

Cholera Toxin A-subunit

01-521 50 µg

The main enterotoxin, known as cholera toxin, interacts with G proteins and increases cyclic AMP in the intestinal lining to open ion channels. As ions flow into the intestinal lumen (lining), body fluids (mostly water) flows out of the body due to osmosis leading to massive diarrhea as the fluid is expelled from the body. Cholerae toxin is a complex consisting of one molecule of A subunit (27.2 kD) and 5 molecules of B subunit (11.6 kD). It adsorbs to GM1 ganglioside on the surface of target cells by the B subunit and penetrates into cells where A subunit is dissociated and processed into A1, which constitutively activates adenyl cyclase activity of α subunit of Gs (a kind of GTP-binding protein) by ADP ribosylation activity.

This product was highly purified from purified cholera toxin produced by V. *cholerae* Inaba 569B strain by gel-filtration (in the presence of urea) and ion-exchange chromatography.

Applications

1. ADP ribosylation assay

2. . Study of signal transduction

Specifications

Purity: No contamination of the B-subunit as examined by biological and SDS-PAGE **Form** : 1.6 mg/ml in 20 mM Tris-HCl pH 8.2、0.2M NaCl , 10% glycerol, filter-sterilized **Storage**: -80° C

Ref.

Hirst TR &D'Souza in The Comprehensive Sourcebook of Bacterial Protein Toxins 3rd Ed. p 270-290 Academic Press (2006)

Figure. SDS-PAGE analysis of the purified cholera toxin B-subunit

• To be used only for research and not to be used in human

Related Products

#01-511 Cholera Toxin #01-525 Cholera toxin B-subunit



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