



540 Division Street, Campbell, California 95008-6906  
 Tel. (408) 866-6363 Fax (408) 866-6364  
[www.listlabs.com](http://www.listlabs.com)

## Certificate of Testing

### Cholera Toxin (Azide-Free) from *Vibrio cholerae*

Prod. No: 100B Lot Number: 10071A2

Date of Manufacture 7 March 2024 FOR RESEARCH PURPOSES ONLY.  
 NOT FOR HUMAN USE.

#### Contents

Each container holds 1 mg of lyophilized Cholera Toxin (CT) in 0.05 M Tris, 0.2 M NaCl, 0.001 M Na<sub>2</sub>EDTA at pH 7.5 when reconstituted with 0.5 mL water. **Handle the product gently; do not vortex.**

#### Storage/Shipping Requirements


Store at 5 ± 3°C. This product is provided as an aseptically packaged lyophilized powder, sealed under vacuum. Ship material at ambient temperature

#### Handling

Good laboratory technique should be employed in the safe handling of this product. Wear appropriate laboratory attire including a lab coat, gloves, and safety glasses.

The product is intended for research purposes by qualified personnel. It is not intended for use in humans or as a diagnostic agent. List Biological Laboratories, Inc. is not liable for any damages resulting from the misuse or handling of this product.

Attribute	Test Method ID/Version	Results
Appearance	Physical Appearance / ASSAY.063 v05	Before reconstitution: uniform white powder After reconstitution: clear, colorless, and particulate free
Purity	SDS-PAGE / GELS.018 v18	Non-reduced %purity: 100% Reduced %purity: 100%
	Native Gel / GELS.008 v05	94% purity
	OD Measurement / ASSAY.060 v07	A <sub>280</sub> /A <sub>260</sub> : 2.04 A <sub>320</sub> : 0.04
	Endotoxin / ASSAY.092 v07	1.13 EU/mg
Activity	Hemagglutination Assay / ASSAY.011 v06	Lowest concentration with positive response to assess binding activity using GM1 ganglioside fixed sheep red blood cells: 0.006 mg/mL
	ELISA / ASSAY.108 v01	EC <sub>50</sub> of titer curve for binding ability of cholera toxin to an ELISA plate coated with 2 µg GM1: 49.3 ng/mL

Quality Control:  Date: 05/16/2024

Production:  Date: 05/16/2024