

PRODUCT INFORMATION



119-23

Item No. 41386

CAS Registry No.: 2953044-98-7
Formal Name: 9Z-octadecenoic acid,
6-[[3-(dimethylamino)propyl]
[(9Z)-1-oxo-9-octadecen-1-yl]
amino]-7-oxo-7-(tricyclo[3.3.1.1^{3,7}]
dec-1-ylamino)heptyl ester

MF: C₅₈H₁₀₅N₃O₄

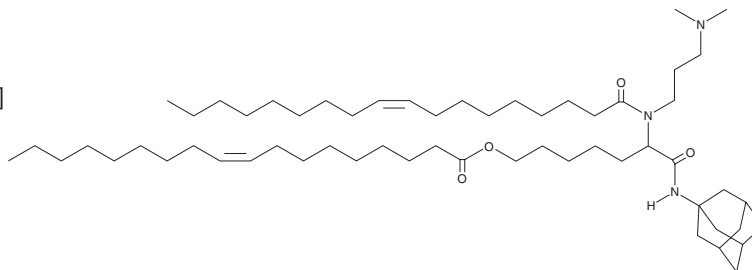
FW: 908.5

Purity: ≥95%

Supplied as: A 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.

Laboratory Procedures

119-23 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. 119-23 is sparingly soluble (1-10 mg/ml) in chloroform.

Description

119-23 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*.¹ LNPs containing 119-23 and encapsulating an mRNA reporter show greater intramuscular transfection efficacy compared to LNPs containing the ionizable cationic lipids SM-102 (Item No. 33474) or DLin-MC3-DMA (Item No. 34364) in mice. 119-23-containing LNPs accumulate in mouse hepatic and splenic immune cells to a greater extent than SM-102-containing LNPs. LNPs containing 119-23 and encapsulating mRNA encoding human erythropoietin (hEPO) increase serum hEPO levels in mice.

Reference

1. Li, B., Raji, I.O., Gordon, A.G.R., *et al.* Accelerating ionizable lipid discovery for mRNA delivery using machine learning and combinatorial chemistry. *Nat. Mater.* **23**(7), 1002-1008 (2024).

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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