Monoclonal Anti-*Francisella tularensis* Pathogenicity Determinant B (PdpB) Protein, Clone PdpB1 (produced *in vitro*)

Catalog No. NR-3198

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:

Antibody Class: IgG2a
Mouse monoclonal antibody specific to a recombinant protein fragment of the pathogenicity determinant B protein (PdpB) of *Francisella tularensis* was produced *in vitro*.

Two large convergently transcribed operons, *pdpDiglABCD* and *pdpA*, are encoded by the *Francisella* pathogenicity island, which harbor genes necessary for intramacrophage growth and virulence in mice.[1] The *pdpB* gene is a member of the *pdpA* operon and is translated to an approximately 140 kDa protein.[2] PdpB may play a role in both entry into and replication within host cells.[3,4]

Material Provided:

Each vial contains approximately 1 mL of NR-3198 in Dulbecco's Modified Eagle's Medium supplemented with 5% fetal bovine serum. The estimated concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-3198 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-3198 has been shown to be specific for the PdpB 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/bmbl5/bmbl5toc.htm.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Monoclonal Anti-*Francisella tularensis* Pathogenicity Determinant B (PdpB) Protein, Clone PdpB1 (produced *in vitro*), NR-3198."

Disclaimers:

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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. Deng, K., et al. "Identification of *Francisella tularensis* Genes Affected by Iron Limitation." Infect. Immun. 74 (2006): 4224–4236. PubMed: 16790797.
3. Tempel, R., et al. "Attenuated *Francisella novicida* Transposon Mutants Protect Mice Against Wild-Type Challenge." Infect. Immun. 74 (2006): 5095–5105. PubMed: 16926401.

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4. Brotcke, A., et al. "Identification of MglA-Regulated Genes Reveals Novel Virulence Factors in *Francisella tularensis*." Infect. Immun. (2006): 6642–6655. PubMed: 17000729.
5. Nano, F. E., et al. "A *Francisella tularensis* Pathogenicity Island Required for Intramacrophage Growth." J. Bacteriol. 186 (2004): 6430–6436. PubMed: 15375123.

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