

# PRODUCT INFORMATION

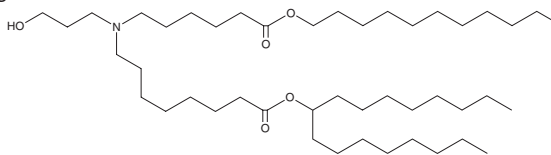


## Lipid C-1

Item No. 39975

**CAS Registry No.:** 2244715-87-3  
**Formal Name:** 8-[(3-hydroxypropyl)[6-oxo-6-(undecyloxy)hexyl]amino]-octanoic acid, 1-octylnonyl ester

**Synonym:** Lipid 142  
**MF:** C<sub>45</sub>H<sub>89</sub>NO<sub>5</sub>  
**FW:** 724.2  
**Purity:** ≥98%  
**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

Lipid C-1 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. Solvents such as methanol and chloroform purged with an inert gas can be used.

### Description

Lipid C-1 is an ionizable cationic amino lipid and a derivative of SM-102 (Item No. 33474).<sup>1</sup> It has been used in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro*. LNPs containing lipid C-1 and encapsulating an mRNA reporter induce higher luciferase expression in Calu-3 cells than SM-102.

### Reference

1. Lewis, M.M., Soto, M.R., Maier, E.Y., *et al.* Optimization of ionizable lipids for aerosolizable mRNA lipid nanoparticles. *Bioeng. Transl. Med.* **8(6)**, e10580 (2023).

#### 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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