**BACKGROUND**

Cholera Toxin A subunit, also known as ctxA or toxA, is a 258 amino acid viral protein that comprises the central core of the Cholera holotoxin, a structure composed of A and B subunits. The Cholera Toxin A subunit contains two disulfide-linked chains, designated A1 and A2, and functions to catalyze the ADP-ribosylation of target GTP-binding proteins, thereby activating A cyclase (adenylate cyclase) and causing a hypersecretion of water, chloride and bicarbonate (resulting in the characteristic Cholera stool). Initial Cholera infection occurs when the pentameric Cholera Toxin B subunits bind to lipid rafts and are internalized to the endoplasmic reticulum (ER). Once in the ER, the A1 and A2 components of Cholera Toxin A subunit are cleaved and disassembled, and the A1 section is translocated into the cytosol. Upon entering in the cytosol, A1 refolds into its original structure, allowing it to avoid proteasomal degradation and reach its target host, thus inducing Cholera toxicity.

**REFERENCES**


**SOURCE**

Cholera Toxin A subunit (2/166) is a mouse monoclonal antibody raised against *Vibrio cholerae* extract.

**PRODUCT**

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

**APPLICATIONS**

Cholera Toxin A subunit (2/166) is recommended for detection of Cholera Toxin A subunit of *Vibrio cholerae* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Cholera Toxin A subunit: 29 kDa.

**STORAGE**

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

**RESEARCH USE**

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

**PROTOCOLS**

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