

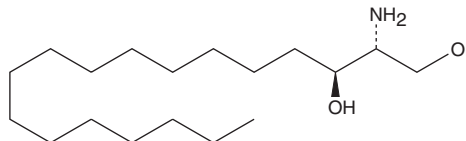
PRODUCT INFORMATION



DL-erythro/threo Sphinganine (d18:0)

Item No. 24367

CAS Registry No.: 3102-56-5
Formal Name: *rel*-2R-amino-1,3S-octadecanediol
MF: C₁₈H₃₉NO₂
FW: 301.5
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

DL-erythro/threo Sphinganine (d18:0) is supplied as a solid. A stock solution may be made by dissolving the DL-erythro/threo sphinganine (d18:0) in the solvent of choice. DL-erythro/threo Sphinganine (d18:0) is soluble in organic solvents such as chloroform, methanol, ethanol, and DMSO, which should be purged with an inert gas. We do not recommend storing the aqueous solution for more than one day.

Description

DL-erythro Sphinganine (d18:0) is a precursor of ceramide and sphingosine as well as a substrate of sphingosine kinases, which generate sphinganine-1-phosphate (Item No. 22500).¹ Sphinganine levels increase significantly in response to certain mycotoxins, including fumonisins as well as in some cancers.²⁻⁴ This product is a mixture of sphinganine (d18:0) (Item No. 10007945), L-erythro sphinganine (d18:0) (Item No. 24374), D-threo sphinganine (d18:0) (Item No. 24375), and L-threo sphinganine (d18:0).

References

1. Smith, E.R., and Merrill, A.H., Jr. Differential roles of *de novo* sphingolipid biosynthesis and turnover in the 'burst' of free sphingosine and sphinganine, and their 1-phosphates and N-acyl-derivatives, that occurs upon changing the medium of cells in culture. *J. Biol. Chem.* **270**(32), 18749-18758 (1995).
2. Pruett, S.T., Bushnev, A., Hagedorn, K., *et al.* Biodiversity of sphingoid bases ("sphingosines") and related amino alcohols. *J. Lipid Res.* **49**(8), 1621-1639 (2008).
3. Shephard, G.S., van der Westhuizen, L., and Sewram, V. Biomarkers of exposure to fumonisin mycotoxins: A review. *Food Addit. Contam.* **24**(10), 1196-1201 (2007).
4. Yin, J., Miyazaki, K., Shaner, R.L., *et al.* Altered sphingolipid metabolism induced by tumor hypoxia - new vistas in glycolipid tumor markers. *FEBS Lett.* **584**(9), 1872-1878 (2010).

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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