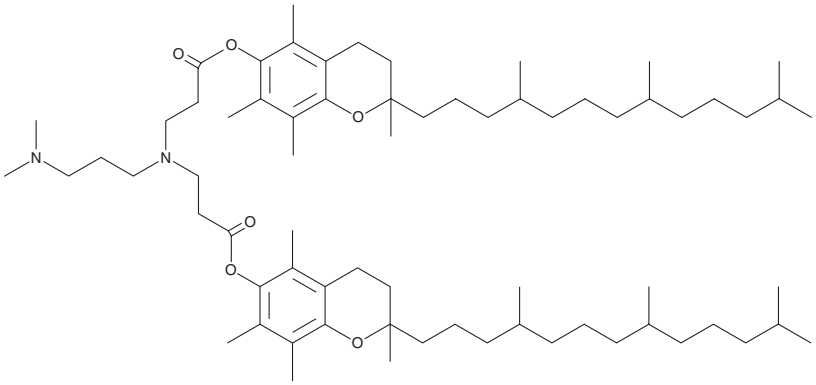
PRODUCT INFORMATION

Lipid VN_3C_1

Item No. 46807



CAS Registry No.:	3035464-93-5
Formal Name:	*bis*(2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)chroman-6-yl) 3,3'-((3-(dimethylamino)propyl) azanediyl)dipropionate
MF:	$C_{69}H_{118}N_2O_6$
FW:	1,071.7
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

Lipid VN_3C_1 is a vitamin E-based ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo*.[1] LNPs containing lipid VN_3C_1 exhibit increased cellular uptake in DC2.4 dendritic cells compared with LNPs containing SM-102 (Item No. 33474). Lipid VN_3C_1 -containing LNPs promote dendritic cell maturation and antigen presentation in primary mouse bone marrow-derived dendritic cells (BMDCs) cultured with ovalbumin peptide (257-264; Item No. 36882). LNPs containing lipid VN_3C_1 increase IL-6 levels at the subcutaneous injection site in mice.

Reference

1. Cui, K., Fangming, Z., Shi, T., *et al*. Iterative screening of vitamin E-based functional lipid nanoparticles for mRNA delivery. *ACS Nano* **19(22)**, 20672-20692 (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
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