

### ***Yersinia pestis* F1-V Fusion Protein, Monomer-Enriched Antigen, Recombinant from *Escherichia coli***

#### **Catalog No. NR-2561**

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#### **For research use only. Not for human use.**

#### **Contributor:**

National Institutes of Allergy and Infectious Diseases, National Institutes of Health

#### **Product Description:**

Recombinant *Yersinia pestis* (*Y. pestis*) F1-V fusion protein, monomer-enriched antigen was purified from *Escherichia coli* and depleted of DNA and endotoxin.<sup>1</sup> Originally developed by the U.S. Army Medical Research Institute of Infectious Disease (USAMRIID), F1-V is a fusion protein consisting of the Fraction 1 (F1) capsular protein and the virulence-associated (V) regulatory protein from *Y. pestis* (GenPept: AAY23169).<sup>2,3</sup>

#### **Material Provided:**

Each vial contains approximately 1.5 mg of recombinant F1-V fusion protein in 20 mM L-arginine, 10 mM sodium chloride and 1 mM L-cysteine. The concentration and post-vialing pH are shown on the Certificate of Analysis for each lot.

#### **Packaging/Storage:**

NR-2561 was packaged in glass serum vials. It is provided frozen and should be stored at -70°C or colder immediately upon arrival. **Thawed material should be held at 2°C to 8°C and used within 8 hours.**

#### **Functional Activity:**

NR-2561 was demonstrated to be functionally active based on its reactivity with antibodies to both the F1 and V proteins. NR-2561 is protective in a *Y. pestis* lethal challenge murine model.

#### **Citation:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Yersinia pestis* F1-V Fusion Protein, Monomer-Enriched Antigen, Recombinant from *Escherichia coli*, NR-2561."

#### **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](http://www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm).

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#### **References:**

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3. Heath, D. G., et al. "Protection against Experimental Bubonic and Pneumonic Plague by a Recombinant Capsular F1-V Antigen Fusion Protein Vaccine." *Vaccine* 16 (1998): 1131-1137. PubMed: 9682370.
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- Prime-Boost with Recombinant Plague Antigens." Infect. Immun. 73 (2005): 5256–5261. PubMed: 16041052.
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  6. Santi, L., et al. "Protection Conferred by Recombinant *Yersinia pestis* Antigens Produced by a Rapid and Highly Scalable Plant Expression System." Proc. Natl. Acad. Sci. U.S.A. 103 (2006): 861–866. PubMed: 16410352.

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