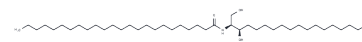


## C24 dihydro Ceramide (d18:0/24:0)

## Chemical Properties

CAS No. :	6063-36-1
Formula:	C42H85NO3
Molecular Weight:	652.15
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	C24 dihydro Ceramide is a sphingolipid that has been found in the stratum corneum of human skin.[1] It is found in higher concentrations in female sebum compared to male sebum.[2] C24 dihydro Ceramide levels positively correlate with cytotoxicity in CCRF-CEM, MOLT-4, COG-LL-317h, and COG-LL-332h T cell acute lymphoblastic leukemia (ALL) cell lines.[4] Levels of C24 dihydro ceramide are increased by 149.49-fold in dihydroceramide desaturase 1 (DEGS1) knockdown UM-SCC-22A human head and neck squamous carcinoma cells in vitro.[4] C24 dihydro Ceramide levels are also increased in INS-1 $\beta$ -cells incubated with glucose and palmitate.[5]
Targets(IC50)	Others

## Solubility Information

Solubility	DMF: 0.15 mg/mL (0.23 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	1.5334 mL	7.6669 mL	15.3339 mL
5 mM	0.3067 mL	1.5334 mL	3.0668 mL
10 mM	0.1533 mL	0.7667 mL	1.5334 mL
50 mM	0.0307 mL	0.1533 mL	0.3067 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

- Farwanah, H., Wohlrab, J., Neubert, R.H., et al. Profiling of human stratum corneum ceramides by means of normal phase LC/APCI-MS. *Anal. Bioanal. Chem.* 383(4), 632-637 (2005).
- Agrawal, K., Hassoun, L.A., Foolad, N., et al. Effects of atopic dermatitis and gender on sebum lipid mediator and fatty acid profiles. *Prostaglandins Leukot. Essent. Fatty Acids* 134, 7-16 (2018).
- Holliday, M.W., Jr., Cox, S.B., Kang, M.H., et al. C22:0- and C24:0-dihydroceramides confer mixed cytotoxicity in T-cell acute lymphoblastic leukemia cell lines. *PLoS One* 8(9), (2013).
- Breen, P., Joseph, N., Thompson, K., et al. Dihydroceramide desaturase knockdown impacts sphingolipids and apoptosis after photodamage in human head and neck squamous carcinoma cells. *Anticancer Res.* 33(1), 77-84 (2013).
- Véret, J., Coant, N., Berdyshev, E.V., et al. Ceramide synthase 4 and de novo production of ceramides with specific N-acyl chain lengths are involved in gluco-lipototoxicity-induced apoptosis of INS-1  $\beta$ -cells. *Biochem J.* 438(1), 177-189 (2011).

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