

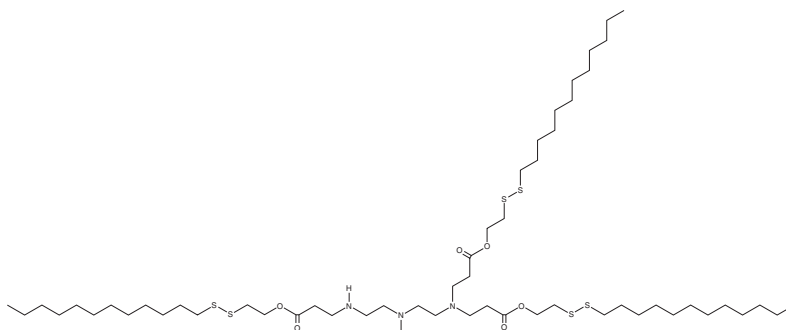
# PRODUCT INFORMATION



## BAMEA-O16B

Item No. 37439

**CAS Registry No.:** 2490668-30-7  
**Formal Name:** bis(2-(dodecylsulfaneyl)ethyl) 3,3'-((3-methyl-9-oxo-10-oxa-13,14-dithia-3,6-diazahexacosyl)azanediyl) dipropionate  
**Synonym:** BAMPA-O16B  
**MF:** C<sub>56</sub>H<sub>111</sub>N<sub>3</sub>O<sub>6</sub>S<sub>6</sub>  
**FW:** 1,114.9  
**Purity:** ≥95%  
**Supplied as:** A 10 mg/ml solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

BAMEA-O16B is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. BAMEA-O16B is soluble in the organic solvent ethanol.

### Description

BAMEA-O16B is a disulfide bond-containing ionizable cationic lipid.<sup>1</sup> It has been used in the generation of lipid nanoparticles (LNPs) for the delivery of CRISPR complementary single-guide RNA (sgRNA) and Cas9 mRNA for genome editing *in vitro* and *in vivo*. LNPs containing BAMEA-O16B encapsulating Cas9 mRNA and sgRNAs targeting the gene encoding proprotein convertase subtilisin kexin type 9 (PCSK9) accumulate in the liver and decrease serum PCSK9 levels in mice.

### Reference

1. Liu, J., Chang, J., Jiang, Y., *et al.* Fast and efficient CRISPR/Cas9 genome editing *in vivo* enabled by bio-reducible lipid and messenger RNA nanoparticles. *Adv. Mater.* **31**(33), e1902575 (2019).

#### 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, 11/06/2025

#### 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](http://WWW.CAYMANCHEM.COM)