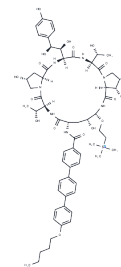


Rezafungin

Chemical Properties

CAS No. :	1396640-59-7
Formula:	C ₆₃ H ₈₅ N ₈ O ₁₇
Molecular Weight:	1226.39
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Rezafungin (SP-3025, Biafungin) is a natural product echinocandin and a 1,3-β-D-glucan synthase inhibitor with broad-spectrum antifungal activity, high tissue penetration, and a long half-life, used for the treatment of candidemia and invasive candidiasis.
Targets(IC50)	Antifungal
In vitro	Methods: Using CLSI and EUCAST reference Methods, the minimum inhibitory concentration (MIC) and minimum effective concentration (MEC) of Rezafungin against clinical isolates of <i>Candida</i> and <i>Aspergillus</i> spp. were determined. Results: Rezafungin showed MIC ≤0.125 µg/mL against most <i>Candida</i> species including <i>C. albicans</i> , MEC ≤0.015-0.125 µg/mL against wild-type <i>A. fumigatus</i> , and similar or slightly superior activity against echinocandin-resistant strains. [1]
In vivo	Methods: In a C3H/HeN mouse infection model, Rezafungin (1 mg/kg; once daily) was administered by intraperitoneal injection for 6 consecutive days. Results: Rezafungin effectively prevented <i>Pneumocystis</i> spp. infection and significantly reduced nuclear and asci loads. [2]

Solubility Information

Solubility	DMSO: 65 mg/mL (53 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.8154 mL	4.077 mL	8.154 mL
5 mM	0.1631 mL	0.8154 mL	1.6308 mL
10 mM	0.0815 mL	0.4077 mL	0.8154 mL
50 mM	0.0163 mL	0.0815 mL	0.1631 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Hoeningl, Martin et al. The Antifungal Pipeline: Fosmanogepix, Ibrexafungerp, Olorofim, Opelconazole, and Rezafungin. *Drugs* vol. 81,15 (2021): 1703-1729.

Zhao L, Sun X, Hou C, et al. CPNE7 promotes colorectal tumorigenesis by interacting with NONO to initiate ZFP42 transcription. *Cell Death & Disease*. 2024, 15(12): 896.

Miesel L, et al. Efficacy of Rezafungin in Prophylactic Mouse Models of Invasive Candidiasis, Aspergillosis, and Pneumocystis Pneumonia. *Antimicrob Agents Chemother*. 2021 Feb 17;65(3):e01992-20.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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