

Pralidoxime Chloride

Chemical Properties

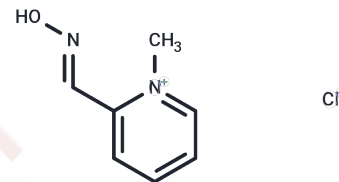
CAS No. : 51-15-0

Formula: C₇H₉ClN₂O

Molecular Weight: 172.61

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	Pralidoxime Chloride (2-PAM chloride) is a useful agent in the treatment of organophosphate poisoning. Pralidoxime binds to organophosphate-inactivated acetylcholinesterase, used to combat poisoning by organophosphates or acetylcholinesterase inhibitors (nerve agents).
Targets(IC50)	Cholinesterase (ChE)
In vitro	The application of pralidoxime allowed the regeneration of an important fraction of inhibited AChE, process which is concentration-dependent[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (289.67 mM), Sonication and heating are 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 (11.59 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.7934 mL	28.967 mL	57.9341 mL
5 mM	1.1587 mL	5.7934 mL	11.5868 mL
10 mM	0.5793 mL	2.8967 mL	5.7934 mL
50 mM	0.1159 mL	0.5793 mL	1.1587 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

Ríos JC, et al. *Toxicol In Vitro*. 2005 Oct;19(7):893-7. Epub 2005 Aug 19.

Zareifi D S, Chaliotis O, Chala N, et al. A Network-Based Computational and Experimental Framework for Repurposing Compounds Towards the Treatment of Non-Alcoholic Fatty Liver Disease. *iScience*. 2022: 103890.

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