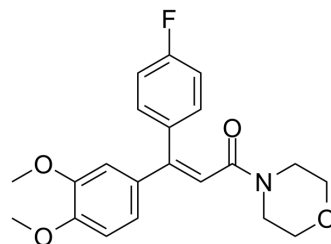


Flumorph

Cat. No.:	HY-17521		
CAS No.:	211867-47-9		
Molecular Formula:	C ₂₁ H ₂₂ FNO ₄		
Molecular Weight:	371.4		
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 (269.25 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.6925 mL	13.4626 mL	26.9251 mL
	5 mM	0.5385 mL	2.6925 mL	5.3850 mL
	10 mM	0.2693 mL	1.3463 mL	2.6925 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 (6.73 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Flumorph(SYP-L190) is a carboxylic acid amide (CAA) fungicide. IC50 value: Target: Fungicide agent Flumorph did not inhibit the synthesis of cell wall materials, but disturbed the polar deposition of newly synthesized cell wall materials during cystospore germination and hyphal growth. In flumorph-treated hyphae, the most characteristic change was the development of periodic swelling ("beaded" morphology) and the disruption of tip growth. Upon removing flumorph, normal tip growth and organized F-actin were observed again [1]. Flumorph had induced systemic genotoxicity in mammals as it caused DNA damage in all tested vital organs, especially in brain and spleen [2].

REFERENCES

- [1]. Sheng Zhu S, et al. Flumorph Is a Novel Fungicide That Disrupts Microfilament Organization in Phytophthora melonis. *Phytopathology*. 2007 May;97(5):643-9.
- [2]. Zhang T, et al. Assessment of genotoxic effects of flumorph by the comet assay in mice organs. *Hum Exp Toxicol*. 2014 Mar;33(3):224-9.
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Caution: Product has not been fully validated for medical applications. For research use only.

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