



Cholera toxin (3D11): sc-51838

BACKGROUND

Cholera toxin is a heterohexameric AB₅ enterotoxin released by *Vibrio cholera* that causes a profuse amount of secretory diarrhea in susceptible hosts. The holotoxin consists of a pentameric ring of B subunits whose central pore is occupied by the A subunit. The B subunit of cholera toxin, also referred to as Cholera toxin B subunit (CtxB), binds to a GM1-ganglioside receptor, a ubiquitous glycolipid cell surface receptor and directs the enzymatic A subunit to its target by binding the GM1 gangliosides exposed on luminal surface of intestinal epithelial cells to initiate toxin action. The A subunit contains two chains, A1 and A2, linked by a disulfide bridge. This subunit activates the adenylate cyclase enzyme in the cells of the intestinal mucosa leading to increased levels of intracellular cAMP, thereby causing water to flood and burst the cell.

REFERENCES

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

Cholera toxin (3D11) is a mouse monoclonal antibody raised against purified Cholera toxin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cholera toxin (3D11) is recommended for detection of Cholera toxin of mouse, rat and human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Cholera toxin: 16 kDa.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.