

Genomic DNA from *Francisella tularensis* subsp. *holarctica*, CDC Live Vaccine Strain (LVS)

Catalog No. NR-3018

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Product Description: Genomic DNA was isolated from a preparation of *Francisella tularensis* (*F. tularensis*) subsp. *holarctica*, strain CDC LVS.

Lot¹: 62013068

Manufacturing Date: 19SEP2013

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (~ 1470 base pairs)	Consistent with <i>F. tularensis</i> subsp. <i>holarctica</i>	Consistent with <i>F. tularensis</i> subsp. <i>holarctica</i> ²
Molecular Subtyping by PCR Amplification³	Type B (subsp. <i>holarctica</i>)	Type B (subsp. <i>holarctica</i>)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen[®] Measurement	0.7 to 1.5 µg in 25 to 100 µL per vial	1.1 µg in 28 µL per vial (0.04 µg/µL)
Functional Activity by PCR Amplification 16S ribosomal RNA gene	~ 1500 bp amplicon	~ 1500 bp amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.9
Bacterial Inactivation 10% of total yield plated on Chocolate agar with Isovitalax ^{4,5}	No viable bacteria detected	No viable bacteria detected

¹NR-3018 was produced by inoculation of NR-646 lot 7513128 into Mueller Hinton broth and grown 73 hours at 37°C in an aerobic atmosphere. Broth inoculum was added to Chocolate agar with Isovitalax kolles which were grown 49 hours at 37°C in an aerobic atmosphere. Genomic DNA was extracted using proprietary technology.

²Also consistent with other *F. tularensis* subspecies.

³Petersen, J. M., et al. "Laboratory Analysis of Tularemia in Wild-Trapped, Commercially Traded Prairie Dogs, Texas, 2002." *Emerg. Infect. Dis.* 10 (2004): 419-425. PubMed: 15109407.

⁴7 days at 37°C in an aerobic atmosphere on Chocolate agar with Isovitalax

⁵An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-negative and Gram-positive bacteria.

Date: 11 MAR 2014

Signature: 

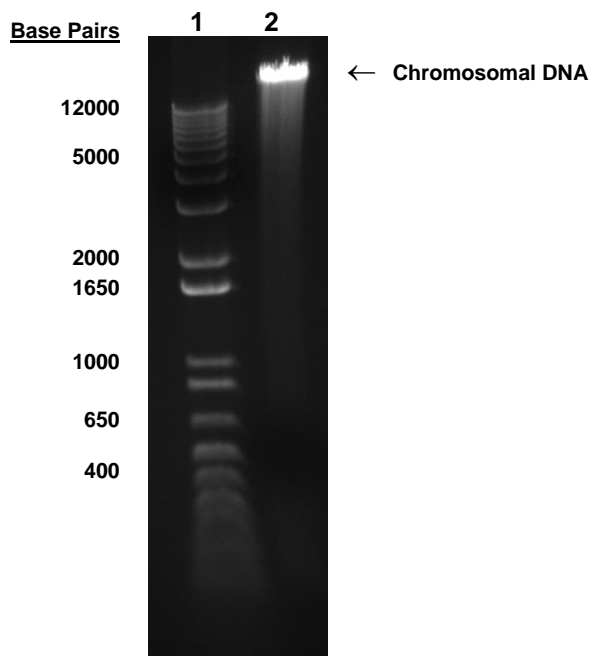
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Figure 1



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: 200 ng of NR-3018