Data Sheet (Cat.No.T5965)

TargetMol

Ditiocarb sodium

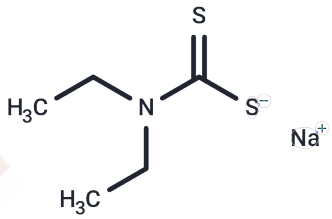
Chemical Properties

CAS No. : 148-18-5

Formula: C5H10NNaS2

Molecular Weight: 171.26

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	Ditiocarb sodium (Sodium diethyldithiocarbamate) (sodium diethiocarbamate) is a copper reagent, which reacts with Cu2 + solution to form a complex and improves the precipitation rate of copper replacement. Sodium diethyldidiocarbamate can reduce HIV infection.
Targets(IC50)	HIV Protease
In vitro	The cementation rate increases with the increase in copper ions Cu2+ concentration and temperature.?The cementation rate of copper ions Cu2+ and the mass transfer coefficient increase by increasing the concentration of sodium diethyldithiocarbamate (NaDDC) where sodium diethyldithiocarbamate reacts with Cu2+ solution giving a complex of copper diethyldithiocarbamate.

Solubility Information

Solubility	DMSO: 15 mg/mL (87.59 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 (11.68 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	5.8391 mL	29.1954 mL	58.3908 mL
5 mM	1.1678 mL	5.8391 mL	11.6782 mL
10 mM	0.5839 mL	2.9195 mL	5.8391 mL
50 mM	0.1168 mL	0.5839 mL	1.1678 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

El-Saharty A A , El-Hammamy N H , El-Araby H A . Sodium diethyldithiocarbamate as accelerator of the rate of copper cementation[J]. The Egyptian Journal of Aquatic Research, 2015, 41(4):289-293.