

Product Information Sheet for NR-15475

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:

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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.

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