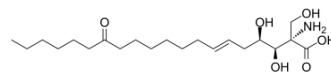


Myriocin

Cat. No.:	HY-N6798	
CAS No.:	35891-70-4	
Molecular Formula:	C ₂₁ H ₃₉ NO ₆	
Molecular Weight:	401.54	
Target:	HCV; Antibiotic	
Pathway:	Anti-infection	
Storage:	Powder	-20°C 3 years
	In solvent	-80°C 6 months
		-20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (124.52 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.4904 mL	12.4521 mL	24.9041 mL
	5 mM	0.4981 mL	2.4904 mL	4.9808 mL
	10 mM	0.2490 mL	1.2452 mL	2.4904 mL

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

In Vivo

- Add each solvent one by one: 50% PEG300 >> 50% saline
Solubility: 5 mg/mL (12.45 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 1.25 mg/mL (3.11 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 1.25 mg/mL (3.11 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 1.25 mg/mL (3.11 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Myriocin, a fungal metabolite isolated from *Myriococcum albomyces*, *Isaria sinclairi* and *Mycelia sterilia*, is a potent inhibitor of serine-palmitoyl-transferase (SPT) and a key enzyme in de novo synthesis of sphingolipids^[1]. Myriocin strongly suppresses replication of both the subgenomic HCV-1b replicon and the JFH-1 strain of genotype 2a infectious HCV^[2], with an IC₅₀ of 3.5 μg/mL for inhibiting HCV infection^[3].

IC₅₀ & Target

Serine-palmitoyl-transferase (SPT)^[1]

REFERENCES

- [1]. He Q, et al. Inhibition of serine palmitoyltransferase by myriocin, a natural mycotoxin, causes induction of c-myc in mouse liver. *Mycopathologia*. 2004 Apr;157(3):339-47.
- [2]. Amemiya F, et al. Targeting lipid metabolism in the treatment of hepatitis C virus infection. *J Infect Dis*. 2008 Feb 1;197(3):361-70.
- [3]. Ciesek S, et al. The suppressive effect that myriocin has on hepatitis C virus RNA replication is independent of inhibition of serine palmitoyl transferase. *J Infect Dis*. 2008 Oct 1;198(7):1091-3.
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Caution: Product has not been fully validated for medical applications. For research use only.

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