

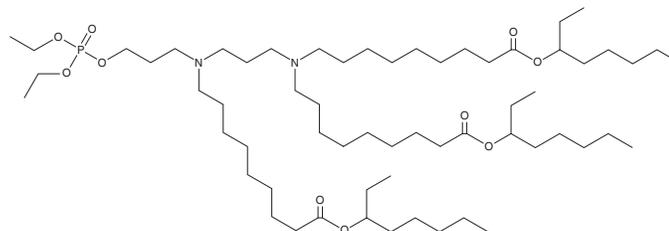
PRODUCT INFORMATION



PL1

Item No. 38647

CAS Registry No.: 2274812-94-9
Formal Name: di(octan-3-yl) 9,9'-((3-((3-((diethoxyphosphoryl)oxy)propyl)(9-(octan-3-yloxy)-9-oxononyl)amino)propyl)azanediy) dinonanoate



MF: C₆₁H₁₂₁N₂O₁₀P
FW: 1,073.6
Purity: ≥95%
Supplied as: A 5 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

PL1 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as chloroform and methanol purged with an inert gas can be used. PL1 is soluble in chloroform and slightly soluble in methanol.

Description

PL1 is a multi-tail ionizable cationic phospholipid that has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA.¹ LNPs containing PL1 and encapsulating mRNA encoding the co-stimulatory receptor CD137 or OX40 increase T cell antitumor immunity in various mouse xenograft models.

Reference

1. Li, W., Zhang, X., Zhang, C., *et al.* Biomimetic nanoparticles deliver mRNAs encoding costimulatory receptors and enhance T cell mediated cancer immunotherapy. *Nat. Commun.* **12(1)**, 7264 (2021).

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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