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Product #151  
Lot #1519A1  
Release Date: July 2019  
Recommended Retest Date: July 2022

CERTIFICATE OF ANALYSIS  
DIPHTHERIA TOXOID  
From *Corynebacterium diphtheriae*  
Lot #1519A1

**Contents**

Each vial contains 0.5 mg of diphtheria toxoid. When reconstituted to 0.5 mL with water, the buffer is 10 mM sodium phosphate, pH 7.5, and 0.1 mg/mL sorbitol. **Handle product gently, do not vortex.**

**Concentration**

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

**Activity**

This product is produced from diphtheria toxin by inactivation with formaldehyde. Cytotoxicity testing on Vero cells indicates no activity was observed for the diphtheria toxoid at an EC<sub>50</sub> (half maximal effective concentration) of 0.25 mg/mL.

**Assay Results**

In immunodiffusion studies, diphtheria toxoid showed immunoprecipitation with an antiserum specific to diphtheria toxin.

The endotoxin content, determined by a kinetic chromogenic LAL assay, is <5 EU/mg.

**Packaging and Storage**

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

**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**

Production: KO Date: 7-12-19 Management: NS Date: 7-12-19 QA/QC: KIP Date: 7/12/19

Made in U.S.A. 