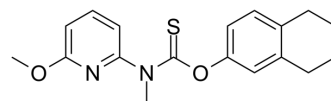


Liranaftate

Cat. No.:	HY-B0348		
CAS No.:	88678-31-3		
Molecular Formula:	C ₁₈ H ₂₀ N ₂ O ₂ S		
Molecular Weight:	328.43		
Target:	Fungal		
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 : 100 mg/mL (304.48 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.0448 mL	15.2239 mL	30.4479 mL
	5 mM	0.6090 mL	3.0448 mL	6.0896 mL
	10 mM	0.3045 mL	1.5224 mL	3.0448 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: 2.5 mg/mL (7.61 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: 2.5 mg/mL (7.61 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (7.61 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Liranaftate (Piritetrate) is a squalene epoxidase inhibitor with anti-fungicidal activities. Liranaftate can be used for the research of dermatophytes. Liranaftate also suppresses fungal element-promoted production of IL-8 and experimental inflammation^{[1][2][3][4]}.

In Vitro

Liranaftate showed excellent fungistatic activity against the conidia of *T. rubrum*. For each of these agents, the MIC after 14 days of contact was 0.009 g/ml. The liranaftate-induced decrease in the MCC occurred from 9 days onwards; MCC at 14 days

was 0.039 g/ml [1]. In time-kill studies, liranafate showed the greatest decrease to a below detection limit in viable counts of *T rubrum*. The degree of killing of the strain by amorolfine was not greater than that seen by liranafate, and little reduction of the viable counts by luliconazole and ketoconazole was observed irrespective of concentrations of the agents [2].

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

REFERENCES

- [1]. Oku, Y., et al., [Fungicidal activity of liranafate against *Trichophyton rubrum*]. *Nihon Ishinkin Gakkai Zasshi*, 2002. 43(3): p. 181-7.
- [2]. Oku, Y., N. Takahashi, and K. Yokoyama, [Fungicidal activity of liranafate against dermatophytes]. *Nihon Ishinkin Gakkai Zasshi*, 2009. 50(1): p. 9-13.
- [3]. Maruyama N, et, al. [Suppression of experimental inflammation by anti-fungal agent liranafate in mice]. *Nihon Ishinkin Gakkai Zasshi*. 2010;51(1):7-11.
- [4]. Kobayashi M, et, al. [Anti-fungal drug liranafate suppresses fungal element-promoted production of IL-8 in normal human keratinocytes]. *Nihon Ishinkin Gakkai Zasshi*. 2008;49(4):319-22.
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Caution: Product has not been fully validated for medical applications. For research use only.

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