



## Product Information

Product ID C0274

CAS No. 179463-17-3

### Chemical Name

Synonym Caspofungin Acetate, MK-0991

Formula  $C_{52}H_{88}N_{10}O_{15} \cdot C_4H_8O_4$

Formula Wt. 1213.42

Melting Point 204-206 °C

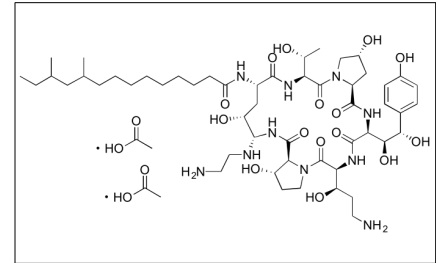
Purity  $\geq 95\%$

Solubility Soluble in ethanol (20 mg/mL), DMSO (25 mg/mL), DMF (20 mg/mL), water (10 mg/mL), methanol.

Store Temp -20 °C

Ship Temp Ambient

**Description** Caspofungin acetate is a lipopeptide antifungal that inhibits the enzyme 1,3-B-Glucan synthase, which synthesizes B-glucan polymers that form fungal cell walls. Caspofungin acetate is active against a variety of *Aspergillus* and *Candida* species and unlike many antifungals, is not metabolized by the cytochrome p450 system. The ability of caspofungin acetate to inhibit B-glucan synthesis decreases cell wall mechanical strength, alters cell surface hydrophobicity, and triggers cell aggregation.



**Bulk quantities available upon request**

Product ID	Size
C0274	5 mg
C0274	25 mg
C0274	100 mg

**References** El-Kirat-Chatel S, Beaussart A, Alsteens D, et al. Nanoscale analysis of caspofungin-induced cell surface remodelling in *Candida albicans*. *Nanoscale*. 2013 Feb 7;5(3):1105-15. PMID: 23262781.

Pacetti SA, Gelone SP. Caspofungin acetate for treatment of invasive fungal infections. *Ann Pharmacother*. 2003 Jan;37(1):90-8. PMID: 12503942.

Mio T, Adachi-Shimizu M, Tachibana Y, et al. Cloning of the *Candida albicans* homolog of *Saccharomyces cerevisiae* GSC1/FKS1 and its involvement in beta-1,3-glucan synthesis. *J Bacteriol*. 1997 Jul;179(13):4096-105. PMID: 9209021.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.