

PRODUCT INFORMATION



C18 Sphingomyelin (d18:1/18:0)

Item No. 24355

CAS Registry No.: 54336-69-5
Formal Name: 4-hydroxy-7-(1-hydroxy-2-hexadecen-1-yl)-N,N,N-trimethyl-9-oxo-3,5-dioxo-8-aza-4-phosphahexacosan-1-aminium, 4-oxide, inner salt

Synonyms: N-Octadecanoyl Sphingosylphosphorylcholine, SM(d18:1/18:0), Sphingomyelin (d18:1/18:0), Stearoyl Sphingomyelin

MF: C₄₁H₈₃N₂O₆P

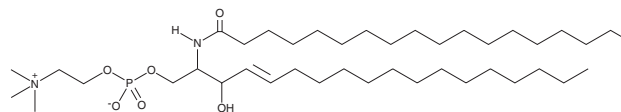
FW: 731.1

Purity: ≥98%

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

C18 Sphingomyelin (d18:1/18:0) is supplied as a solid. A stock solution may be made by dissolving the C18 sphingomyelin (d18:1/18:0) in the solvent of choice, which should be purged with an inert gas. C18 Sphingomyelin (d18:1/18:0) is soluble in organic solvents such as ethanol, methanol, and chloroform.

Description

C18 Sphingomyelin is a naturally occurring form of sphingomyelin (Item Nos. 22674 | 24345). C18 Sphingomyelin is increased by approximately 35-fold in CCD-112 colon fibroblasts compared with HCT116 human colorectal carcinoma cells.¹ C18 Sphingomyelin has been used as an internal standard for the quantification of sphingolipid metabolites.² This product is a mixture of the *D-erythro* and *L-threo* isomers of C18 sphingomyelin. As this product is derived from a natural source, there may be variations in the sphingoid backbone.

References

1. del Solar, V., Lizardo, D.Y., Li, N., *et al.* Differential regulation of specific sphingolipids in colon cancer cells during staurosporine-induced apoptosis. *Chem. Biol.* **22(12)**, 1662-1670 (2015).
2. Mano, N., Oda, Y., Yamada, K., *et al.* Simultaneous quantitative determination method for sphingolipid metabolites by liquid chromatography/ionspray ionization tandem mass spectrometry. *Anal. Biochem.* **244(2)**, 291-300 (1997).

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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