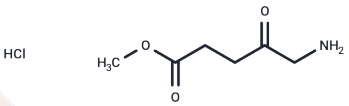
Data Sheet (Cat.No.T5002)

TargetMol

Methyl Aminolevulinate Hydrochloride

Chemical Properties



CAS No. : 79416-27-6

Formula: C6H12ClNO3

Molecular Weight: 181.62

Storage: 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	Methyl Aminolevulinate Hydrochloride (5-Aminolevulinic acid methyl ester) is commonly used in photosentizer reagents for photodynamic therapy to treat conditions such as Acne vulgaris and hypertrophic scarring.
Targets(IC50)	Others,Reactive Oxygen Species,ROS
In vivo	In mouse, Spermidine (200 μg) intracerebellar injection (icb), does not alter basal cGMP levels. Spermidine attenuates responses mediated through the NMDA, NMDA-associated glycine receptor and quisqualate receptors. Spermidine is widely distributed in neural and non-neural tissues and has been shown to play a key role in cell differentiation and growth [2].

Solubility Information

Solubility	DMSO: 55 mg/mL (302.83 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (11.01 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.506 mL	27.530 mL	55.060 mL
5 mM	1.1012 mL	5.506 mL	11.012 mL
10 mM	0.5506 mL	2.753 mL	5.506 mL
50 mM	0.1101 mL	0.5506 mL	1.1012 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

Morrow DI, et al. Hexyl aminolaevulinate is a more effective topical photosensitiser precursor than methyl aminolaevulinate and 5-aminolaevulinic acids when applied in equimolar doses. J Pharm Sci. 2010 Aug;99(8): 3486-98.