

**Perfringolysin O from *Clostridium perfringens* with N-Terminal Histidine Tag, Recombinant from *Escherichia coli***

**Catalog No. NR-10357**

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**Contributor:**

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**Product Description:**

*Clostridium perfringens* (*C. perfringens*) perfringolysin O is a thiol-activated cytolysin that binds to membrane cholesterol and forms oligomeric pores, causing membrane damage.<sup>1,2</sup>

NR-10357 is a recombinant form of perfringolysin O from *C. perfringens*. The recombinant protein was cloned from ATCC® 13124™ and contains an N-terminal histidine tag. NR-10357 was expressed in *Escherichia coli* and purified using standard chromatographic methods. NR-10357 has been qualified for western blots and cytolytic assays.

**Material Provided:**

Each vial of NR-10357 contains approximately 25 µg of perfringolysin O in 50 mM HEPES (pH 8.0) containing 10% glycerol, 150 mM NaCl and 5 mM DTT.

**Packaging/Storage/Handling:**

NR-10357 was packaged aseptically in polypropylene cryovials. The product is provided frozen and should be stored at -80°C immediately upon arrival.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Perfringolysin O from *Clostridium perfringens* with N-Terminal Histidine Tag, Recombinant from *Escherichia coli*, NR-10357.”

**Biosafety Level: 2**

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/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

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**References:**

1. Tweten, R. L. “Cloning and Expression in *Escherichia coli* of the Perfringolysin O (Theta-Toxin) Gene from *Clostridium perfringens* and Characterization of the Gene Product.” Infect. Immun. 56 (1988): 3235-3240. PubMed: 2903128.
2. Soltani, C. E., et al. “Structural Elements of the Cholesterol-Dependent Cytolysins that are Responsible for their Cholesterol-Sensitive Membrane Interactions.” Proc. Natl. Acad. Sci. U.S.A. 104 (2007): 20226-20231. PubMed: 18077338.

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