

## Clostridium perfringens Enterotoxin

01-509 50 μg

Clostridium perfringens enterotoxinn (CPE) is a protein toxin produced by Gram-positive bacteria, *C. perfringens*. CPE destroys cell membrane structure of animals by binding to the membranes 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.

This product was highly purified from *Clostridium perfringens* strain NCTC8239by the method of Sakaguchi et al <sup>1)</sup>. The molecular weight is 35 kD. The cytotoxic activity was examined by using Vero cells. The surviving fraction of the cells exposed to 1 ug/ml for 30 min was less than 40%.

## **Applications**

- 1. For the study of Claudin localization in cells.
- 2. For the study of tight junctions

## Specification

Purity: Over 95% pure by nondanaturing polyacrylamide gel electrophoresis (CBB staining)

Form: 280 ug/ml in 50% glycerol, 10 mM sodium phosphate buffer (pH 6.7) Storage: -20°C (long period,-70°C)

## References

- 1. Sakaguchi, G., et al., Appl. Microbiol. 26:762-767 (1973)
- 2. Fujita, K., et al., FEBS Lett. 476:258-261 (2000)

\*This product is for research use only.

**←**CPE

Fig. Nondenaturing poluacrylamide gel electrophoresis

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