

Certificate of Testing

Lipopolysaccharide from *Escherichia coli* O111:B4

Prod. No: 201

Lot Number: 20150B1

Date of Manufacture 22 June 2026

**FOR RESEARCH PURPOSES ONLY.
NOT FOR HUMAN USE.**

Contents

Each container holds 5 mg of lyophilized lipopolysaccharide.

Storage/Shipping Requirements

Store at 5 ± 3 °C. This product is provided as an aseptically packaged lyophilized cake, sealed under vacuum. Ship material at ambient temperature.

Handling

Good laboratory technique should be employed in the safe handling of this product. Wear appropriate laboratory attire including a lab coat, gloves and safety glasses.

The 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.

Attribute	Test Method ID / Version	Acceptance Criteria	Results	Pass / Fail
Appearance	Physical Appearance / ASSAY.063 v6.0	Before reconstitution: uniform white cake. After reconstitution: colorless, clear or hazy, complete dissolution, particulate-free.	Before reconstitution: uniform white cake. After reconstitution: colorless, hazy, complete dissolution, particulate-free.	Pass
Purity	SDS-PAGE / GELS.020 v7.0	Band migration pattern comparable to control	Band migration pattern comparable to control	Pass
Potency	Endotoxin / ASSAY.092 v7.0	For record	9.36 x 10⁶ EU/mg	N/A
Assay	Protein Assay / ASSAY.002 v6.0	Sum of Protein + Nucleic Acid: $\leq 3\%$	Protein: 0.92% Nucleic Acid: 0.53% Sum: 1.45%	Pass
	Nucleic Acid Assay / ASSAY.003 v3.0			
	Phosphate Assay / ASSAY.004 v5.0	1.6% - 5.8%	2.7%	Pass
	KDO Assay / ASSAY.005 v6.0	1.5% - 4.0%	2.3%	Pass
	Solubility Test / 200.005 v3.0	Soluble and comparable to standard	Soluble and comparable to standard	Pass

Quality Control: 

Date: 07/07/2026

Production: 

Date: 07/07/2026