## TECHNICAL DATA SHEET

## N-nervonoyl-1-deoxy-D-erythro-sphinganine (d18:0/24:1)

Catalog Number	860464	Physical state	Powder
Purity	> 99%	Transition temp.	No data
CAS		CMC	No data
Synonyms	N-C24:1-deoxy-sphinganine; N-(15Z-tetracosenoyl)-D-erythro-sphinganine (d18:0/24:1)	pK <sub>a</sub>	No data
Molec. Formula	$C_{42}H_{83}NO_2$	TLC mobile phase	C:M*, 95:5, v/v
MW	634.114	Exact Mass	633.642
Percent composition	C 79.55% H 13.19% N 2.21% O 5.05%		
Stability	Store in <-20°C freezer for up to six months		
Solubility	Soluble in DMSO at 40°C + Sonication. Note: solidifies at room temperature in DMSO (i.e. keep warm with sonication). Soluble in methanol and ethanol:water, 95:5, at 40°C. Concentration should be 10 mg/mL.		
Web link	860464		

<sup>\*</sup>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 860464

