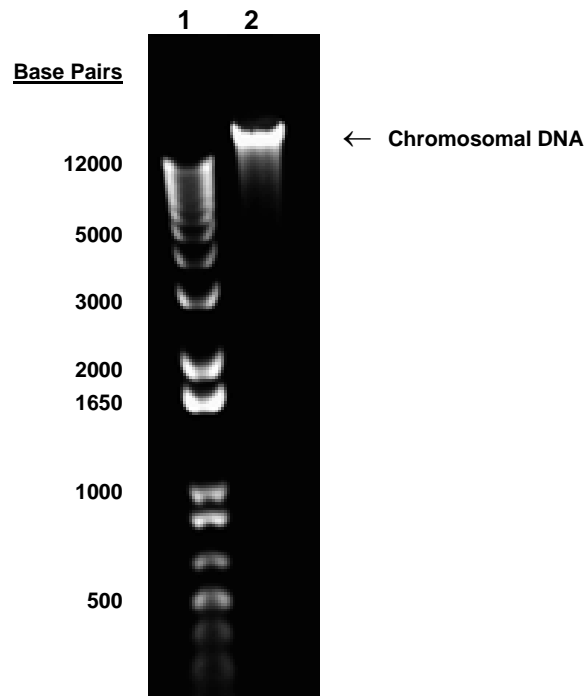
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Figure 1



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: 200 ng of NR-13356