# **Screening Libraries**

# **Product** Data Sheet

## **Profenofos**

Cat. No.: HY-B0832 CAS No.: 41198-08-7

Molecular Formula:  $C_{11}H_{15}BrClO_3PS$ 

Molecular Weight: 373.63

Target: Cholinesterase (ChE) Pathway: **Neuronal Signaling** Storage: 4°C, protect from light

\* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 50 mg/mL (133.82 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6764 mL	13.3822 mL	26.7644 mL
	5 mM	0.5353 mL	2.6764 mL	5.3529 mL
	10 mM	0.2676 mL	1.3382 mL	2.6764 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 (6.69 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.69 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.69 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	Profenofos is an insecticida used on field crops, vegetables, and fruit crops. Profenofos is an acetylcholinesterase (AChE) inhibitor, with neurotoxicity <sup>[1]</sup> .
IC <sub>50</sub> & Target	AChE

### **REFERENCES**

1]. Madhulika Kushwaha, et a Biodegradation. J Environ Qua		ofos, an Acetylcholinesterase-In	hibiting Organophosphorus Pesticide: A Short Revie	ew of Its Usage, Toxicity, and
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