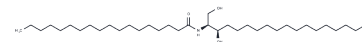


## C18 dihydro Ceramide (d18:0/18:0)

## Chemical Properties

CAS No. :	2304-80-5
Formula:	C36H73NO3
Molecular Weight:	567.98
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	C18 dihydro Ceramide is a bioactive sphingolipid and precursor in the de novo synthesis of C18 ceramide that lacks the 4,5-trans double bond. [1] Increased C18 dihydroceramide lipid levels lead to increased triacylglycerol storage and autophagosome accumulation as well as upregulation of the fibrosis markers $\alpha$ -SMA and FGF2 in Chang and LX-2 liver cells. C18 dihydro Ceramide is elevated in the plasma of pre-diabetics up to 9 years prior to the onset of type 2 diabetes. [2] It is also elevated in the skin of patients with lesional atopic dermatitis.[3]
Targets(IC50)	Others

## Solubility Information

Solubility	DMSO: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7606 mL	8.8031 mL	17.6063 mL
5 mM	0.3521 mL	1.7606 mL	3.5213 mL
10 mM	0.1761 mL	0.8803 mL	1.7606 mL
50 mM	0.0352 mL	0.1761 mL	0.3521 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

- Lee, A.Y., Lee, J.W., Kim, J.-E., et al. Dihydroceramide is a key metabolite that regulates autophagy and promotes fibrosis in hepatic steatosis model. *Biochem. Biophys. Res. Commun.* 494(3-4), 460-469 (2017).
- Wigger, L., Cruciani-Guglielmacci, C., Nicolas, A., et al. Plasma dihydroceramides are diabetes susceptibility biomarker candidates in mice and humans. *Cell Rep.* 18(9), 2269-2279 (2017).
- Joo, J.-M., Hwang, J.-H., Bae, S., et al. Relationship of ceramide-, and free fatty acid-cholesterol ratios in the stratum corneum with skin barrier function of normal, atopic dermatitis lesional and non-lesional skins. *J. Dermatol. Sci.* 77(1), 71-74 (2015).

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481