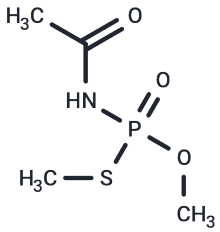
Data Sheet (Cat.No.T22545)

TargetMol

Acephate

Chemical Properties



CAS No. : 30560-19-1

Formula: C4H10NO3PS

Molecular Weight: 183.17

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	Acephate (Orthene) is an anticholinesterase insecticide with a weak inhibitory effect on AChE in rats, but it can effectively inhibit AChE in cockroaches.
Targets(IC50)	Cholinesterase (ChE)

Solubility Information

Solubility	H2O: Soluble, DMSO: 250 mg/mL (1364.85 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (54.59 mM),Solution. *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	5.4594 mL	27.297 mL	54.5941 mL
5 mM	1.0919 mL	5.4594 mL	10.9188 mL
10 mM	0.5459 mL	2.7297 mL	5.4594 mL
50 mM	0.1092 mL	0.5459 mL	1.0919 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

Wang Y, Dong Y, et al. Acephate interferes with androgen synthesis in rat immature Leydig cells. Chemosphere. 2020 Apr;245:125597.

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