

PRODUCT INFORMATION

UltraPure LPS from *Escherichia coli* O111:B4

Item No. 28872

Overview and Properties

Contents: Each vial contains 1 mg of highly purified lipopolysaccharide (LPS) lyophilized in water.
Storage: 2-8°C (as supplied)
Stability: ≥2 years
Special Conditions: This product is pyrogenic. Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device.

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

UltraPure LPS from *Escherichia coli* O111:B4 is a form of lipopolysaccharide (LPS) extracted from wild-type S-form *E. coli* serotype O111:B4 and re-extracted to reduce residual contaminating proteins.¹ LPS is commonly used to activate toll-like receptor 4 (TLR4) on leukocytes, eliciting inflammatory signaling in isolated cells and *in vivo*.²⁻⁵

References

1. Manthey, C.L. and Vogel, S.N. Elimination of trace endotoxin protein from rough chemotype LPS. *J. Endotox. Res.* **1(2)**, 84-91 (1994).
2. Migale, R., Herbert, B.R., Lee, Y.S., *et al.* Specific lipopolysaccharide serotypes induce differential maternal and neonatal inflammatory responses in a murine model of preterm labor. *Am. J. Pathol.* **185(9)**, 2390-2401 (2015).
3. Mai, K., Chui, J.J., Di Girolamo, N., *et al.* Role of toll-like receptors in human iris pigment epithelial cells and their response to pathogen-associated molecular patterns. *J. Inflamm. (Lond.)* **11**, 20 (2014).
4. Medearis, D.N., Camitta, B.M., and Heath, E.C. Cell wall composition and virulence in *Escherichia coli*. *J. Exp. Med.* **128(3)**, 399-414 (1968).
5. Pirianov, G., MacIntyre, D.A., Lee, Y., *et al.* Specific inhibition of c-Jun N-terminal kinase delays preterm labour and reduces mortality. *Reproduction* **150(4)**, 269-277 (2015).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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