

Product Data Sheet

Product Name: E12CA1A3

Cat. No.: GC91614

Chemical Properties

Cas. No. 2778182-26-4

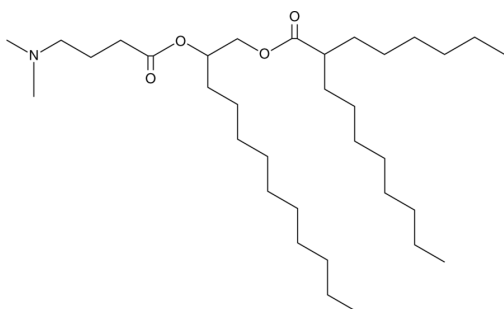
Formula $C_{34}H_{67}NO_4$ M.Wt 553.9

Solubility DMSO: Sparingly soluble: 1-10 mg/ml, Ethanol: Soluble: ≥ 10 mg/ml, PBS (pH 7.2): Slightly soluble: 0.1-1 mg/ml
Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

E12CA1A3 is an ionizable cationic lipid ($pK_a = 6.4$) that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo*.^[1] LNPs containing E12CA1A3 and encapsulating an mRNA reporter induce luciferase reporter expression in mouse bone marrow-derived dendritic cells (BMDCs) and mice. LNPs containing E12CA1A3 are cleared more rapidly from the liver than LNPs containing DLin-MC3-DMA in mice.

References:

[1]. Xu, Y., Hu, Y., Xia, H., et al. Delivery of mRNA vaccine with 1, 2-diester-derived lipids elicits fast liver clearance for safe and effective cancer immunotherapy. *Adv. Healthc.*

Caution: Product has not been fully validated for medical applications. For research use only.

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Mater.13(5)e2302691(2024).

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