

***Francisella tularensis* subsp. *novicida*, Strain GB2**

Catalog No. NR-575

Product Description: *Francisella tularensis* (*F. tularensis*) subsp. *novicida*, strain GB2 is a spontaneous *mgIA* mutant of the wild-type strain U112.

Lot¹: 4059344

Manufacturing Date: 04FEB2005

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology ² Hemolysis Motility X- and V-factor requirements Biochemical tests Catalase Oxidase Urease Sucrose Indole Hydrogen sulfide production Nitrate Glucose Maltose Glycerol	Gram-negative coccobacillus Report results Non-hemolytic Non-motile Negative Positive Negative Negative Positive Report results Report results Report results Report results Report results Report results	Gram-negative coccobacillus Circular, low convex, entire, and mucoid Non-hemolytic Non-motile Negative Positive Negative Negative Positive Negative Positive Negative Positive Positive Negative
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 485 bp)	Consistent with <i>F. tularensis</i>	Consistent with <i>F. tularensis</i>
Molecular Subtyping by PCR Amplification of Subspecies-Specific Sequence from Extracted DNA³	~ 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>)
Viability (post-freeze)²	Growth	Growth

¹*F. tularensis* subsp. *novicida*, strain GB2 was deposited by Francis E. Nano, Ph.D., Department of Biochemistry and Microbiology, University of Victoria, Victoria, British Columbia, Canada. NR-575 was prepared by broth/agar culture of the deposited material.

²24 hours at 37°C and aerobic atmosphere with 5% CO₂ on Cystine Heart Agar plus 5% defibrinated rabbit blood.

³Broekhuijsen, 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

Date: 09 MAR 2011

Signature: 

Title: Technical Manager, BEI Authentication or designee

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