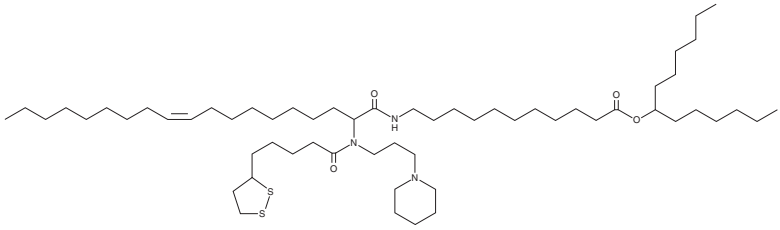
PRODUCT INFORMATION

LA-A2B2CD3

Item No. 46605

CAS Registry No.: 3087764-75-5
Formal Name: 11-[[(10Z)-2-[[5-(1,2-dithiolan-3-yl)-1-oxopentyl][3(1-piperidinyl)propyl]amino]-1-oxo-10-nonadecen-1-yl]amino]-undecanoic acid, 1-hexylheptyl ester
MF: $C_{59}H_{111}N_3O_4S_2$
FW: 990.7
Purity: ≥95%
Supplied as: A 50 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

LA-A2B2CD3 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA and sgRNA *in vitro* and *in vivo*.[1] LNPs formulated with LA-A2B2CD3 increase reactive oxygen species (ROS) levels *in vitro* to a lesser extent than LNPs containing other lipids, such as SM-102 (Item No. 33474), and decrease inflammatory cytokine levels at subcutaneous delivery sites in mice unlike LNPs containing other lipids, which increase them. Topical delivery of LNPs containing LA-A2B2CD3 and encapsulating Cas9 mRNA and CD93-targeting sgRNA reduces skin lesions, epidermal thickening, and *trans*-epidermal water loss in a mouse model of psoriasis induced by imiquimod (Item No. 14956).

Reference

1. Wang, C., Pan, Q., Chen, S., *et al.* Strain-promoted mRNA transdermal delivery by lipoic lipid nanoparticles for therapeutic skin genome editing. *J. Am. Chem. Soc.* **147(38)**, 34449-34465 (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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