N-Octanoyl-L-threo-sphingosine

Catalog number: 1830
Synonyms: N-C8:0-L-threo-Ceramide
Source: synthetic
Solubility: chloroform, ethanol, DMSO, DMF (up to 5mg/ml)
CAS number: 175892-44-1
Molecular Formula: C_{26}H_{51}NO_{3}

Molecular Weight: 426
Storage: -20ºC
Purity: TLC: >98%, GC: >98%; identity confirmed by MS
TLC System: chloroform/methanol (90:10 by vol.)
Appearance: solid

Application Notes:
This product is a high purity, non-natural L-threo ceramide that is ideal as a standard and for biological studies. D-erythro Ceramide is the natural ceramide isomer and is involved in many biological processes including induction of cell maturation, cell cycle arrest, terminal cell differentiation, cell senescence, and cell death. Both the natural D-erythro and the non-natural L-erythro and the D- and L-threo ceramides display similar effectiveness in inducing apoptotic damage in cells. The protein phosphatases PP1 and PP2A, which are involved in regulating apoptosis and cell growth, are activated by D-erythro ceramide but inhibited by L-threo, D-threo, and L-erythro ceramide. Both D-erythro and D-threo C2 ceramides have been found to be potent inducers of IL-6 production, while neither the L-threo or L-erythro stereoisomers of ceramide were effective. D- and L-erythro ceramide and D- and L-threo ceramide are also comparably effective inhibitors of protein kinase C.

Selected References:

This product is to be used for research only. It is not intended for drug or diagnostic use, human consumption or to be used in food or food additives. Matreya assumes no liability for any use of this product by the end user. We believe the information, offered in good faith, is accurate.