

Cholera Toxin B-subunit

01-525

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. Cholera 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. Adjuvant for mucosal immunity. Stimulate B-lymphocytes. Vaccine development
2. . Tract tracing in neurological research, taking advantage of GM1 ganglioside binding and retrograde transport.

Specifications

Purity: No contamination of the A-subunit as examined by biological and SDS-PAGE

Form : 0.98 mg/ml in 20 mM Tris-HCl pH 6.8, 0.2M NaCl , 10% glycerol, Filter-sterilized

Storage: -80°C

Reference

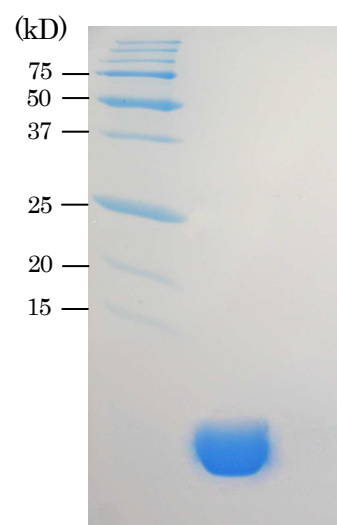
Hirst TR & D'Souza in The Comprehensive Sourcebook of Bacterial Protein Toxins 3rd Ed. p 270-290 Academic Press (2006)

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

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

Related Products

01-511 Cholera Toxin # 01-521 Cholera Toxin A-subunit



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