



CERTIFICATE OF ANALYSIS
SHIGA TOXIN 2 from *E. coli*, recombinant
Lot #1623A1

Contents

NEW FORMULATION

Each vial contains 10 µg of Shiga Toxin 2 in 100µl of 0.1M Tris, 0.1M NaCl and 0.001% PVA, pH 8.6.

Handle the product gently; mix by inversion, do not vortex.

READ ALL HANDLING INFORMATION PRIOR TO USE.

Concentration

The protein concentration was determined by absorbance at 280 nm using Abs (0.1%) = 1.33. This value is calculated by ProtParam¹ using an algorithm based on the Edelhoch² method with modifications described in Pace et al³.

Purity

When examined on a 12% SDS-PAGE this product migrates as two major bands corresponding to the A and B polypeptides, with apparent molecular weights of 33 kDa and 8 kDa, respectively. The percent purity of this lot is >98%.

The endotoxin content, determined using a kinetic chromogenic LAL assay, is < 600 EU/mg.

Activity

This lot of Shiga Toxin 2 has been tested to confirm activity using a Vero cell cytotoxicity assay. The cell cytotoxicity (CC₅₀) is ~ 11 µg/mL on 1 x 10³ Vero cells. The toxin is also reactive by Western blot analysis using a monoclonal anti-Shiga Toxin 2A antibody.

Toxicity

Shiga Toxin 2 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 frozen liquid. Store at ≤ - 65 °C

(continued)

Handling

Good laboratory technique should be employed in the safe handling of this product; refer to the SDS. 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 USE IN HUMANS.

References

1. 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.
4. Biosafety in Microbiological and Biomedical Laboratories. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institutes of Health.

Production: TC Date: 1/28/2020 Management: KD Date: 28 Jan 2020 QA/QC: JC Date: 1/29/2020