



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 Bradford<sup>1</sup> 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,<sup>2</sup> a modification of the Laemmli<sup>3</sup> gel system.

**Bioassay**

Each lot of C-fragment is tested to confirm binding activity to G<sub>T1b</sub> ganglioside using a hemagglutination assay.<sup>4</sup>

**Toxicity**

The C-fragment comprises the binding portion of intact tetanus toxin and is considered to be nontoxic.<sup>5</sup> However, since the lethal dose of tetanus toxin in humans is <2.5 ng/kg<sup>6</sup>, 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.