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Product #161

CERTIFICATE OF ANALYSIS  
SHIGA TOXIN 1 from *E. coli*, recombinant  
Lot #1611A1

Contents:

Each vial of lot #1611A1, when reconstituted in 100  $\mu$ L of water, contains 10  $\mu$ g of Shiga toxin 1 in 1X PBS, pH 7.4. **Use sufficient volume to wash down the walls and stopper, if necessary. Handle the product gently; mix by inversion, do not vortex. READ ALL HANDLING INFORMATION PRIOR TO RECONSTITUTION.**

Concentration:

Protein concentration was determined by absorbance at 280 nm using  $Abs(0.1\%) = 0.775$ . This value is calculated by ProtParam<sup>1</sup> using an algorithm based on the Edelhoch<sup>2</sup> method with modifications described in Pace, et al<sup>3</sup>.

Purity:

When examined on 12% SDS-polyacrylamide gels, this product migrates as two major bands corresponding to the A and B polypeptides, with apparent molecular weights of 32 kDa and 8 kDa, respectively. The percent purity of this lot is >98%.

This product has been tested for endotoxin levels and was found to be acceptable.

Activity:

This lot of Shiga toxin 1 has been tested to confirm activity using the Vero cell cytotoxicity assay and was found to be acceptable. The toxin is reactive by Western blot analysis using both monoclonal anti-Shiga toxin 1 subunit A and subunit B.

Toxicity:

Shiga toxin 1 is very toxic and should be handled with extreme caution. Since the toxicity varies with the cell type, a range of concentrations should be tested to determine optimal concentrations for specific studies.

Storage:

This product is supplied as a lyophilized powder which has been stoppered under vacuum. Store at 2-8°C.



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### **Handling:**

**Good laboratory technique should be employed in the safe handling of this product. This involves observing the following practices:**

- 1. Wear appropriate laboratory attire, i.e., labcoat, eye protection and gloves. Nitrile gloves are recommended when handling lyophilized material.**
- 2. Do not mouth pipette, inhale, ingest or allow to come into contact with open wounds. Wash thoroughly any area of the body which comes into contact with the product.**
- 3. Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device.**
- 4. This product is intended for research purposes only. 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 USE IN HUMANS.**

### **References:**

- 1. [www.expasy.ch/tools/protparam-doc.html](http://www.expasy.ch/tools/protparam-doc.html)**
- 2. Edelhoch, H. (1967) Biochemistry, 6: 1948-1954.**
- 3. Pace, C.N., Vajdos, F., Fee, L., Grimsley, G., and Gray, T. (1995) Protein Sci, 4: 2411-2423.**

QA/QC: KPD Date: 01/22/2021

Made in U.S.A. 