

# PRODUCT INFORMATION



## Cardiolipin (16:0/16:0/16:0/16:0)

Item No. 39175

CAS Registry No.: 105380-95-8

Formal Name: hexadecanoic acid, (2R,14R)-5,8,11-trihydroxy-5,11-dioxido-4,6,10,12-tetraoxa-5,11-diphosphapentadecane-1,2,14,15-tetrayl ester

Synonyms: 16:0 Cardiolipin, 64:0-CL, Diphosphatidylglycerol (16:0), Tetrapalmitoyl Cardiolipin

MF:  $C_{73}H_{142}O_{17}P_2$

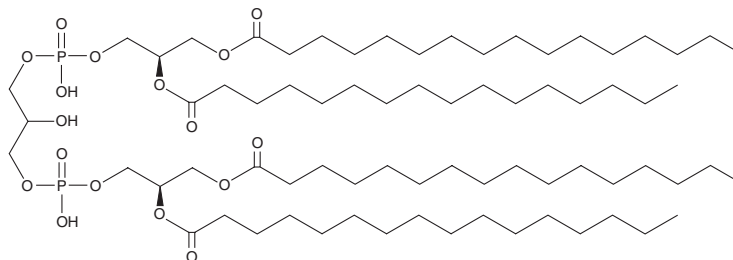
FW: 1,353.9

Purity:  $\geq 95\%$

Supplied as: A solid

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

Cardiolipin (16:0/16:0/16:0/16:0) is supplied as a solid. A stock solution may be made by dissolving the cardiolipin (16:0/16:0/16:0/16:0) in the solvent of choice, which should be purged with an inert gas. Cardiolipin (16:0/16:0/16:0/16:0) is soluble in chloroform.

### Description

Cardiolipin (16:0/16:0/16:0/16:0) is an anionic phospholipid containing the long-chain saturated fatty acid palmitic acid (Item No. 10006627). It has been used in the generation of micelles, liposomes, and other artificial membranes.<sup>1-3</sup>

### References

1. Zhou, J., Duan, M., Wang, X., *et al.* A feedback loop engaging propionate catabolism intermediates controls mitochondrial morphology. *Nat. Cell. Biol.* **24**(4), 526-537 (2022).
2. Ferreira, M., Ribiero, B., Seabra, C.L., *et al.* Fluoroquinolone metalloantibiotics: Fighting *Staphylococcus aureus* biofilms. *Micro* **2**(3), 410-425 (2022).
3. Kim, H., Yoo, Y.D., and Lee, G.Y. Identification of bacterial membrane selectivity of Romo1-derived antimicrobial peptide AMPR-22 via molecular dynamics. *Int. J. Mol. Sci.* **23**(13), 7404 (2022).

#### 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, 11/13/2023

#### 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