## TECHNICAL DATA SHEET

## N-palmitoyl-1-desoxymethyl -D-erythro-sphinganine (d17:0/16:0)

Catalog Number	860463	Physical state	Powder
Purity	> 99%	Transition temp.	No data
CAS		CMC	No data
Synonyms	N-C16-desoxyMe-sphinganine; N-hexadecanoyl-desoxymethylD-erythrosphinganine (d170/16:0)	$pK_{a}$	No data
Molec. Formula	$C_{33}H_{67}NO_2$	TLC mobile phase	C:M*, 95:5, v/v
MW	509.891	Exact Mass	509.517
Percent composition	C 77.73% H 13.24% N 2.75% O 6.28%		
Stability	Store in <-20°C freezer for up to one year		
Solubility	Soluble in DMSO, Methanol, Ethanol:Water (95:5) at 40°C + Sonication. Note: solidifies at room temperature in all solvents (i.e. keep warm with sonication). Concentration should be 5 mg/mL in DMSO; 10 mg/mL in methanol or ethanol:water (95:5).		
Web link	860463		

<sup>\*</sup>C, chloroform; M, methanol

## **Description:**

Commonly referred to as 1-desoxymethyldihydroceramide (1-desoxyMeDHCer), this product is the N-acylated form of 1-desoxymethylsphinganine, a potent inhibitor of sphingolipid metabolism. The biological activity of 1-desoxyMeDHCer is not clearly understood at this time.

## **References:**

- Zitomer, NC et al (2009) Ceramide synthase inhibition by fumosin B1 causes accumulation of 1-deoxysphinganine. J Biol Chem. 284(8):4786-95
- Pruett, ST et al (2008). Thematic Review Series: Sphingolipids. Biodiversity of sphingoid bases ("sphingosines") and related amino alcohols. J Lipid Res 49:1621-39

**Related products: Sphingolipids** 

MSDS: Available at www.avantilipids.com for Product Number 860463

