Proteins

Inhibitors

Temephos

Cat. No.: HY-B1120 CAS No.: 3383-96-8 Molecular Formula: $C_{16}H_{20}O_{6}P_{2}S_{3}$ Molecular Weight: 466.47

Target: Parasite Pathway: Anti-infection

Storage: Pure form -20°C 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (214.38 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1438 mL	10.7188 mL	21.4376 mL
	5 mM	0.4288 mL	2.1438 mL	4.2875 mL
	10 mM	0.2144 mL	1.0719 mL	2.1438 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (5.36 mM); Suspended solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.36 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Temefos is an organophosphate larvicide, used to treat water infested with disease-carrying insects including mosquitoes, midges, and black fly larvae. Temefos affects the central nervous system through inhibition of cholinesterase, results in death before reaching the adult stage.

REFERENCES

[1]. Thirugnanam M, et al. Environmental impact of mosquito pesticides: influence of temefos on the brain acetylcholinesterase of killifish. Environ Physiol Biochem. 1975;5(6):451-9.

2]. Wirth MC, et al. Selection an .999 Sep;15(3):315-20.	nd characterization of temeph	os resistance in a population of <i>n</i>	Aedes aegypti from Tortola, Britisl	า Virgin Islands. J Am Mosq Cont	rol Assoc.
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