

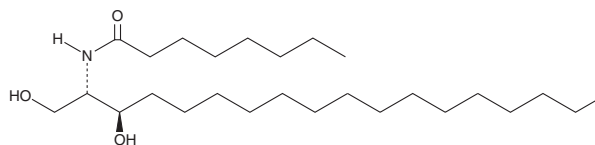
PRODUCT INFORMATION



C8 dihydro Ceramide (d18:0/8:0)

Item No. 24358

CAS Registry No.: 145774-33-0
Formal Name: N-[(1S,2R)-2-hydroxy-1-(hydroxymethyl)heptadecyl]-octanamide
Synonyms: Cer(d18:0/8:0), Ceramide (d18:0/8:0), N-octanoyl-D-erythro-Dihydrosphingosine
MF: C₂₆H₅₃NO₃
FW: 427.7
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

C8 dihydro Ceramide (d18:0/8:0) is supplied as a solid. A stock solution may be made by dissolving the C8 dihydro ceramide (d18:0/8:0) in the solvent of choice. C8 dihydro Ceramide (d18:0/8:0) is soluble in organic solvents such as ethanol, DMSO, and chloroform, which should be purged with an inert gas.

Description

C8 dihydro Ceramide is a sphingolipid and an intermediate in the synthesis of C8 ceramide (Item No. 62540).¹ It is synthesized by the acylation of sphinganine by ceramide synthase, a process that can be inhibited by some fungal mycotoxins, such as fumonisin B₁ (Item No. 62580).² C8 dihydro Ceramide can be converted to C8 ceramide *via* the introduction of a 4,5-*trans* double bond by dihydroceramide desaturase.¹ C8 dihydro Ceramide is metabolically inactive and has been used as a negative control for the biological activity of C8 ceramide.³

References

1. Michel, C., van Echten-Deckert, G., Rother, J., *et al.* Characterization of ceramide synthesis. A dihydroceramide desaturase introduces the 4,5-*trans*-double bond of sphingosine at the level of dihydroceramide. *J. Biol. Chem.* **272(36)**, 22432-22437 (1997).
2. Wang, E., Norred, W.P., Bacon, C.W., *et al.* Inhibition of sphingolipid biosynthesis by fumonisins. Implications for diseases associated with *Fusarium moniliforme*. *J. Biol. Chem.* **266(22)**, 14486-14490 (1991).
3. Struckhoff, A.P., Bittman, R., Burow, M.E., *et al.* Novel ceramide analogs as potential chemotherapeutic agents in breast cancer. *J. Pharmacol. Exp. Ther.* **309(2)**, 523-532 (2004).

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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