

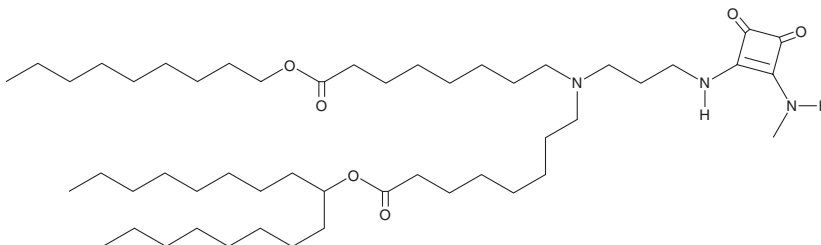
PRODUCT INFORMATION



Lipid Compound 182

Item No. 43416

CAS Registry No.: 2089253-10-9
Formal Name: 8-[[3-[[2-(methylamino)-3,4-dioxo-1-cyclobuten-1-yl]amino]propyl][8-(nonyloxy)-8-oxooctyl]amino]-octanoic acid, 1-octylnonyl ester
MF: C₅₀H₉₃N₃O₆
FW: 832.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Lipid compound 182 is supplied as a solid. A stock solution may be made by dissolving the lipid compound 182 in the solvent of choice, which should be purged with an inert gas. Lipid compound 182 is sparingly soluble (1-10 mg/ml) in ethanol.

Description

Lipid compound 182 is an ionizable cationic amine lipid ($pK_a = 6.48$) that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*.¹ LNPs containing lipid compound 182 and encapsulating mRNA encoding human erythropoietin (hEPO) increase plasma levels of hEPO in mice.

Reference

1. Cornebise, M., Narayanan, E., Xia, Y., *et al.* Discovery of a novel amino lipid that improves lipid nanoparticle performance through specific interactions with mRNA. *Adv. Funct. Mater.* **32**(8), 2106727(1-12) (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.

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