



# LIST BIOLOGICAL LABORATORIES, INC.

540 DIVISION STREET ▪ CAMPBELL ▪ CALIFORNIA 95008-6906 ▪ USA  
408-866-6363 ▪ 800-726-3213 ▪ FAX 408-866-6364 ▪ EMAIL info@listlabs.com  
WEBSITE www.listlabs.com

Product #150  
Release Date: 4/2013  
Recommended Retest: 4/2018

CERTIFICATE OF ANALYSIS  
DIPHTHERIA TOXIN from *Corynebacterium diphtheriae*  
UNNICKED  
Lot #15043A1

### Contents

Each vial, when reconstituted to 0.5 ml with water, contains 1 mg of unnicked diphtheria toxin in 0.01 M Tris and 0.001 M EDTA at pH 7.5. **Handle the product gently; do not vortex.**

### Attention

Toxicity may vary by lot of toxin. Each laboratory should determine the optimum dosage for each particular application.

### Concentration

Protein concentration was determined by absorbance at 280 nm using an extinction coefficient of 1.18 for a 1 mg/ml solution.

### Purity

When examined by gel electrophoresis in a non-denaturing system run at alkaline pH, this protein migrates as a single major band.

On SDS-PAGE in the presence of a reducing agent, this preparation migrates as a single major band with an apparent molecular weight of 58,000 daltons corresponding to the intact toxin. Bands representing A and B fragments were not observed.

Densitometric analysis estimates the purity of the product as >95%.

The endotoxin content, determined using a kinetic chromogenic LAL assay, is approximately 3 EU/mg.

### Packaging/Storage

This preparation is provided as a lyophilized powder that has been stoppered under vacuum. Prior to reconstitution, it should be stored at 2–8°C. Following reconstitution with water, unused toxin may be frozen in aliquots and stored at -20°C. NOTE: Repeated freezing and thawing or maintaining the preparation at 2–8°C for extended periods of time is not recommended.

### Handling

Good laboratory technique should be employed in the safe handling of this product. 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.**

Production: NS Date: 9/14/15 Management: JB Date: 9/11/15 QA/QC: AR Date: 9/11/15

Made in U.S.A. 