## **Citicoline sodium**

Cat. No.: CAS No.: Molecular Formula: Molecular Weight: Target: Pathway:	HY-B0739A 33818-15-4 C <sub>14</sub> H <sub>25</sub> N <sub>4</sub> NaO <sub>11</sub> P <sub>2</sub> 510.31 Endogenous Metabolite; Apoptosis Metabolic Enzyme/Protease; Apoptosis	$H_{2}N \xrightarrow{OH} OH \\ O \xrightarrow{O} O \xrightarrow{P} O \xrightarrow{P} O \xrightarrow{N^{*}} N^{*} \\ O' ONaO' O' \\ ONaO' O' \\ O' O' ONaO' O' \\ O' O' ONaO' O' \\ O' O' O' O' O' O' \\ O' O' O' O' O' \\ O' O' O' O' O' O' \\ O' O' O' O' O' O' O' \\ O' O' O' O' O' O' \\ O' O' O' O' O' O' O' \\ O' O' O' O' O' O' O' O' \\ O' O' O' O' O' O' O' O' O' \\ O' $
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)	

### SOLVENT & SOLUBILITY

		DMSO : < 1 mg/mL (insoluble or slightly soluble) * "≥" means soluble, but saturation unknown.					
		Solvent Mass Concentration	1 mg	5 mg	10 mg		
	Preparing Stock Solutions	1 mM	1.9596 mL	9.7980 mL	19.5959 mL		
	Stock Solutions	5 mM	0.3919 mL	1.9596 mL	3.9192 mL		
		10 mM	0.1960 mL	0.9798 mL	1.9596 mL		
	Please refer to the so	Please refer to the solubility information to select the appropriate solvent.					
In Vivo		1. Add each solvent one by one: PBS Solubility: 100 mg/mL (195.96 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY					
Description	Citicoline sodium salt is an intermediate in the synthesis of phosphatidylcholine which is a component of cell membranes and also exerts neuroprotective effects.				
IC₅₀ & Target	Microbial Metabolite	Human Endogenous Metabolite			

### CUSTOMER VALIDATION

• Nat Neurosci. 2023 Apr;26(4):542-554.

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# Product Data Sheet



### REFERENCES

[1]. 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.

[2]. 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.

#### Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA