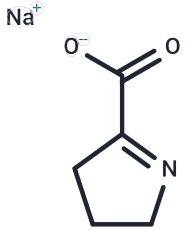
Data Sheet (Cat.No.T88439)

TargetMol

Pyrroline-5-carboxylate sodium

Chemical Properties



CAS No. : 72978-16-6

Formula: C5H6NNaO2

Molecular Weight: 135.1

Storage: Store at low temperature
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	Pyrroline-5-carboxylate sodium is a naturally occurring intermediate and a potent activator of redox-dependent metabolic pathways and a PROTAC linker.
Targets(IC50)	PROTAC Linker
In vitro	Arabidopsis mutant plants deficient in Pyrroline-5-carboxylate catabolism exhibited a cell death-like response (HR) when grown in media containing exogenous Pyrroline-5-carboxylate sodium or proline. Similarly, under oxidative stress conditions, yeast and plant cells showed increased reactive oxygen species (ROS) production and programmed cell death (PCD) due to elevated Pyrroline-5-carboxylate levels. [1]

Solubility Information

Solubility	H2O: 20 mg/mL (148.04 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.4019 mL	37.0096 mL	74.0192 mL
5 mM	1.4804 mL	7.4019 mL	14.8038 mL
10 mM	0.7402 mL	3.701 mL	7.4019 mL
50 mM	0.148 mL	0.7402 mL	1.4804 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

Qamar A, et al. Role of proline and pyrroline-5-carboxylate metabolism in plant defense against invading pathogens. Front Plant Sci. 2015 Jul 6;6:503.

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