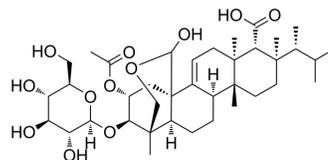


Enfumafungin

Cat. No.:	HY-N8537		
CAS No.:	260979-95-1		
Molecular Formula:	C ₃₈ H ₆₀ O ₁₂		
Molecular Weight:	708.88		
Target:	Fungal		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (141.07 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	1.4107 mL	7.0534 mL	14.1068 mL
		5 mM	0.2821 mL	1.4107 mL	2.8214 mL
10 mM		0.1411 mL	0.7053 mL	1.4107 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 (3.53 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (3.53 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (3.53 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Enfumafungin, a triterpene glycoside, is isolated from extracts derived from fungus <i>Hormonema carpetanum</i> . Enfumafungin is an antifungal compound that is acting on the fungal cell wall, as the (1,3)-beta-D-glucan synthase inhibitor. Enfumafungin is specific for yeasts and fungi (excluding <i>Cryptococcus</i>) and does not inhibit the growth of <i>Bacillus subtilis</i> ^{[1][2]} .
IC₅₀ & Target	(1,3)-beta-D-glucan synthase ^[1]
In Vitro	Enfumafungin (24-48 h) has MICs of less than 0.5 µg/mL against the <i>Candida</i> and <i>Aspergillus</i> species tested and it is inactive

against *Cryptococcus*, including the decapsulated form (MY2062)^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Enfumafungin (50-200 mg/kg; i.p. twice daily for 2 days) produces a significant decrease in the number of c.f.u. in kidneys of mice challenged with *C. albicans*, with an ED₉₀ of 90 mg/kg^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Peláez F, et, al. The discovery of enfumafungin, a novel antifungal compound produced by an endophytic *Hormonema* species biological activity and taxonomy of the producing organisms. *Syst Appl Microbiol*. 2000 Oct;23(3):333-43.

[2]. Onishi J, et, al. Discovery of novel antifungal (1,3)-beta-D-glucan synthase inhibitors. *Antimicrob Agents Chemother*. 2000 Feb;44(2):368-77.

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

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