



**CERTIFICATE OF ANALYSIS
CHOLERA TOXIN B SUBUNIT (LOW SALT)
Lot #10431A1**

Contents:

Each vial of cholera toxin B subunit (choleragenoid), when reconstituted to 0.25 ml with water, contains 0.5 mg of protein in 0.01 M sodium phosphate, pH 7.5.

Handle product gently; do not vortex.

Concentration:

Protein concentration was determined by absorbance at 280 nm using an extinction coefficient of 0.96 for 1 mg/ml solution.¹

Purity:

When examined on 4-12% SDS-polyacrylamide gels, this protein migrates as a single band with an apparent molecular weight of 11,000 Da. Densitometric analysis estimates the purity of the product as >99%. The ratio of absorbance at 280 and 260 nm ($R_{280/260}$) is 1.9. This product has been tested for endotoxin levels and was found to be acceptable.

Assay:

When compared to a standard solution of B subunit at the same protein concentration, this lot exhibits comparable ganglioside binding activity in a hemagglutination assay.

Packaging/Storage:

This product is provided as a lyophilized powder, sealed under vacuum. Store at 2-8°C. **DO NOT FREEZE.**

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.**

(continued)

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.

Production: TP Date: 8/25/11 Management: KD Date: 8/25/11 QA/QC: CL Date: 8/25/11