

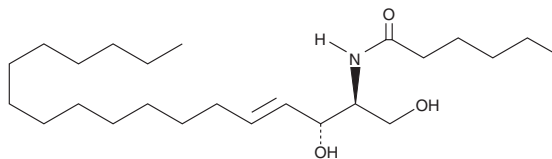
PRODUCT INFORMATION



C6 Ceramide (d18:1/6:0)

Item No. 62525

CAS Registry No.: 124753-97-5
Formal Name: N-[(1S,2R,3E)-2-hydroxy-1-(hydroxymethyl)-3-heptadecen-1-yl]-hexanamide
Synonyms: N-Caproyl-C18-sphingosine, Cer(18:1/6:0), Ceramide (d18:1/6:0), C6 Ceramide, N-hexanoyl-D-erythro-sphingosine
MF: C₂₄H₄₇NO₃
FW: 397.6
Purity: ≥98%
Supplied as: A crystalline 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

C6 ceramide (d18:1/6:0) is supplied as a crystalline solid. A stock solution may be made by dissolving the C6 ceramide (d18:1/6:0) in an organic solvent purged with an inert gas. C6 ceramide (d18:1/6:0) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of C6 ceramide (d18:1/6:0) in these solvents is approximately 20 mg/ml.

C6 ceramide (d18:1/6:0) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, C6 ceramide (d18:1/6:0) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. C6 ceramide (d18:1/6:0) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

C6 ceramide is a cell-permeable analog of naturally occurring ceramides. With a longer carbon chain than C2 ceramide, it is somewhat more hydrophobic, and may more closely mimic the effects of natural ceramides.¹ C6 ceramide mediates many diverse biological activities including apoptosis,² activation of protein phosphatase 2A,^{3,4} and inhibition of the mitochondrial respiratory chain.⁵ It also enhances the expression of COX-2 in rat granulosa cells⁴ and stimulates the growth of bovine aortic smooth muscle cells.⁶ C6 ceramide acts in neuronal axons to inhibit neurite growth.⁷

References

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4. Gudz, T.I., Tserng, K.-Y., and Hoppel, C.L. *J. Biol. Chem.* **272**, 24154-24158 (1997).
5. Santana, P., Llanes, L., Hernandez, I., et al. *Endocrinology* **137**, 2480-2489 (1996).
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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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