

PRODUCT INFORMATION



C22 Sphingomyelin (d18:1/22:0)

Item No. 24451

CAS Registry No.: 94359-12-3
Formal Name: (7S)-4-hydroxy-7-[(1R,2E)-1-hydroxy-2-hexadecen-1-yl]-N,N,N-trimethyl-9-oxo-3,5-dioxo-8-aza-4-phosphatriacontan-1-aminium, 4-oxide, inner salt

Synonyms: SM(d18:1/22:0), Sphingomyelin (d18:1/22:0), N-docosanoyl-D-erythro-Sphingosylphosphorylcholine

MF: C₄₅H₉₁N₂O₆P

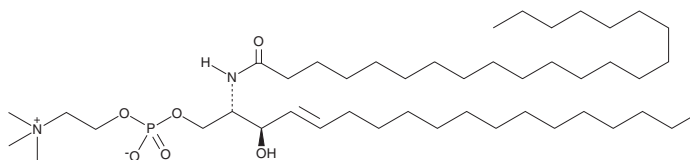
FW: 787.2

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

C22 Sphingomyelin (d18:1/22:0) is supplied as a solid. A stock solution may be made by dissolving the C22 sphingomyelin (d18:1/22:0) in the solvent of choice. C22 Sphingomyelin (d18:1/22:0) is soluble in ethanol and methanol and in a 14:1 solution of chloroform:methanol.

Description

C22 Sphingomyelin is a naturally occurring form of sphingomyelin (Item Nos. 22674 | 24345). Plasma levels of C22 sphingomyelin positively correlate with hepatic steatosis severity in patients with chronic hepatitis C virus (HCV).¹ C22 Sphingomyelin levels are decreased in T-47D mammary epithelial cells and increased in MDA-MB-231 breast cancer cells relative to C16 sphingomyelin (Item No. 10007946).² As this product is derived from a natural source, there may be variations in the sphingoid backbone.

References

- Li, J.F., Qu, F., Zheng, S.J., *et al.* Elevated plasma sphingomyelin (d18:1/22:0) is closely related to hepatic steatosis in patients with chronic hepatitis C virus infection. *Eur. J. Clin. Microbiol. Infect. Dis.* **33**(10), 1725-1732 (2014).
- Dória, M.L., Cotrim, C.Z., Simões, C., *et al.* Lipidomic analysis of phospholipids from human mammary epithelial and breast cancer cell lines. *J. Cell. Physiol.* **228**(2), 457-468 (2013).

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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