

CERTIFICATE OF ANALYSIS  
CFITC CONJUGATE  
LOT #1963A1



Preparation:

CFITC is prepared by conjugating the C-fragment of tetanus toxin to fluorescein isothiocyanate, isomer I (FITC) by a modification of the method of Wood *et al.*<sup>1</sup>

Contents:

When reconstituted with 0.1 ml of sterile water, each vial contains 10 µg of protein in 0.01 M sodium phosphate, pH 7.5.

Binding Ratio:

This lot contains 11.2 µg of FITC bound per mg of C-fragment, assuming an extinction coefficient at 493 nm of 85,200 M<sup>-1</sup>cm<sup>-1</sup> for FITC.<sup>2</sup>

Packaging/Storage:

This product is provided as a lyophilized powder that has been sealed under vacuum. Store at 4°C prior to and following reconstitution. **This product is light sensitive.**

Activity:

The binding activity of tetanus toxin C-fragment to G<sub>T1b</sub> gangliosides has been confirmed in a hemagglutination assay.<sup>3</sup>

Toxicity:

The C-fragment comprises the binding portion of intact tetanus toxin and is considered to be nontoxic.<sup>4</sup> However, since the lethal dose of tetanus toxin in humans is <2.5 ng/kg,<sup>5</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.**

(continued)

Handling:

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

1. PERSONS HANDLING THIS PRODUCT AND CONTAMINATED GLASSWARE SHOULD HAVE A CURRENT TETANUS VACCINATION, AND THEIR SERUM ANTITOXIN LEVEL SHOULD BE GREATER THAN 1.0 INTERNATIONAL UNIT PER MILLILITER.
2. This product is to be used by skilled personnel under the direction of a principal investigator in a laboratory setting only.
3. Wear appropriate laboratory attire including a lab coat, gloves and safety glasses.
4. Never remove the stopper prior to reconstitution and never work with the product in the powdered form. Always reconstitute it first.
5. 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.
6. Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device.
7. 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. Wood, B.T., Thompson, S.H. and Goldstein, G. (1965) *J. Immun.* **95**, 225-229.
2. Moller, G., Gronowitz, E., Persson, U., Coutinho, A., Moller, E., Hammarstrom, L., and Smith, E. (1976) *J. Exp. Med.* **143**, 1429-1438.
3. Tayot, J.-L., Holmgren, J., Svennerholm, L., Lindblad, M. and Tardy, M. (1981) *Eur. J. Biochem.* **113**, 249-258.
4. Helting, T.B. and Zwisler, O. (1977) *J. Biol. Chem.* **252**, 187-193.
5. Gill, D.M. (1982) *Microbiol. Rev.* **46**, 86-94.

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