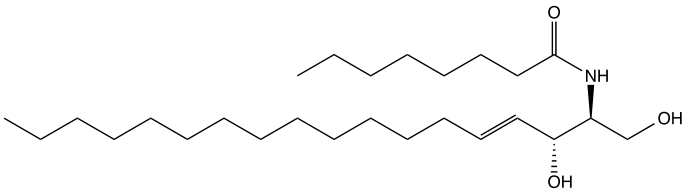
Catalog # 10-4301

C8-Ceramide

CAS# 74713-59-0

N-Octanoyl-D-erythro-sphingosine

Lot # FBM2058



Cell permeable ceramide analog. Stimulates ceramide-activated protein kinase.[1] Induces apoptosis.[2] Reported to inhibit apoptosis and gap junction intercellular communication (GJIC) in rat liver epithelial cells.[3] Induces the secretion of brain-derived neurotrophic factor (BDNF) from microglia in vitro.[4]

1) Mathias *et al*. (1991) *Characterization of a ceramide-activated protein kinase: stimulation by tumor necrosis factor alpha*; Proc.Natl.Acad.Sci.USA **88** 10009
2) Jarvis *et al*. (1993) *Induction of apoptotic DNA damage and cell death by activation of the sphingomyelin pathway*; Proc.Natl.Acad.Sci.USA **91** 73
3) Upham *et al*. (2003), *Differential roles of 2,6 and 8 carbon ceramides on the modulation of gap junctional communication and apoptosis during carcinogenesis;* Cancer Lett., **191** 27
4) Nakajima *et al*. (2002), *Ceramide activates microglia to enhance the production/secretion of brain-derived neurotrophic factor (BDNF) without induction of deleterious factors in vitro;* J.Neurochem., **80** 697

PHYSICAL DATA

Molecular Weight:	425.69
Molecular Formula:	$C_{26}H_{51}NO_3$
Purity:	98% by TLC (10% Methanol/methylene chloride; Rf = 0.25) NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml), or ethanol (up to 25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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