



Product #193
Lot #19313C1

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CERTIFICATE OF ANALYSIS
Tetanus Toxin C-Fragment
Lot #19313C1

Contents

Each vial contains 10 µg of tetanus toxin C-fragment. When reconstituted with 50 µl of sterile purified water, the buffer is 0.01 M sodium phosphate, pH 7.5. To aid recovery, 0.1% albumin may be added.

Concentration

Protein concentration is determined by a modification of the method of Bradford¹ using ovalbumin as the standard.

Electrophoretic Purity

This preparation migrates as a single major band of molecular weight approximately 47,000 daltons when run in the presence of β-mercaptoethanol on 12% polyacrylamide SDS gels prepared according to the method of Wyckoff,² a modification of the Laemmli³ gel system.

Bioassay

Each lot of C-fragment is tested to confirm binding activity to G_{T1b} ganglioside using a hemagglutination assay.⁴

Toxicity

The C-fragment comprises the binding portion of intact tetanus toxin and is considered to be nontoxic.⁵ However, since the lethal dose of tetanus toxin in humans is <2.5 ng/kg⁶, contamination of this product with less than 0.1% intact toxin could provide enough toxin to cause death in a nonvaccinated person. Use this product with the assumption that a small amount of contamination by intact tetanus toxin is present. **See handling precautions on reverse side.**

Packaging and Storage

C-fragment is supplied as a lyophilized powder, sealed under vacuum. Store at 2-8°C prior to reconstitution.

(continued)

Handling

Good laboratory technique should be employed in the safe handling of this product; refer to the SDS. Wear appropriate laboratory attire including lab coat, gloves and safety glasses. Nitrile gloves are recommended when handling lyophilized material.

This 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.

FOR RESEARCH PURPOSES ONLY. NOT FOR HUMAN USE.

References:

1. Bradford, M.M. (1976) *Anal. Biochem.* **72**, 248-254.
2. Wyckoff, M., Rodbard, D. and Chrambach, A. (1977) *Anal. Biochem.* **78**, 459-482.
3. Laemmli, U.K. (1970) *Nature* **227**, 680-685.
4. Tayot, J.-L., Holmgren, J., Svennerholm, L., Lindblad, M. and Tardy, M. (1981) *Eur. J. Biochem.* **113**, 249-258.
5. Helting, T.B. and Zwisler, O. (1977) *J. Biol. Chem.* **252**, 187-193.
6. Gill, D.M. (1982) *Microbiol. Rev.* **46**, 86-94.