# **Screening Libraries**

# **Amitraz**

Cat. No.: HY-B1111 CAS No.: 33089-61-1 Molecular Formula:  $C_{19}H_{23}N_3$ Molecular Weight: 293.41

Adrenergic Receptor; Monoamine Oxidase; Parasite Target: Pathway: GPCR/G Protein; Neuronal Signaling; Anti-infection

Storage: Powder -20°C 3 years 4°C 2 years

In solvent -80°C 6 months

-20°C 1 month

N N	$\sim_{N}$

**Product** Data Sheet

# **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (340.82 mM; Need ultrasonic)

H<sub>2</sub>O: < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.4082 mL	17.0410 mL	34.0820 mL
	5 mM	0.6816 mL	3.4082 mL	6.8164 mL
	10 mM	0.3408 mL	1.7041 mL	3.4082 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 (8.52 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (8.52 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.52 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description	Amitraz is a non-systemic acaricide and insecticide, with alpha-adrenergic agonist activity, interaction with octopamine receptors of the central nervous system and inhibition of monoamine oxidases and prostaglandin synthesis.
IC <sub>50</sub> & Target	Mite

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 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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