

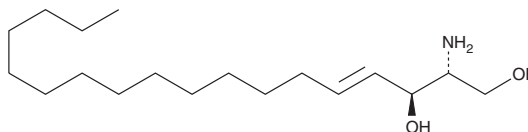
PRODUCT INFORMATION



L-erythro Sphingosine (d18:1)

Item No. 24372

CAS Registry No.: 6036-75-5
Formal Name: 2R-amino-4E-octadecene-1,3S-diol
Synonyms: L-erythro Sphingosine,
L-erythro-C18-Sphingosine
MF: C₁₈H₃₇NO₂
FW: 299.5
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

L-erythro Sphingosine (d18:1) is supplied as a solid. A stock solution may be made by dissolving the L-erythro sphingosine (d18:1) in the solvent of choice. L-erythro Sphingosine (d18:1) is soluble in organic solvents such as ethanol, chloroform, and DMSO, which should be purged with an inert gas.

Description

L-erythro Sphingosine is a synthetic stereoisomer of sphingosine (d18:1) (Item No. 10007907). It inhibits protein kinase C (PKC) *in vitro* (IC₅₀ = 3.3 μM) and superoxide generation induced by phorbol 12-myristate 13-acetate (PMA; Item No. 10008014) in neutrophils as well as reduces growth of CHO cells (IC₅₀s = 1.3 and 2 μM, respectively).¹ L-erythro Sphingosine also inhibits dephosphorylation of the tumor suppressor retinoblastoma gene product (pRb; EC₅₀ = 5 μM) and growth of MOLT-4 acute lymphoblastic leukemia cells (IC₅₀ = 3.7 μM).²

References

1. Merrill, A.H., Jr., Nimkar, S., Menaldino, D., *et al.* Structural requirements for long-chain (shingoid) base inhibition of protein kinase C *in vitro* and for the cellular effects of these compounds. *Biochemistry* **28**(8), 3138-3145 (1989).
2. Pushkareva, M., Chao, R., Bielawska, A., *et al.* Stereoselectivity of induction of the retinoblastoma gene product (pRb) dephosphorylation by D-erythro-sphingosine supports a role for pRb in growth suppression by sphingosine. *Biochemistry* **34**(6), 1885-1892 (1995).

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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