

PRODUCT INFORMATION



DOPE-C8

Item No. 43295

Formal Name: (R)-2,3-bis(oleoyloxy)propyl
(2-((3-(octyloxy)-3-oxopropyl)
ammonio)ethyl) phosphate

Synonyms: 1,2-Dioleoyl-*sn*-glycero-3-
phosphoethanolamine-C8,
1,2-DOPE-C8

MF: C₅₂H₉₈NO₁₀P

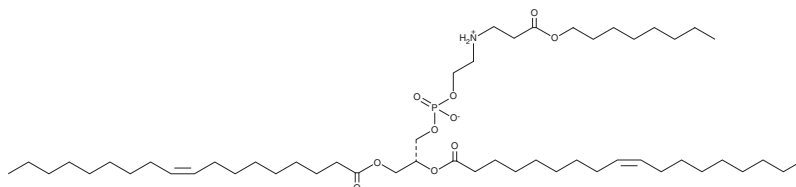
FW: 928.3

Purity: ≥95%

Supplied as: A 10 mg/ml solution in ethanol

Storage: -20°C

Stability: ≥4 years



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

Description

DOPE-C8 is a zwitterionic glycerophospholipid that has been used in the generation of lipid nanoparticles (LNPs) for mRNA delivery *in vivo*.¹ LNPs containing DOPE-C8 have improved endosomal escape ability over LNPs containing 1,2-DSPC (Item Nos. 15100 | 39189). LNPs containing DOPE-C8 and encapsulating mRNA encoding EGFP induce hepatic EGFP expression in mice.

Reference

1. Iwakawa, K., Sato, R., Konaka, M., *et al.* Cubic phase-inducible zwitterionic phospholipids improve the functional delivery of mRNA. *Adv. Sci. (Weinh)* e2413016 (2025).

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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