

Polyclonal Anti-*Yersinia pestis* V-Antigen (LcrV) (antiserum, Goat)

Catalog No. NR-31022

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Lot No. PAS14181 (60242019)

For research use only. Not for human use.

Contributor:

National Institutes of Allergy and Infectious Diseases (NIAID),
National Institutes of Health (NIH)

Manufacturer:

ProSci Incorporated, 12170 Flint Place, Poway, California

Product Description:

Antiserum to the *Yersinia pestis* (*Y. pestis*) V-antigen (LcrV) was produced by immunization of a goat with a recombinant form of the V-antigen. Three bleeds were pooled and aliquoted to produce NR-31022.

Y. pestis, the causative agent of the plague, is a Gram-negative pathogen that infects many animal species, including humans, and is transmitted by arthropod vectors or aerosol droplets.¹ V-antigen is a multifunctional protein that plays an important role in type III secretion in *Y. pestis*. Immunization with purified recombinant V-antigen is sufficient to generate protective immunity to plague in mice, guinea pigs, and non-human primates.²⁻⁴ Additionally, V-antigen injection into animals results in the release of interleukin-10, a cytokine that suppresses innate immune functions, and also prevents the release of proinflammatory cytokines.⁵

Material Provided:

Each vial contains 1 mL of polyclonal antiserum to recombinant V-antigen.

Packaging/Storage:

NR-31022 was packaged in screw cap cryovials. It is provided frozen and should be stored at -20°C or colder immediately upon arrival.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Polyclonal Anti-*Yersinia pestis* V-Antigen (LcrV) (antiserum, Goat), NR-31022."

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.

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References:

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2. Leary, S. E., et al. "Active Immunization with Recombinant V Antigen from *Yersinia pestis* Protects Mice against Plague." *Infect. Immun.* 63 (1995): 2854-2858. PubMed: 7622205.
3. Jones, S. M., et al. "Protective Efficacy of a Fully Recombinant Plague Vaccine in the Guinea Pig." *Vaccine* 21 (2003): 3912-3918. PubMed: 12922126.
4. Mett, V., et al. "A Plant-Produced Plague Vaccine Candidate Confers Protection to Monkeys." *Vaccine* 25 (2007): 3014-3017. PubMed: 17287055.
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Fusion Peptide and Restoration of Synthesis by Active Immunization." *Infect. Immun.* 63 (1995): 3021-3029. PubMed: 7622225.

6. Overheim, K. A., et al. "LcrV Plague Vaccine with Altered Immunomodulatory Properties." *Infect. Immun.* 73 (2005): 5152-5159. PubMed: 16041032.
7. Williamson, E. D., et al. "Human Immune Response to a Plague Vaccine Comprising Recombinant F1 and V Antigens." *Infect. Immun.* 73 (2005): 3598-3608. PubMed: 15908389.

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