

## Psychosine

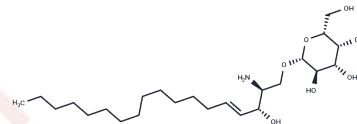
## Chemical Properties

CAS No. : 2238-90-6

Formula: C<sub>24</sub>H<sub>47</sub>N<sub>0</sub>O<sub>7</sub>

Molecular Weight: 461.63

Storage: Store at low temperature, Keep away from direct sunlight  
 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	Psychosine (Galactosylsphingosine) is a PKC inhibitor, a substrate for the enzyme galactosylceramide cerebrosidase (GALC), and a potential biomarker of Krabbe's disease. Psychosine is highly cytotoxic and induces cell death in a variety of cells.
Targets(IC50)	PKC
In vitro	In the Oligodendrocyte cell line, M03.13, Psychosine (10, 20, and 40 $\mu$ M; 24 hours) can induce cell death at least in part via apoptosis[2].

## Solubility Information

Solubility	Ethanol: 1 mg/mL (2.17 mM), Sonication is recommended. DMSO: 1 mg/mL (2.17 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	2.1662 mL	10.8312 mL	21.6624 mL
5 mM	0.4332 mL	2.1662 mL	4.3325 mL
10 mM	0.2166 mL	1.0831 mL	2.1662 mL
50 mM	0.0433 mL	0.2166 mL	0.4332 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

M L Escolar, et al. Psychosine, a marker of Krabbe phenotype and treatment effect. Mol Genet Metab. 2017 Jul;121 (3):271-278.

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Belleri M, et al.  $\beta$ -Galactosylceramidase in cancer: more than a psychosine scavenger. Oncoscience. 2022 Mar 23; 9:11-12.

Spassieva S, et al. Lysosphingolipids and sphingolipidoses: Psychosine in Krabbe's disease. J Neurosci Res. 2016 Nov;94(11):974-81.

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