

**Polyclonal Anti-*Francisella tularensis*
Intracellular Growth Locus, Subunit A
(IgIA) Protein (antiserum, Rabbit)****Catalog No. NR-3194****For research use only. Not for human use.****Contributor:**

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

Product Description:

Polyclonal antiserum specific to a histidine-tagged recombinant form of the intracellular growth locus, subunit A protein of *Francisella tularensis*, was produced in rabbit.

Two large convergently transcribed operons, *pdpDglABCD* and *pdpA*, are encoded by the *Francisella* pathogenicity island, which harbor genes necessary for intramacrophage growth and virulence in mice.¹ IgIA is an approximately 21 kDa protein encoded by the *pdpDglABCD* operon, which interacts with the subunit B protein (IgIB) in the cytoplasm.^{2,3}

Material Provided:

Each vial contains approximately 1 mL of NR-3194.

Packaging/Storage:

NR-3194 was packaged aseptically in screw capped plastic cryovials. The product is provided frozen and should be stored at -20°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-3194 has been shown to be specific for the IgIA protein of wild-type *Francisella tularensis* using Western blot analysis.

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/bmb15/bmb15toc.htm.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Polyclonal Anti-*Francisella tularensis* Intracellular Growth Locus, Subunit A (IgIA) Protein (antiserum, Rabbit), NR-3194."

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. Barker, J. R. and K. E. Klose. "Molecular and Genetic Basis of Pathogenesis in *Francisella tularensis*." Ann. N. Y. Acad. Sci. Mar 29 2007 (Epub ahead of print). PubMed: 17395737.
2. Nano, F. E., et al. "A *Francisella tularensis* Pathogenicity Island Required for Intramacrophage Growth." J. Bacteriol. 186 (2004): 6430-6436. PubMed: 15375123.
3. de Bruin, O. M., J. S. Ludu, and F. E. Nano. "The *Francisella* Pathogenicity Island Protein IgIA Localizes to the Bacterial Cytoplasm and Is Needed for Intracellular Growth." BMC Microbiol. 7 (2007): 1-10. PubMed: 17233889.
4. Gray, C. G., S. C. Cowley, K. K. Cheung, and F. E. Nano. "The Identification of Five Genetic Loci of *Francisella novicida* Associated with Intracellular Growth." FEMS Microbiol. Lett. 215 (2002): 53-56. PubMed: 12393200.

ATCC® is a trademark of the American Type Culture Collection.