

PRODUCT INFORMATION



T Cell Lipid 15

Item No. 45491

CAS Registry No.: 3024023-96-6
Formal Name: 9-octadecenoic acid (9Z)-1,1'-[2-[[3-(dimethylamino)propyl][1,4-dioxo-4-[(1-propylheptyl)oxy]butyl]amino]-1,3-propanediyl] ester

MF: C₅₈H₁₀₈N₂O₇

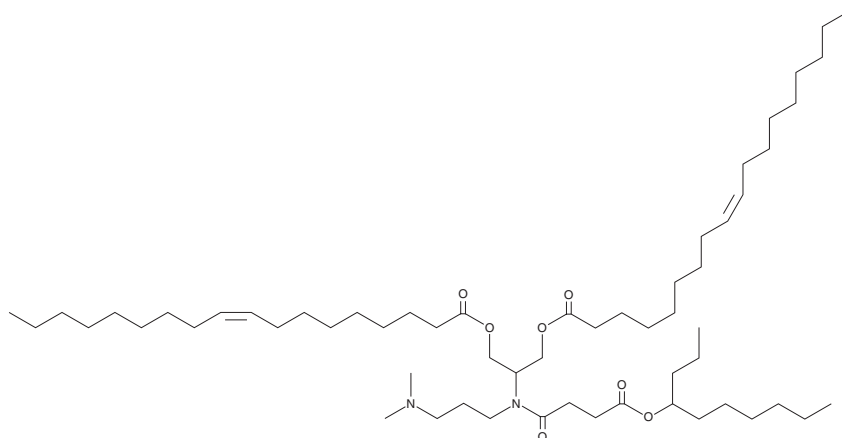
FW: 945.5

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.

Laboratory Procedures

T cell lipid 15 is supplied as a solution in ethanol. To change the solvent, simply evaporate the T cell lipid 15 under a gentle stream of nitrogen and immediately add the solvent of choice. T cell lipid 15 is sparingly soluble (1-10 mg/ml) in a 2:1 solution of chloroform:methanol.

Description

T cell lipid 15 is an 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 T cell lipid 15, encapsulating CD22 chimeric antigen receptor (CAR) mRNA, and conjugated to a CD8-targeting nanobody induce CAR presentation in the CD8⁺ T cell population in isolated human peripheral blood mononuclear cells (PBMCs). These LNPs decrease tumor growth in a humanized NALM6 leukemia mouse xenograft model.

Reference

1. Lemgart, V.T., Sawyer, A.J., Kuhlman, W., *et al.* Reprogramming CD22 CAR-T cells *in vivo* using CD8-targeted mRNA-LNPs to treat hematological malignancies. *Mol. Ther.* **34**(5), 2621-2636 (2026).

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.

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