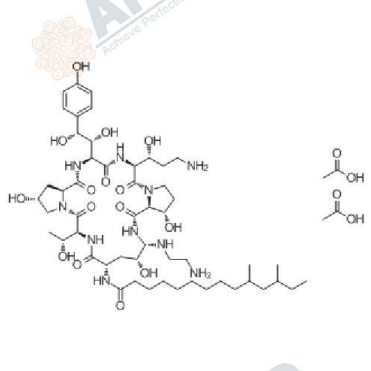
Product Data Sheet

Caspofungin Acetate

Cat. No.: B2083
CAS No.: 179463-17-3
Formula: C56H96N10O19
M.Wt: 1213.42
Synonyms:
Target: Others
Pathway: β(1,3)-D-Glucan Synthase
Storage: Store at -20°C



Solvent & Solubility

In Vitro

⩾60.67 mg/mL in DMSO; insoluble in EtOH; ⩾21.5 mg/mL in H2O

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	0.8241 mL	4.1206 mL	8.2412 mL
5 mM	0.1648 mL	0.8241 mL	1.6482 mL
10 mM	0.0824 mL	0.4121 mL	0.8241 mL

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

Biological Activity

Shortsummary	lipopeptide antifungal drug
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Aspergillus fumigates
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	32 μg/ml for 6 h; or 2 μg/ml for 12 h

	Applications:	Caspofungin suppressed the synthesis of cell wall β-1,3-glucan, which triggered a compensatory stimulation of chitin synthesis. Caspofungin induced morphological changes in Aspergillus fumigates. Moreover, Treatment with caspofungin induced ChsG-dependent upregulation of chitin synthesis and the formation of chitin-rich microcolonies in Aspergillus fumigates.
In Vivo	**Animal experiment**	
	Applications:	

Product Citations

1. Granger BL. "Accessibility and contribution to glucan masking of natural and genetically tagged versions of yeast wall protein 1 of Candida albicans." PLoSOne. 2018 Jan 12;13(1):e0191194.PMID:29329339

See more customer validations on www.apexbt.com.

References

1Walker, L. A., Lee, K. K., Munro, C. A. and Gow, N. A. (2015) Caspofungin Treatment of Aspergillus fumigatus Results in ChsG-Dependent Upregulation of Chitin Synthesis and the Formation of Chitin-Rich Microcolonies. Antimicrob Agents Chemother. 59, 5932-5941

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com