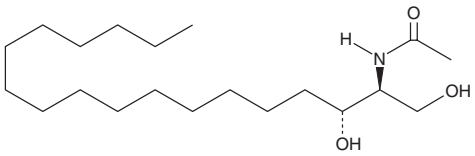
PRODUCT INFORMATION

C2 dihydro Ceramide (d18:0/2:0)

Item No. 20168

CAS Registry No.: 13031-64-6
Formal Name: N-[(1S,2R)-2-hydroxy-1-(hydroxymethyl) heptadecyl]-acetamide
Synonyms: Cer(d18:0/2:0), Ceramide (d18:0/2:0), N-acetyl-dihydro-Sphingosine, N-acetyl-D-*erythro*-Sphinganine, N-acetyl-D-*erythro*-dihydro-Sphingosine
MF: $C_{20}H_{41}NO_3$
FW: 343.5
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

C2 dihydro Ceramide (d18:0/2:0) is supplied as a crystalline solid. A stock solution may be made by dissolving the C2 dihydro ceramide (d18:0/2:0) in the solvent of choice. C2 dihydro Ceramide (d18:0/2:0) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of C2 dihydro ceramide (d18:0/2:0) in these solvents is approximately 33, 20, and 22 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of C2 dihydro ceramide (d18:0/2:0) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of C2 dihydro ceramide (d18:0/2:0) in PBS, pH 7.2, is approximately 0.05 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

C2 dihydro Ceramide is a metabolically inactive analog of C-2 ceramide (Item No. 62510).[1,2] It is used as a negative control in experiments investigating the biological activity of C-2 ceramide.

References

1. Hill, P.A. and Tumber, A. Ceramide-induced cell death/survival in murine osteoblasts. *J. Endocrinol.* 225-233 (2010).
2. Raucci, F.J., Jr., Wijesinghe, D.S., Chalfant, C.E., *et al*. Exogenous and endogenous ceramides elicit volume-sensitive chloride current in ventricular myocytes. *Cardiovasc. Res.* **86**, 55-62 (2010).

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