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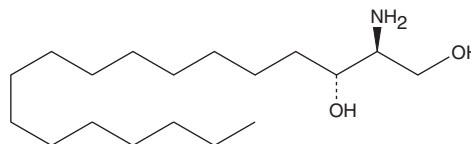
PRODUCT INFORMATION



Sphinganine (d18:0)

Item No. 10007945

CAS Registry No.: 764-22-7
Formal Name: 2S-amino-1,3R-octadecanediol
Synonyms: Dihydrosphingosine,
D-erythro-Dihydrosphingosine,
Dihydro-D-erythro Sphingosine,
Sphinganine, D-erythro-Sphinganine
MF: $C_{18}H_{39}NO_2$
FW: 301.5
Purity: $\geq 98\%$
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥ 2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Sphinganine (d18:0) is supplied as a crystalline solid. A stock solution may be made by dissolving the sphinganine (d18:0) in the solvent of choice. Sphinganine (d18:0) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of sphinganine (d18:0) in these solvents is approximately 2 mg/ml in DMSO, approximately 10 mg/ml in DMF and is miscible in ethanol.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Sphinganine (d18:0) is a precursor of ceramide and sphingosine as well as a substrate of sphingosine kinases, which generate sphinganine-1-phosphate. Sphinganine levels increase significantly in response to certain mycotoxins, including fumonisins, as well as in some cancers.¹⁻³ Sphinganine can block protein kinase C activation in some cases but not others.^{4,5} Sphinganine-1-phosphate can emulate sphingosine-1-phosphate in cell signaling or have opposite intracellular effects.⁶⁻⁸

References

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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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