Yersinia pestis F1-V Fusion Protein, Recombinant from *Escherichia coli*

Catalog No. NR-4526

For research use only. Not for human use.

Contributor:
Richard T. Kenney, M.D., Director of Clinical Research and Development and Medical Affairs, GlaxoSmithKline Biologicals, Columbia, Maryland.

Product Description:
Yersinia pestis (*Y. pestis*) recombinant F1-V fusion protein was expressed in *Escherichia coli* and purified by conventional chromatography. 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* joined by a two amino acid linker (GenPept: AAY23169).[1,2]

Material Provided:
Each vial contains approximately 2.1 mg of recombinant F1-V fusion protein in phosphate buffered saline (PBS).

Packaging/Storage:
NR-4526 was packaged in stoppered glass serum vials with a crimp seal. It is provided in solution at 2-8°C and should be stored at 2-8°C immediately upon arrival. Do not freeze.

Functional Activity:
NR-4526 was demonstrated to be functionally active based on its reactivity with F1-V specific antisera. Recombinant F1-V fusion protein is protective in a *Y. pestis* lethal challenge murine model.[2,3]

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, Recombinant from *Escherichia coli*, NR-4526."

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:
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3. Goodin, J. L., et al. "Purification and Protective Efficacy of Monomeric and Modified *Yersinia pestis* Capsular F1-V Antigen Fusion Proteins for Vaccination against the Plague." Protein Expr. Purif. 53 (2007): 63–79. PubMed: 17293124.
4. Williamson, E. D., et al. "Kinetics of the Immune Response to the (F1+V) Vaccine in Models of Bubonic and Pneumonic Plague." Vaccine 25 (2007): 1142–1148. PubMed: 17101198.
5. Dubois, A. B., L. C. Freytag, and J. D. Clements. "Evaluation of Combinatorial Vaccines against Anthrax

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6. Titball, R. W., et al. Vaccines for plague. The Secretary of State for Defense in Her Britanic Majesty's Government (GB) assignee. U. S. Patent 5,985,285. 16 Nov. 1999.

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