

### Synonym

CE subunit B

### Source

Vibrio cholerae serotype O1 Cholera enterotoxin subunit B, His Tag(GHB-V52H3) is expressed from human 293 cells (HEK293). It contains AA Thr 22 - Asn 124 (Accession # [P01556](#)).

Predicted N-terminus: Thr 22

### Molecular Characterization

CE subunit B (Thr 22 - Asn 124)  
P01556 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 13.5 kDa. The protein migrates as 16-17 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>95% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

### Storage

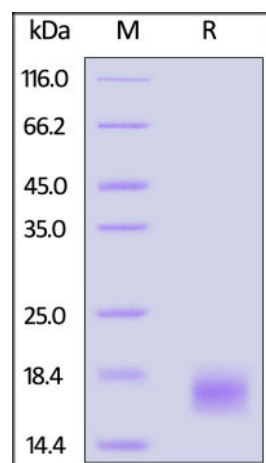
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

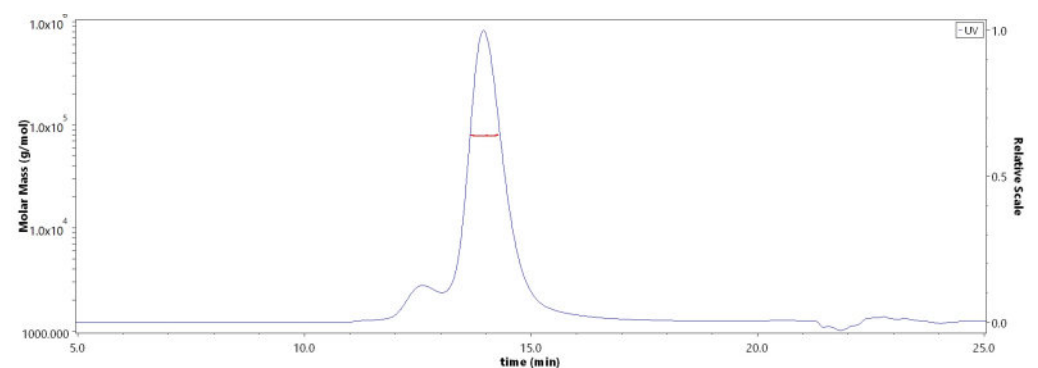
### SDS-PAGE



Vibrio cholerae serotype O1 Cholera enterotoxin subunit B, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### Bioactivity-ELISA

### SEC-MALS



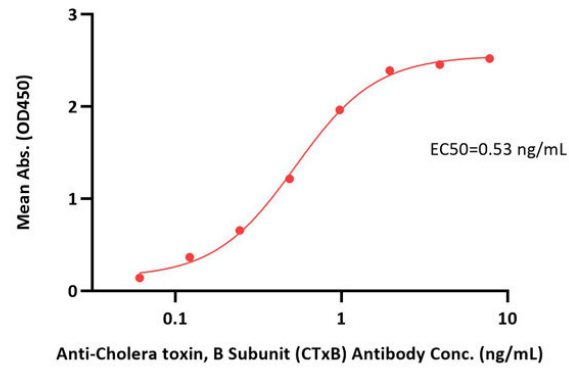
The purity of Vibrio cholerae serotype O1 Cholera enterotoxin subunit B, His Tag (Cat. No. GHB-V52H3) is more than 85% and the molecular weight of this protein is around 73-83kDa verified by SEC-MALS.

[Report](#)

# Vibrio cholerae serotype O1 (strain ATCC 39315 / El Tor Inaba N16961) Cholera enterotoxin subunit B Protein, His Tag (MALS verified)

Catalog # GHB-V52H3

Vibrio cholerae serotype O1 (strain ATCC 39315 / El Tor Inaba N16961) Cholera enterotoxin subunit B, His Tag ELISA  
0.1 µg of Vibrio cholerae serotype O1 (strain ATCC 39315 / El Tor Inaba N16961) Cholera enterotoxin subunit B, His Tag per well



Immobilized Vibrio cholerae serotype O1 (strain ATCC 39315 / El Tor Inaba N16961) Cholera enterotoxin subunit B, His Tag (Cat. No. GHB-V52H3) at 1 µg/mL (100 µL/well) can bind Anti-Cholera toxin, B Subunit (CTxB) Antibody with a linear range of 0.1-2 ng/mL (QC tested).

## Background

Cholera toxin is protein complex secreted by the bacterium Vibrio cholerae. It is responsible for the massive, watery diarrhea characteristic of cholera infection. The B subunit of cholera toxin (CtxB) binds to a GM1-ganglioside receptor, a ubiquitous glycolipid cell surface receptor. This binding is widely accepted to initiate toxin action by triggering uptake and delivery of the toxin A subunit into cells. The beta chain has no toxic activity by itself. The holotoxin consists of a pentameric ring of B subunits whose central pore is occupied by the A subunit. The A subunit contains two chains, A1 and A2, linked by a disulfide bridge.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.