

CERTIFICATE OF ANALYSIS  
CHOLERA TOXIN (AZIDE FREE)  
from *Vibrio cholerae* Inaba 569B  
Lot #10060A2Contents:

Each vial of cholera toxin, when reconstituted to 0.5 ml with sterile purified water, contains 1.0 mg of protein in:

0.05 M Tris  
0.2 M NaCl  
0.001 M Na<sub>2</sub>EDTA at pH 7.5

Solubility of cholera toxin, in water, decreases with time, following lyophilization. **Handle the product gently; do not vortex.**

Concentration:

Each vial contains 1.0 mg determined using the extinction coefficient of 1.14 for 1 mg/ml measured at 1 cm and 280 nm.<sup>1</sup>

Purity:

The preparation migrates as a single major band when examined by polyacrylamide gel electrophoresis in a non-denaturing system run at alkaline pH. The  $R_{280/260}$  of this preparation is 2.0.

The endotoxin content, determined using a kinetic chromagenic LAL assay, is 8 EU/mg.

Activity:

Using trisialoganglioside fixed sheep red blood cells, this lot exhibited strong hemagglutination activity when examined in a modification of Sato, *et.al.*<sup>2</sup>

Packaging/Storage:

Lyophilized powder stoppered under vacuum. It is recommended that this material be stored at 2-8°C prior to and following reconstitution. DO NOT FREEZE.

(continued)

**Handling:**

Good laboratory technique should be employed in the safe handling of this product. This requires observing the following practices:

1. Wear appropriate laboratory attire including a lab coat, gloves and safety glasses. Nitrile gloves are recommended when handling lyophilized material.
2. Do not mouth pipette, inhale, ingest or allow to come into contact with open wounds. Wash thoroughly any area of the body which comes into contact with the product.
3. Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device.
4. This product is intended for research purposes by qualified personnel only. 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.

**FOR RESEARCH PURPOSES ONLY. NOT FOR HUMAN USE.**

**References:**

1. Spangler, Brenda D. (1992) *Microbiological Reviews* 56(4), 622-647
2. Sato, Y., Cowell, J.L., Sato, H., Burstyn, D.G. and Manclark, C.R. (1983) *Infect. Immun.* 41, 313-320.

Production: Em Date: 4/12/11 Management: NT Date: 4/12/11 QA/QC: CL Date: 4/12/11