

PRODUCT INFORMATION



Cardiolipin (18:1/18:1/18:1/18:1) (sodium salt)

Item No. 14045

CAS Registry No.: 115404-77-8
Formal Name: 9-octadecenoic acid (9Z)-(2R,14R)-5,8,11-trihydroxy-5,11-dioxido-4,6,10,12-tetraoxa-5,11-diphosphapentadecane-1,2,14,15-tetrayl ester, disodium salt

Synonyms: 18:1 Cardiolipin, 72:4-CL, Diphosphatidylglycerol (18:1), Tetraoleoyl Cardiolipin

MF: C₈₁H₁₄₈O₁₇P₂ • 2Na

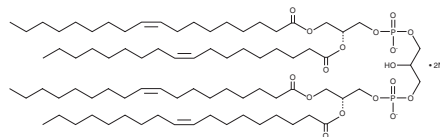
FW: 1,502.0

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Cardiolipin (18:1/18:1/18:1/18:1) (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the cardiolipin (18:1/18:1/18:1/18:1) (sodium salt) in the solvent of choice, which should be purged with an inert gas. Cardiolipin (18:1/18:1/18:1/18:1) (sodium salt) is soluble in methanol.

Description

Cardiolipin (18:1/18:1/18:1/18:1) is an anionic phospholipid containing the monounsaturated fatty acid oleic acid (Item Nos. 90260 | 24659). It has been used in the generation of lipid nanoparticles (LNPs).¹ LNPs containing cardiolipin (18:1/18:1/18:1/18:1), 4A3-SCB, DMG-PEG(2000) (Item No. 33945), 1,2-dioleoyl-*sn*-glycero-3-PE (1,2-DOPE; Item No. 15091), and cholesterol (Item Nos. 9003100 | 39088) and encapsulating mRNA accumulate in the spleen in mice.

Reference

1. Álvarez-Benedicto, E., Farbiak, L., Ramírez, M.M., *et al.* Optimization of phospholipid chemistry for improved lipid nanoparticle (LNP) delivery of messenger RNA (mRNA). *Biomater. Sci.* **10(2)**, 549-559 (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.

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