

Product Data Sheet

Product Name: Hexadecanal-d5

Cat. No.: GC47428

Chemical Properties

Cas. No. 2703602-66-6

SMILES CCCCCCCCCCCCCCCC=O

Formula C₁₆H₂₇D₅O

M.Wt 245.5

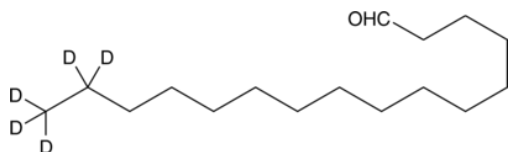
Solubility DMF: 30 mg/ml, DMSO: 10 mg/ml, Ethanol: 30 mg/ml, Ethanol: PBS (pH 7.2) (1:2): 0.3 mg/ml

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Hexadecanal-d₅ contains five deuterium atoms at the 15, 15', 16, 16 and 16 positions. It is intended for use as an internal standard for the quantification of hexadecanal by GC- or LC-mass spectrometry. Sphingosine-1-phosphate (S1P) is a potent bioactive phospholipid that exhibits a broad spectrum of biological activities including cell proliferation, survival, migration, cytoskeletal organization, and morphogenesis.¹ Hexadecanal is the 16-carbon aldehyde analog of palmitic acid. It is produced from the irreversible cleavage of S1P by S1P lyase 1 and is a major component of plasmalogen.^{2,3}

1. Leclercq, T.M., and Pitson, S.M. Cellular signalling by sphingosine kinase and sphingosine 1-phosphate IUBMB Life 58:467-472 (2006) 2. Reiss, U., Oskouian, B., Zhou, J., et al. Sphingosine-phosphate lyase enhances stress-induced ceramide generation and apoptosis The Journal of

Caution: Product has not been fully validated for medical applications. For research use only.

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Biological Chemistry 279(2)1281-1290(2004) 3. Pyne, S., and Pyne, N.J. Sphingosine 1-phosphate signalling in mammalian cells Biochemistry Journal 349 385-402(2000)

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