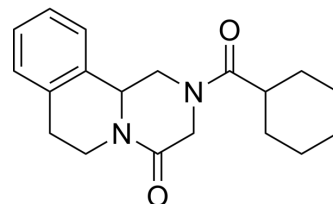


Praziquantel

Cat. No.:	HY-B0244
CAS No.:	55268-74-1
Molecular Formula:	C ₁₉ H ₂₄ N ₂ O ₂
Molecular Weight:	312.41
Target:	Parasite; Antibiotic
Pathway:	Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (160.05 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (insoluble)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.2009 mL	16.0046 mL	32.0092 mL
	5 mM	0.6402 mL	3.2009 mL	6.4018 mL
	10 mM	0.3201 mL	1.6005 mL	3.2009 mL

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

In Vivo

- Add each solvent one by one: 15% Cremophor EL >> 85% Saline
Solubility: 30 mg/mL (96.03 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 50% PEG300 >> 50% saline
Solubility: 12.5 mg/mL (40.01 mM); Suspended solution; Need ultrasonic and warming and heat to 60°C
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (8.00 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (8.00 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (8.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Praziquantel is a broadly effective trematocide and cestocide, the initial effect of praziquantel on the schistosome may be an interaction of the drug with lipid constituents of the tegumental membrane. Praziquantel is used for the research of

	schistosomiasis ^{[1][2]} .
IC ₅₀ & Target	Schistosome
In Vitro	<p>Praziquantel (0.1-10 µM) enhances the tension produced by the musculature of male Schistosomajaponicum in a dose-dependent manner^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

CUSTOMER VALIDATION

- Aquaculture. 2025 Feb 15.
- Acta Trop. 2021 May 16;105961.

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REFERENCES

- [1]. Andrews P, et al. Praziquantel: mechanisms of anti-schistosomal activity. Pharmacol Ther. 1985;29(1):129-56.
- [2]. Qian Sun, et al. The cytotoxicity study of praziquantel enantiomers. Drug Des Devel Ther. 2016 Jun 24;10:2061-8.

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

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