

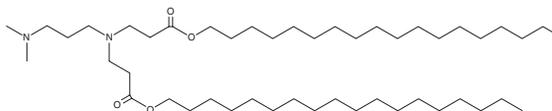
# PRODUCT INFORMATION



**80-O18**

Item No. 40611

**CAS Registry No.:** 1638334-27-6  
**Formal Name:** N-[3-(dimethylamino)propyl]-N-[3-(octadecyloxy)-3-oxopropyl]-β-alanine, octadecyl ester  
**MF:** C<sub>47</sub>H<sub>94</sub>N<sub>2</sub>O<sub>4</sub>  
**FW:** 751.3  
**Purity:** ≥95%  
**Supplied as:** A 50 mg/ml solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥3 years



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

## Laboratory Procedures

80-O18 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 80-O18 should be diluted with the aqueous buffer of choice. 80-O18 is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

## Description

80-O18 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for use *in vitro*.<sup>1</sup> An LNP complex containing 80-O18 and a Cre-GFP fusion protein tagged with one of three assay-specific chloroalkane tags displays high total cellular uptake and functional delivery in reporter assays using HeLa-DsRed cells, as well as cytosolic delivery in a chloroalkane penetration assay (CAPA) screen using HeLa-HGM cells.

## Reference

1. Wang, J., Zhang, S., Li, Y., *et al.* Investigating the cytosolic delivery of proteins by lipid nanoparticles using the chloroalkane penetration assay. *Biochemistry* (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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/18/2025

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM