

PRODUCT INFORMATION



1-Lignoceroyl-2-decanoyl-*sn*-glycero-3-phosphoethanolamine

Item No. 45848

Formal Name: (R)-2-ammonioethyl (2-(decanoyloxy)-3-(tetracosanoyloxy)propyl) phosphate

Synonyms: 1-Lignoceroyl-2-decanoyl-PE,
1-Lignoceroyl-2-decanoyl
Phosphatidylethanolamine,
PE(24:0/10:0),
PtdEtn-(1-lignoceroyl, 2-decanoyl),
1-Tetracosanoyl-2-decanoyl-*sn*-glycero-
3-phosphoethanolamine

MF: C₃₉H₇₈NO₈P

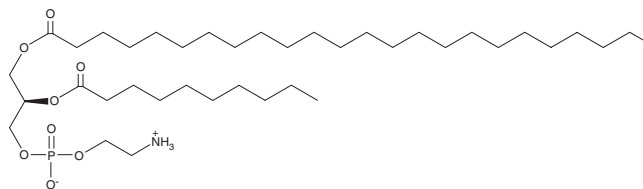
FW: 720.0

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

1-Lignoceroyl-2-decanoyl-*sn*-glycero-3-phosphoethanolamine (1-lignoceroyl-2-decanoyl-PE) is supplied as a solid. A stock solution may be made by dissolving the 1-lignoceroyl-2-decanoyl-PE in the solvent of choice, which should be purged with an inert gas. 1-Lignoceroyl-2-decanoyl-PE is slightly soluble (0.1-1 mg/ml) in chloroform:methanol (2:1).

Description

1-Lignoceroyl-2-decanoyl-PE is a phospholipid that contains lignoceric acid (Item No. 13353) and decanoic acid (Item No. 20838) at the *sn*-1 and *sn*-2 positions, respectively, that has been found in *F. tularensis*.¹ It reduces IL-12 p40 production in primary mouse bone marrow-derived macrophages (BMDMs) stimulated with R-848 (Item No. 14806). Liposomes composed of 1-lignoceroyl-2-decanoyl-PE and 1,2-dilignoceroyl-PC decrease IL-6 and TNF-α production and viral load in primary human dendritic cells infected with dengue virus.

Reference

1. Ireland, R., Schwarz, B., Nardone, G., *et al.* Unique *Francisella* phosphatidylethanolamine acts as a potent anti-inflammatory lipid. *J. Innate Immun.* **10**(4), 291-305 (2018).

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.

Copyright Cayman Chemical Company, 07/13/2026

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM