

## *Francisella tularensis* subsp. *holarctica*, Strain LVSG

**Catalog No. NR-585**

**Product Description:** *Francisella tularensis* (*F. tularensis*) subsp. *holarctica* is a small, non-motile, aerobic, pleomorphic, gram-negative coccobacillus which displays a moderate degree of human virulence.

**Lot<sup>1</sup>: 4067740**

**Manufacturing Date: 23FEB2005**

| TEST  | SPECIFICATIONS   | RESULTS  |
|---|--|--|
| <b>Phenotypic Analysis</b><br>Cellular morphology<br>Colony morphology <sup>2</sup><br>Hemolysis<br>Motility<br>X- and V-factor requirements<br>Biochemical tests<br>Catalase<br>Oxidase<br>Urease<br>Indole<br>Hydrogen sulfide production<br>Nitrate<br>Glucose<br>Maltose<br>Sucrose<br>Glycerol | Gram-negative coccobacillus<br>Report results<br>Non-hemolytic<br>Non-motile<br>Negative<br><br>Positive<br>Negative<br>Negative<br>Report results<br>Report results<br>Report results<br>Report results<br>Report results<br>Report results | Gram-negative coccobacillus<br>Pinpoint, gray<br>Non-hemolytic<br>Non-motile<br>Negative<br><br>Positive<br>Negative<br>Negative<br>Negative<br>Positive<br>Negative<br>Positive<br>Positive<br>Negative<br>Negative |
| <b>Genotypic Analysis</b><br>Sequencing of 16S ribosomal RNA gene (~ 480 bp)  | Consistent with <i>F. tularensis</i><br>subsp. <i>holarctica</i>   | Consistent with <i>F. tularensis</i><br>subsp. <i>holarctica</i> <sup>3</sup>  |
| <b>Molecular Subtyping<sup>4</sup> by PCR Amplification of Subspecies-Specific Sequence from Extracted DNA</b>  | ~ 1250 bp amplicon (Type B)  | ~ 1250 bp amplicon (Type B)  |
| <b>Viability (post-freeze)<sup>2</sup></b>  | Growth on agar   | Growth on agar   |

<sup>1</sup>*F. tularensis* subsp. *holarctica*, strain LVSG was deposited by Francis E. Nano, Ph.D., Professor, Department of Biochemistry and Microbiology, University of Victoria, Victoria, British Columbia, Canada. NR-585 was prepared by broth/agar culture of the deposited material.

<sup>2</sup>24 hours at 37°C and aerobic atmosphere with 5% CO<sub>2</sub> on Cystine Heart Agar plus 5% defibrinated rabbit blood.

<sup>3</sup>Also consistent other *F. tularensis* subspecies.

<sup>4</sup>Petersen, 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.

**Date:** 23 FEB 2007

**Signature:** Signature on File

**Title:** Technical Manager, BEI Authentication or designee

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