

Adenylate Cyclase from *Bordetella pertussis*

Catalog No. NR-34572

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Contributor:

BEI Resources

Manufacturer:

List Biological Laboratories, Inc.

Product Description:

Native adenylate cyclase was purified from *Bordetella pertussis* (*B. pertussis*) by conventional chromatography.

B. pertussis is the causative agent of whooping cough, which causes chronic respiratory disease in a variety of mammals. Adenylate cyclase is an important virulence factor secreted by *B. pertussis* that both suppresses and modulates the host immune response. It is also an immunogenic protein that can elicit a protective immune response, though it has not yet been included as a component of vaccines.¹

Material Provided:

Each vial of NR-34572 contains approximately 50 µg (lyophilized) of native adenylate cyclase from *B. pertussis*. After reconstitution with 0.25 mL of sterile water, buffer concentration is 20 mM HEPES (pH 7.5) containing 8 M urea.

Storage:

This product was packaged aseptically in glass serum vials, lyophilized, and sealed under vacuum. The product is provided at room temperature and should be stored at 2°C to 8°C prior to reconstitution.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Adenylate Cyclase from *Bordetella pertussis*, NR-34572."

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, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Carbonetti, N. H. "Pertussis Toxin and Adenylate Cyclase Toxin: Key Virulence Factors of *Bordetella pertussis* and Cell Biology Tools." *Future Microbiol.* 5 (2010): 455-469. PubMed: 20210554.

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