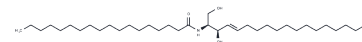


## N-Stearoylsphingosine

## Chemical Properties

CAS No. :	2304-81-6
Formula:	C <sub>36</sub> H <sub>71</sub> NO <sub>3</sub>
Molecular Weight:	565.95
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	N-Stearoylsphingosine (Cer(d18:1/18:0)) is an amide compound widely found in eukaryotic organisms that enhances protein phosphatase 2A (PP2A) activity by interfering with the binding of PP2A to PP2A inhibitor 2, leading to dephosphorylation of Akt. N-Stearoylsphingosine is used in prostate cancer research.
Targets(IC50)	Endogenous Metabolite, Phosphatase

## Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble) DMF: 0.15 mg/mL (0.27 mM), Sonication is recommended. DMSO: 2.5 mg/mL (4.42 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7669 mL	8.8347 mL	17.6694 mL
5 mM	0.3534 mL	1.7669 mL	3.5339 mL
10 mM	0.1767 mL	0.8835 mL	1.7669 mL
50 mM	0.0353 mL	0.1767 mL	0.3534 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Wang Z, et al. Overexpression of ceramide synthase 1 increases C18-ceramide and leads to lethal autophagy in human glioma. *Oncotarget*. 2017 Oct 23;8(61):104022-104036.

Azizov S, et al. Solvent-resistant microfluidic paper-based analytical device/spray mass spectrometry for quantitative analysis of C18 -ceramide biomarker. *J Mass Spectrom*. 2021 Apr;56(4):e4611.

Oh MJ, et al. Novel phytoceramides containing fatty acids of diverse chain lengths are better than a single C18-ceramide N-stearoyl phytosphingosine to improve the physiological properties of human stratum corneum. *Clin Cosmet Investig Dermatol*. 2017 Sep 13;10:363-371.

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