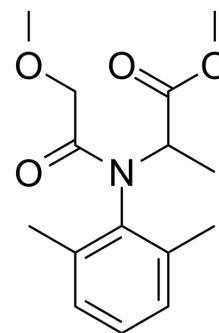


Metalaxyl

Cat. No.:	HY-B0843
CAS No.:	57837-19-1
Molecular Formula:	C ₁₅ H ₂₁ NO ₄
Molecular Weight:	279.33
Target:	Fungal
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (358.00 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	3.5800 mL	17.9000 mL	35.8000 mL
		5 mM	0.7160 mL	3.5800 mL	7.1600 mL
	10 mM	0.3580 mL	1.7900 mL	3.5800 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 (8.95 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.95 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.95 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Metalaxyl is a fungicide agent that inhibits the protein synthesis in fungi. Metalaxyl against downy mildews and soil-borne diseases by <i>Phytium</i> ssp. and <i>Phytophthora</i> ssp. ^{[1][2]} .
In Vitro	Metalaxyl inhibits the growth of <i>P. infestans</i> fungal isolates from Serbian potato fields (EC ₅₀ S = 0.3-3.9 µg/mL) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Metalaxyl causes dose-dependent bradycardia, and at higher doses (250 and 300 mg/kg body weight) the sustained bradycardia led to cardiac arrest in albino rats. The acetylcholinesterase activities in brain and heart are not affected in Metalaxyl-treated rats ^[2] .

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- J Chromatogr A. 2022 May 19;1675:463155.

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REFERENCES

- [1]. Emil Rekanović, et al. Toxicity of metalaxyl, azoxystrobin, dimethomorph, cymoxanil, zoxamide and mancozeb to *Phytophthora infestans* isolates from Serbia. J Environ Sci Health B. 2012;47(5):403-9.
- [2]. K A Naidu, et al. Metalaxyl-induced bradycardia in rats: mediated by alpha-adrenoreceptors. J Toxicol Environ Health. 1988;23(4):495-8.
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Caution: Product has not been fully validated for medical applications. For research use only.

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