

Citicoline

Chemical Properties

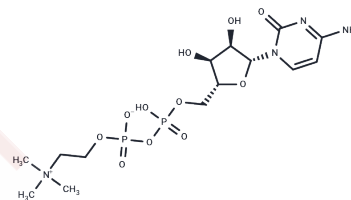
CAS No. : 987-78-0

Formula: C₁₄H₂₆N₄O₁₁P₂

Molecular Weight: 488.32

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	Citicoline (CDP-Choline) is an intermediate in the synthesis of phosphatidylcholine, a component of cell membranes. Citicoline exerts neuroprotective effects.
Targets(IC50)	Apoptosis,Caspase,Endogenous Metabolite,Dopamine Receptor,ROS

Solubility Information

Solubility	DMSO: < 1 mg/mL (insoluble or slightly soluble), H ₂ O: 85 mg/mL (174.07 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	2.0478 mL	10.2392 mL	20.4784 mL
5 mM	0.4096 mL	2.0478 mL	4.0957 mL
10 mM	0.2048 mL	1.0239 mL	2.0478 mL
50 mM	0.041 mL	0.2048 mL	0.4096 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

- Davinelli S, et al. Cytoprotective Effects of Citicoline and Homotaurine against Glutamate and High Glucose Neurotoxicity in Primary Cultured Retinal Cells. *Oxid Med Cell Longev*. 2017;2017:2825703.
- Guo L, Chen Q, Gao Y, et al. CDP-choline modulates cholinergic signaling and gut microbiota to alleviate DSS-induced inflammatory bowel disease. *Biochemical Pharmacology*. 2023: 115845.
- Karpova MN, et al. Increase of the seizure threshold in C57BL/6 mice after citicoline administration. *Bull Exp Biol Med*. 2015 Jan;158(3):315-7.

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