

Catalog # 10-2285 N,N-Dimethyl-D-erythro-sphingosine

CAS# 119567-63-4 (2S,3R,E)-2-(Dimethylamino)octadeca-4-ene-1,3-diol Lot # FBM2026

Endogenous sphingolipid¹. Inhibits sphingosine kinase (IC₅₀ = 5µM)². Induces apoptosis in a variety of cell lines³.

- 1) Igarashi et al. (1990), A specific enhancing effect of N,N-dimethylsphingosine on epidermal growth factor receptor autophosphorylation. Demonstration of its endogenous occurrence (and the virtual absence of unsubstituted sphingosine) in human epidermoid carcinoma A431 cells; J. Biol. Chem., **265** 5385
- 2) Yatomi et al. (1996), N,N-dimethylsphingosine inhibition of sphingosine kinase and sphingosine 1-phosphate activity in human platelets: Biochemistry, **35** 626
- 3) Gude et al. (2008), Apoptosis induces expression of sphingosine kinase 1 to release sphingosine-1-phosphate as a "come-and-get-me" signal; FASEB J., **22** 2629

PHYSICAL DATA

Molecular Weight: 327.55

Molecular Formula: C₂₀H₄₁NO₂

Purity: 98% by TLC

NMR (Conforms)

Solubility:

DMSO (up to 25 mg/ml) or ethanol (up to 25 mg/ml)

Physical Description: White to off-white waxy solid or viscous oil

Storage and Stability: Store as supplied at -20°C for up to 3 years from the date of purchase. Protect from exposure to

moisture. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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