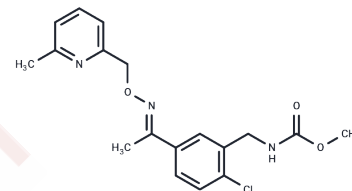


Pyribencarb

Chemical Properties

CAS No. :	799247-52-2
Formula:	C ₁₈ H ₂₀ ClN ₃ O ₃
Molecular Weight:	361.82
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	Pyribencarb, a benzylcarbamate-type fungicide, exhibits broad-spectrum activity against various plant pathogenic fungi. Acting as a potent Qo inhibitor of cytochrome b, Pyribencarb demonstrates particular efficacy against <i>Botrytis cinerea</i> and <i>Sclerotinia sclerotiorum</i> .
Targets(IC50)	Antifungal
In vitro	Pyribencarb effectively suppresses succinate-cytochrome c reductase (SCR) activities in <i>Botrytis cinerea</i> (cucumber gray mold), <i>Corynespora cassiicola</i> (leaf spot), and decylubiquinol-cytochrome c reductase (UCR) in <i>B. cinerea</i> , demonstrating uncompetitive inhibition of <i>B. cinerea</i> 's UCR with a substrate-dependent inhibition constant of 13 nM[1]. Its action targets cytochrome b within complex III of the electron transport chain's respiratory system. Compared to strobilurin fungicides, pyribencarb shows relatively less inhibitory strength on SCR activities in plants, rats, and carp[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (248.74 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: 3.3 mg/mL (9.12 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	2.7638 mL	13.819 mL	27.6381 mL
5 mM	0.5528 mL	2.7638 mL	5.5276 mL
10 mM	0.2764 mL	1.3819 mL	2.7638 mL
50 mM	0.0553 mL	0.2764 mL	0.5528 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

Satoshi Kataoka, et al. Mechanism of action and selectivity of a novel fungicide, pyribencarb. J Pestic Sci, 35(2), 99-106 (2010).

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481