

Monoclonal Anti-Epsilon Toxin from *Clostridium perfringens*, Clone P5C10C5 (produced *in vitro*)

Catalog No. NR-15475

This reagent is the tangible property of the U.S. Government.

For research use only. Not for human use.

NR-15475 is being provided without confirmation of functional activity. However, culture supernatant from hybridoma clone P5C10C5 was shown to react with recombinant *Clostridium perfringens* (*C. perfringens*) epsilon toxin by western blot and ELISA.¹

Hybridoma clone P5C10C5 produces IgG2b and IgM. NR-15475 was purified from clone P5C10C5 supernatant and contains both IgG2b and IgM.

Please read the Certificate of Analysis carefully to determine whether this product is acceptable for your intended use.

Contributor and Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG2bk and IgMk

Monoclonal antibody prepared against recombinant epsilon toxin from *C. perfringens*^{1,2} was purified from hybridoma clone P5C10C5 supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of Sp2/0-Ag14 myeloma cells with splenocytes from BALB/c mice immunized with purified recombinant protein.

C. perfringens are common soil-dwelling bacteria that can infect humans and domestic livestock. These bacteria are classified into types A-E based on the toxins produced during the growth of these organisms. Epsilon toxin is produced by types B and D³ and is thought to form pores in target cell membranes resulting in edema in various organs and the central nervous system.

Material Provided:

Each vial of NR-15475 contains 40 µg to 60 µg of purified antibody in PBS. The concentration and content are shown on the Certificate of Analysis for each lot.

Packaging/Storage:

NR-15475 was packaged aseptically in screw-capped plastic cryovials and is provided frozen on dry ice. NR-15475 should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH:

Monoclonal Anti-Epsilon Toxin from *Clostridium perfringens*, Clone P5C10C5 (produced *in vitro*), NR-15475."

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:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale. This material may be subject to third party patent rights.

References:

1. Personal communication.
2. Smedley, J. G. 3rd, et al. "The Enteric Toxins of *Clostridium perfringens*." Rev. Physiol. Biochem. Pharmacol. 152 (2004): 183–204. PubMed: 15517462.
3. Goswami, P. P., P. Rupa, N. S. Prihar, and L. C. Garg.

"Molecular Cloning of *Clostridium perfringens* Epsilon-toxin Gene and Its High Level Expression in *E. coli*." Biochem. Biophys. Res. Commun. 226 (1996): 735–740. PubMed: 8831683.

4. Petit, L., M. Gibert, and M. R. Popoff. "*Clostridium perfringens*: Toxinotype and Genotype." Trends Microbiol. 7 (1999): 104–110. PubMed: 10203838.

ATCC® is a trademark of the American Type Culture Collection.

