Fenitrothion

Cat. No.: HY-B1885

CAS No.: 122-14-5

Molecular Formula: $C_9H_{12}NO_5PS$

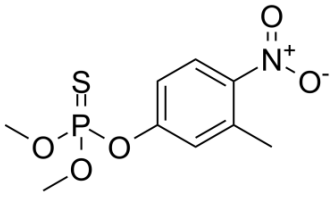
Molecular Weight: 277.23

Target: Parasite; AChE

Pathway: Anti-infection; Neuronal Signaling

Storage: 4°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

Ethanol : 100 mg/mL (360.71 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.6071 mL	18.0356 mL	36.0711 mL
	5 mM	0.7214 mL	3.6071 mL	7.2142 mL
	10 mM	0.3607 mL	1.8036 mL	3.6071 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% EtOH >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (9.02 mM); Clear solution
2. Add each solvent one by one: 10% EtOH >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (9.02 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fenitrothion, one of the most widely used organophosphorus pesticides, is a cholinesterase inhibiting insecticide/acaricid. Fenitrothion is widely used, as a broad-spectrum insecticide, on cotton crops, vegetables crops, fruit crops, and field crops especially paddy. Fenitrothion leads to accumulation of nitrophenols[1][2].

REFERENCES

[1]. Abdel-Ghany R, et al. Impact of Exposure to Fenitrothion on Vital Organs in Rats. J Toxicol. 2016;2016:5609734.

[2]. Qing Hong, et al. A microcosm study on bioremediation of fenitrothion-contaminated soil using Burkholderia sp. FDS-1. International Biodeterioration & Biodegradation

Caution: Product has not been fully validated for medical applications. For research use only.

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