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## Certificate of Testing

### Tetanus Toxoid from *Clostridium tetani*, Lyophilized in Buffer

Prod. No: 191B

Lot Number: 19133A6

Date of Manufacture 16 May 2025

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

#### Contents

Each container holds 100 µg of lyophilized tetanus toxoid. When reconstituted with 200 µL of water the protein is in 100 mM Histidine, 100 mM NaCl, pH 7.0 and 5% Trehalose.

#### Storage/Shipping Requirements

Store at  $5 \pm 3$  °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 v6.0 | Before reconstitution: uniform white pellet, free of foreign material<br>After reconstitution: clear, colorless, particulate free, complete dissolution |
| Purity     | SDS-PAGE / GELS.018 v19.0            | Non-reduced: %Monomer = 71% and %Aggregates = 29%<br>Reduced: %Monomer = 75% and %Aggregates = 25%  |
|            | OD Measurement / ASSAY.060 v7.0      | A <sub>280</sub> /A <sub>260</sub> : 1.9<br>A <sub>320</sub> : 0.01   |
|            | Endotoxin / ASSAY.092 v7.0           | 11 EU/mg  |
| Identity   | Immunodiffusion / ASSAY.019 v5.0     | Lowest concentration of toxoid at which immunoprecipitation was observed: 15.6 µg/mL  |
| Activity   | Mouse Lethality                      | No death or illness at 15 µg of toxoid per mouse (performed on the bulk lot #19133A)  |

Quality Control: \_\_\_\_\_

Date: \_\_\_\_\_

Production: \_\_\_\_\_

Date: \_\_\_\_\_