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Certificate of Testing

TETANUS TOXOID from *Clostridium tetani*, Lyophilized in Buffer

Prod. No: 191A

Lot Number: 19131A2

Date of Manufacture 16 August 2022

**FOR RESEARCH PURPOSES ONLY.
 NOT FOR HUMAN USE.**

Contents

Each container holds 25 µg of lyophilized tetanus toxoid. When reconstituted with 50 µL of water the protein is in 100 mM Histidine, 100 mM NaCl, pH 7.0 and 5% Trehalose.

Storage/Shipping Requirements

Store at 5 ± 3 °C. This product is provided as an aseptically packaged lyophilized powder, sealed under vacuum. Ship material at ambient temperature.

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.

The 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.

Attribute	Test Method ID/Version	Results
Appearance	Physical Appearance / ASSAY.063 v05	Before reconstitution: uniform white pellet After reconstitution: clear, colorless, and particulate free
Purity	SDS-PAGE / GELS.018 v18	Non-reduced: 100% purity Reduced: 100% purity
	Endotoxin / ASSAY.092 v06	1.65 EU/mg
Identity	Immunodiffusion / ASSAY.019 v05	Lowest concentration of toxoid at which immunoprecipitation was observed: 31.25 µg/mL
Activity	Mouse Lethality	No death or illness at 15µg per mouse; performed on the bulk Lot# 19131A

Quality Control Manager:  NGT Date: 08Feb2023

Production:  Todd Christian Date: 02/09/2023