

Active Native *C. perfringens* Enterotoxin

Cat. No. cpe-001C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	This product was highly purified from <i>Clostridium perfringens</i> , strain NCTC8239.
Species	<i>C.perfringens</i>
Source	<i>C. perfringens</i>
Description	<i>Clostridium perfringens</i> enterotoxin (CPE) is a protein toxin produced by Gram-positive bacteria, <i>C. perfringens</i> . CPE destroys cell membrane structure of animals by its phospholipase activity after binding to the membrane of Claudin family proteins, which are components of tight junction of epithelial cell membrane. CPE binds to Claudins 3, 4, 6, 7, 8 and 14, but not to Claudins 1, 2, 5 and 10.
Form	280 g/ml in 50% glycerol, 10 mM sodium phosphate buffer (pH 6.7)
Bio-activity	The cytotoxic activity was examined by using Vero cells. The surviving fraction of the cells exposed to 1 ug/ml of CPE for 30 min was less than 40%.
Molecular Mass	35 kDa
Purity	Over 95% purity by non-denaturing polyacrylamide gel electrophoresis (CBB staining)
Applications	<ol style="list-style-type: none"> 1) For the study of Claudin localization in cells 2) For the study of tight junctions 3) Western blot 4) SDS-PAGE

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5) ELISA

Notes

The toxin is relatively heat-resistant but it can be inactivated by boiling for 30 min.

Storage

Ship at 4centigrade or -20centigrade and store at -20centigrade or -80centigrade (for long-term storage).

Warning

It should be handled carefully by persons with expertise in knowledge and techniques for the safe handling of bacterial toxins. Avoid mouth pipetting. Wear protective gloves on handling the toxin. Avoid contact with open wounds. Wash thoroughly any area of the body that makes contact with the toxin.

GENE INFORMATION

Gene Name

[Enterotoxin \[Clostridium perfringens\]](#)

Official Symbol

[cpe](#)

Synonyms

cpe; enterotoxin; Heat-labile enterotoxin B chain; Enterotoxin alpha

Gene ID

[10874406](#)

Protein Refseq

[YP_004670325.1](#)

UniProt ID

[P01558](#)

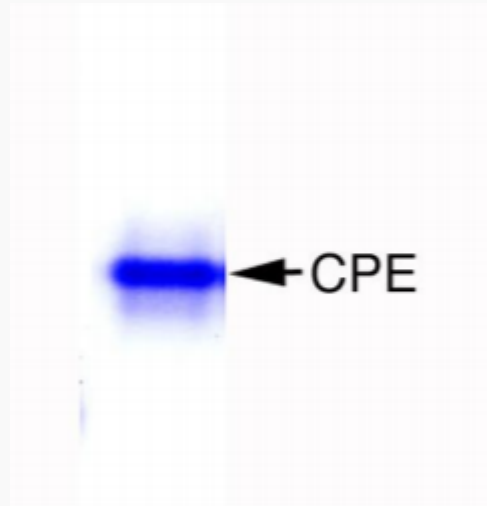
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**Nondenaturing
polyacrylamide gel
electrophoresis of
CPE**



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