

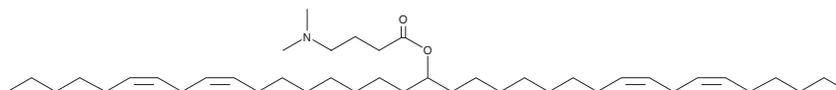
# PRODUCT INFORMATION



## nor-MC3

Item No. 43859

**CAS Registry No.:** 2870681-06-2  
**Formal Name:** (9Z,12Z)-1-(8Z,11Z)-8,11-heptade butanoic acid, 4-(dimethylamino)-cadien-1-yl-9,12-octadecadien-1-yl ester  
**MF:** C<sub>41</sub>H<sub>75</sub>NO<sub>2</sub>  
**FW:** 614.1  
**Purity:** ≥98%  
**Supplied as:** A 50 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.

### Description

nor-MC3 is an ionizable cationic lipid that has been used in the generation of liposomal lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo* and is a derivative of DLin-MC3-DMA (Item No. 34364).<sup>1</sup> Liposomal LNPs containing nor-MC3 at a molar ratio of 20:40:40:1.5 for nor-MC3:egg sphingomyelin:cholesterol:DMG-PEG(2000) compared with those with a molar ratio of 50:10:38.5:1.5 exhibit higher transfection efficiencies *in vitro*. Liposomal LNPs containing nor-MC3 at a molar ratio of 20:40:40:1.5 accumulate in the spleen, pancreas, heart, kidney, muscle, and inguinal lymph nodes in mice to a greater extent than those with a molar ratio of 50:10:38.5:1.5.

### Reference

1. Cheng, H.Y., Zhang, Y., Fox, K., *et al.* Liposomal lipid nanoparticles for extrahepatic delivery of mRNA. *Nat. Commun.* **16(1)**, (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.

#### 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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