

# PRODUCT INFORMATION



## Lipid C16-C

Item No. 44085

**CAS Registry No.:** 2639634-86-7  
**Formal Name:** 17-(2-(4-(2-(2-(2-(bis(2-hydroxyhexadecyl) amino)ethoxy)ethoxy)ethyl)piperazin-1-yl) ethyl)-26-(2-hydroxyhexadecyl)-20,23-dioxa-17,26-diazadotetracontane-15,28-diol

**MF:** C<sub>98</sub>H<sub>201</sub>N<sub>5</sub>O<sub>9</sub>

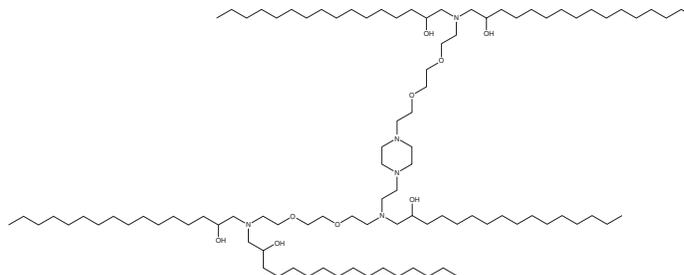
**FW:** 1,593.7

**Purity:** ≥95%

**Supplied as:** A 10 mg/ml 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.

### Description

Lipid C16-C 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*.<sup>1</sup> LNPs containing lipid C16-C selectively traffic to mouse liver and spleen over the lungs, kidneys, lymph nodes, and heart. LNPs containing lipid C16-C and encapsulating mRNA encoding HER2-targeting chimeric antigen receptor (CAR) induce CAR expression in human macrophages *ex vivo* and induce cytotoxicity in HER2-expressing SKOV3 ovarian cancer cells *in vitro*.

### Reference

1. Mukalel, A.J., Tylek, T., O'Brien, E., *et al.* Bioinspired oxidized mRNA lipid nanoparticles for *ex vivo* engineering of chimeric antigen receptor macrophages targeting solid tumors. *bioRxiv [Preprint]* (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.

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