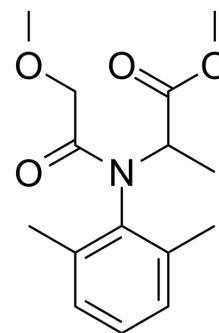


Metalaxyl

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 1 mg	5 mg	10 mg
	Preparing Stock Solutions	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	<ol style="list-style-type: none"> 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 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 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.

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

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