Genomic DNA from *Francisella tularensis* subsp. *novicida*, Strain JMB1

Catalog No. NR-3029

For research use only. Not for human use.

Contributor:
Francis E. Nano, Ph.D., Department of Biochemistry and Microbiology, University of Victoria, Victoria, British Columbia, Canada

Product Description:
Genomic DNA was isolated from a preparation of *Francisella tularensis* subsp. *novicida*, strain JMB1.

F. tularensis subsp. *novicida*, is a Gram-negative, facultative bacterium, which grows predominantly in macrophages when living in mammalian hosts.[1] It is commonly used for studying *F. tularensis* pathogenesis since it is highly virulent in mice but has minor effects on humans.[2]

F. tularensis subsp. *novicida*, strain JMB1, a derivative of the wild-type strain U112, is deficient in DNA repair and related functions.[3]

NR-3029 has been confirmed as non-type B by PCR amplification of an approximately 390 bp amplicon.[4,5] Analysis of the 16S sequence indicates that NR-3029 is consistent with other strains of *F. tularensis* subsp. *novicida*. NR-3029 has been qualified for PCR applications by amplification of approximately 1500 bp of the 16S ribosomal RNA gene.

Material Provided:
Each vial contains approximately 4–6 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl and 1 mM EDTA, pH 8.0). The vial should be centrifuged prior to opening.

Packaging/Storage:
NR-3029 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Genomic DNA from *Francisella tularensis* subsp. *novicida*, Strain JMB1, NR-3029."

Biosafety Level: 1
Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

Disclaimers:
You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government make any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:
1. McLendon, M. K., M. A. Apicella, and L. A. Allen. "*Francisella tularensis*: Taxonomy, Genetics, and Immunopathogenesis of a Potential Agent of Biowarfare." Annu. Rev. Microbiol. 60 (2006): 167–185. PubMed: 16704343.
2. de Bruin, O. M., J. S. Ludu, and F. E. Nano. "The *Francisella* Pathogenicity Island Protein IglA Localizes to the Bacterial Cytoplasm and Is Needed for Intracellular

Biodefense and Emerging Infections Research Resources Repository
P.O. Box 4137
Manassas, VA 20108-4137 USA
www.beiresources.org
800-359-7370
Fax: 703-365-2898
E-mail: contact@beiresources.org

Growth." BMC Microbiol. 7 (2007): 1–10. PubMed: 17233889.
3. Berg, J. M., K. E. Mdluli, and F. E. Nano. "Molecular Cloning of the *recA* Gene and Construction of a *recA* Strain of *Francisella novicida*." Infect. Immun. 60 (1992): 690–693. PubMed: 1309722.
4. 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.
5. Kugeler, K. J., et al. "Real-time PCR for *Francisella tularensis* Types A and B." Emerg. Infect. Dis. 12 (2006): 1799–1801. PubMed: 17283646.

Biodefense and Emerging Infections Research Resources Repository
P.O. Box 4137
Manassas, VA 20108-4137 USA
www.beiresources.org

800-359-7370
Fax: 703-365-2898
E-mail: contact@beiresources.org