

CERTIFICATE OF ANALYSIS
SHIGA TOXIN 1 from *E. coli*, recombinant
Lot #1611A1Contents:

Each vial of lot #1611A1, when reconstituted in 100 μ L of water, contains 10 μ 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 ProtParam¹ using an algorithm based on the Edelhoch² method with modifications described in Pace, et al³.

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.

(continued)

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
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.

Production: TP Date: 4/13/11 Management: INS Date: 4/13/11 QA/QC: GP Date: 4/18/2011