

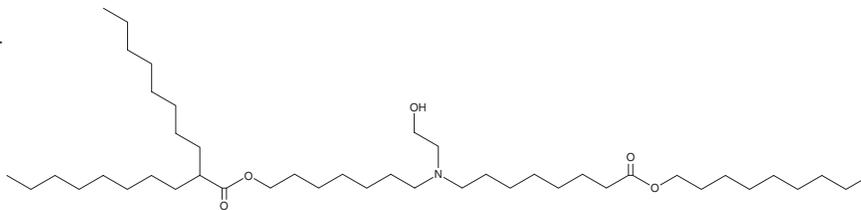
PRODUCT INFORMATION



Lipid M

Item No. 38775

CAS Registry No.: 2089251-57-8
Formal Name: 2-octyl-decanoic acid,
7-[(2-hydroxyethyl)[8-(nonyloxy)-
8-oxooctyl]amino]heptyl ester
MF: C₄₄H₈₇NO₅
FW: 710.2
Purity: ≥95%
Supplied as: A 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

Lipid M 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 methanol and chloroform purged with an inert gas can be used. Lipid M is sparingly soluble (1-10 mg/ml) in methanol and slightly soluble (0.1-1 mg/ml) in chloroform

Description

Lipid M is an ionizable cationic lipid ($pK_a = 6.75$) that has been used in the generation of lipid nanoparticles (LNPs) for mRNA delivery *in vivo*.¹ LNPs containing lipid M and encapsulating mRNA encoding influenza virus genes increase anti-influenza virus IgG titers in cynomolgus monkeys without inducing local edema, erythema, or systemic levels of IL-6.

Reference

1. Hassett, K.J., Benenato, K.E., Jacquinet, E., *et al.* Optimization of lipid nanoparticles for intramuscular administration of mRNA vaccines. *Mol. Ther. Nucleic Acids* **15**, 1-11 (2019).

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, 04/02/2024

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