



540 Division Street, Campbell, California 95008-6906
 Tel. (408) 866-6363 Fax (408) 866-6364
www.listlabs.com

Product #314
 Lot #3141C1

CERTIFICATE OF ANALYSIS
LIPOPOLYSACCHARIDE
 from *Escherichia coli* K12 LCD25
 Lot #3141C1

Contents

Each vial contains 1.0 mg of lyophilized lipopolysaccharide (LPS) isolated from *Escherichia coli* K12 LCD25¹ by a modification of the method of Galanos *et al.*²

Reconstitution/Storage

LPS is dispersible in aqueous solvents at concentrations of 1.0 mg/mL. To achieve suspension in water, heating to 50°C with intermittent vortexing or sonication is generally recommended.³ 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 fatty acid chains. It is recommended that this material be stored at 4°C prior to and following reconstitution.

Analysis

2-Keto-3-deoxyoctonate (KDO) ⁴	3.2%
Phosphate ⁵	6.8%
Protein ⁶	<0.5%
Nucleic acid ⁷	<0.7%

Handling

Good laboratory technique should be employed in the safe handling of any lipopolysaccharide or lipid A product. This requires observing the following practices:

1. Wear appropriate laboratory attire including a lab coat, gloves, and safety glasses.
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. This product is pyrogenic. Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device.
4. This product is intended for research purposes by qualified personnel 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. Munford, R.S., DeVaux, L.C., Cronan, Jr., J.E. and Rick, P.D. (1992) *J. Immunol. Meth.* **148**, 115-120.
2. Galanos, C., Lüderitz, O. and Westphal, O. (1969) *Eur. J. Biochem.* **9**, 245-249.
3. Mukerjee, P., Kastowsky, M., Obst, S., Takayama, K. (1999) Lipopolysaccharide Preparations in Aqueous Media in *Endotoxin in Health and Disease*, Brade, H., Opal, S.M., Vogel, S.M., Morrison, D.C. eds., Marcel Dekker, Inc., New York, p. 223-224.
4. Cynkin, M.A. and Ashwell, G. (1960) *Nature* **186**, 155-156.
5. Ames, B.N. and Dubin, D.T. (1960) *J. Biol. Chem.* **235**, 769-775.
6. Bradford, M.M. (1976) *Anal. Biochem.* **72**, 248-254.
7. Determined by absorption at 260 nm after correction for end absorption by LPS.

Quality Assurance: *[Signature]* Date: 11 JAN 2022