



**LIST BIOLOGICAL  
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Product #152C  
Retest Date: 1/2017  
Recommended Retest: 1/2020

**CERTIFICATE OF ANALYSIS**  
Toxin A from *C. difficile*  
Lot #15219A2

**Contents**

Each vial contains 100 µg of *C. difficile* Toxin A enterotoxin. When reconstituted with 0.5 ml of water, the buffer contains 50 mM Tris, 50 mM NaCl, pH 7.5 and 0.1% trehalose. **Handle product gently; do not vortex.**

**Concentration**

A modification of the method of Bradford,<sup>1</sup> using NIST traceable bovine serum albumin as the standard, is used to determine the protein concentration.

**Purity**

When examined on 3-8% SDS-PAGE gels, this protein migrates as a single major band with an apparent molecular weight of 300,000 daltons. Densitometric analysis estimates the purity of the product as >80%.

The endotoxin content, determined using a kinetic chromogenic LAL assay, is <30 EU/mg.

**Activity**

The binding activity of this lot has been tested using fresh rabbit red blood cells in a hemagglutination assay and the results are within specifications.

Cytotoxicity testing on Vero cells indicates an EC<sub>50</sub> (half maximal effective concentration) of <0.2 ng/mL. Since each cell type exhibits a different sensitivity, testing a range of toxin concentrations is highly recommended.

**Packaging and Storage**

This product is packaged aseptically, lyophilized, and sealed under vacuum. Store at 2-8°C prior to reconstitution. After reconstitution at 0.2 mg/ml with sterile water, this product is stable for up to 2 months when stored at 2-8°C. **DO NOT FREEZE.**

(continued)

## Handling

Good laboratory technique should be employed in the safe handling of this product. Wear appropriate laboratory attire including a lab coat, gloves and safety glasses. Nitrile gloves are recommended for use 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.

Production: KO Date: 10-13-17 Management: NS Date: 10/12/17 QA/QC: JL Date: 10/12/17

Version 3

Made in U.S.A. 