

CERTIFICATE OF ANALYSIS
LIST™ HPT™ LPS
from *Escherichia coli* O113
Lot #4331B1

Contents

Each vial contains 1 mg of highly purified lipopolysaccharide (LPS) from *Escherichia coli* type O113:H10, which was in water when lyophilized.

Packaging/Reconstitution/Storage

LPS is dispersible in aqueous solvents at concentrations of 1 mg/ml. To achieve suspension in water, heating to about 50°C with intermittent vortexing or sonication is generally recommended.¹ Allow ample time for dispersion to occur. The use of 0.5% triethylamine aids in dispersion. Triethylamine is very basic and may be neutralized with Tris HCl to avoid hydrolysis of the LPS fatty acid chains. It is recommended that this material be stored at 2-8°C prior to and following reconstitution.

Analysis

Endotoxin activity by a kinetic chromogenic LAL assay ²	10.3 EU/ng
2-Keto-3-deoxyoctonate (KDO) ³	2.5%
Nucleic acid ⁴	0.3%

There are no detectable protein bands on a colloidal gold blot^{5,6} transferred from SDS-PAGE.⁷

Handling

Good laboratory technique should be employed in the safe handling of any lipopolysaccharide or lipid A product. Wear appropriate laboratory attire including a lab coat, gloves and safety glasses. Nitrile gloves are recommended when handling lyophilized material.

This product is pyrogenic. Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device.

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 damages resulting from the misuse or handling of this product.

FOR RESEARCH PURPOSES ONLY. NOT FOR USE IN HUMANS.

(continued)

References

1. Mukerjee, P., Kastowsky, M., Obst, S., and Takayama, K. (1999) Lipopolysaccharide Preparations in Aqueous Media in *Endotoxin in Health and Disease*, Brade, H., Opal, S.M., Vogel, S.N., and Morrison, D. eds., Marcel Dekker, Inc., New York, p. 223-224.
2. Endosafe Portable Test System User's Guide, Charles River Laboratories, International, Inc., document # PIPTS 101-10.
3. Cynkin, M.A. and Ashwell, G. (1960) *Nature* **186**, 155-156.
4. Determined by absorption at 260 nm.
5. Rohringer, R., and Holden, D.W. (1985) *Anal. Biochem.* **144**, 118-127.
6. Danscher, G. (1981) *Histochemistry* **71**, 81-88.
7. Wyckoff, M., Rodbard, D., and Chrambach, A. (1977) *Anal. Biochem.* **78**, 459-482.

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