# PRODUCT INFORMATION



# **244cis**

Item No. 39284

CAS Registry No.: 2956402-64-3

Formal Name: 4-[2-[bis[9-[(2Z)-2-nonen-1-

yloxy]-9-oxononyl]amino]ethyl]-1-

piperazinenonanoic acid, (2Z)-2-

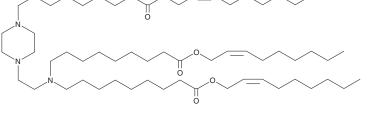
nonen-1-yl ester

MF:  $C_{60}H_{111}N_3O_6$ FW: 970.6 **Purity:** ≥95%

Supplied as: A solution in ethanol

Storage: -20°C Stability: ≥1 year

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



## Description

244cis is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs).<sup>1</sup> LNPs containing 244cis and encapsulating an mRNA reporter specifically accumulate in the lungs and induce lower serum chemokine (C-C motif) ligand 2 (CCL2) levels than LNPs containing SM-102 (Item No. 33474) in mice. Intravenous administration of LNPs containing 244cis and encapsulating mRNA encoding Cre recombinase increases tdTomato fluorescence in lung endothelial, epithelial, and immune cells, as well as fibroblasts, in mice expressing a floxed STOP codon to prevent tdTomato expression.

### Reference

1. Kim, M., Jeong, M., Lee, G., et al. Novel piperazine-based ionizable lipid nanoparticles allow the repeated dose of mRNA to fibrotic lungs with improved potency and safety. Bioeng. Transl. Med. e10556 (2023).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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