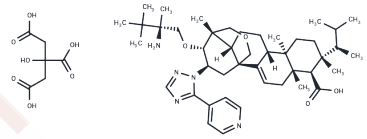
Data Sheet (Cat.No.T70029)

TargetMol

Ibrexafungerp citrate

Chemical Properties



CAS No. : 1965291-08-0

Formula: C50H75N5O11

Molecular Weight: 922.16

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	Ibrexafungerp citrate is a triterpenoid antifungal agent that inhibits the synthesis of 1,3-β-D-glucan in fungal cell walls, and although its functional outcome is similar to echinocandins, it binds to a distinct site on the glucan synthase enzyme, resulting in limited cross-resistance. Ibrexafungerp citrate exhibit concentration-dependent fungicidal activity against Candida species and retaining strong in vitro efficacy against the majority of fluconazole-resistant strains, supporting its use in antifungal resistance and drug development research.
Targets(IC50)	Antifungal
In vitro	In fungal susceptibility assays, Ibrexafungerp citrate acted as a β-1,3-glucan synthase inhibitor, disrupting cell wall integrity. It exhibited a minimum inhibitory concentration (MIC50) of 0.5 μg/mL against various Candida species, including multidrug-resistant Candida auris, resulting in broad-spectrum fungicidal activity [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (86.75 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0844 mL	5.4221 mL	10.8441 mL
5 mM	0.2169 mL	1.0844 mL	2.1688 mL
10 mM	0.1084 mL	0.5422 mL	1.0844 mL
50 mM	0.0217 mL	0.1084 mL	0.2169 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

James M Apgar, et al. Ibrexafungerp: An orally active β-1,3-glucan synthesis inhibitor. Bioorg Med Chem Lett. 2021 Jan 15;32:127661.

Mahmoud Ghannoum, et al. Ibrexafungerp: A Novel Oral Triterpenoid Antifungal in Development for the Treatment of Candida auris Infections. Antibiotics (Basel). 2020 Aug 25;9(9):539.

Stephen A Wring, et al. Preclinical Pharmacokinetics and Pharmacodynamic Target of SCY-078, a First-in-Class Orally Active Antifungal Glucan Synthesis Inhibitor, in Murine Models of Disseminated Candidiasis. Antimicrob Agents Chemother. 2017 Mar 24;61(4):e02068-16.

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