TECHNICAL DATA SHEET

N-palmitoyl-1-deoxy-D-erythro-sphinganine (d18:0/16:0)

Catalog Number	860462	Physical state	Powder
Purity	> 99%	Transition temp.	No data
CAS		CMC	No data
Synonyms	N-C16-deoxy-sphinganine; N-hexadecanoyl-1-deoxy-D-erythro-sphinganine (d18:0/16:0)	pK _a	No data
Molec. Formula	$C_{34}H_{69}NO_2$	TLC mobile phase	C:M*, 95:5, v/v
MW	523.917	Exact Mass	523.533
Percent composition	C 77.94% H 13.27% N 2.67% O 6.11%		
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	860462		

^{*}C, chloroform; M, methanol; W, water

Description:

Commonly referred to as 1-deoxydihydroceramide (1-deoxyDHCer), this product is the N-acylated form of 1-deoxysphinganine, a potent inhibitor of sphingolipid metabolism. The biological activity of 1-deoxyDHCer 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 860462

