

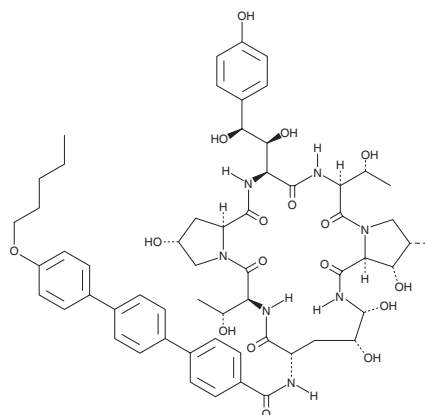
PRODUCT INFORMATION



Anidulafungin

Item No. 20753

CAS Registry No.: 166663-25-8
Formal Name: 1-[(4R,5R)-4,5-dihydroxy-N2-[[4''-(pentyloxy)[1,1':4',1''-terphenyl]-4-yl]carbonyl]-L-ornithine]-echinocandin B
Synonyms: LY303366, VER-002
MF: C₅₈H₇₃N₇O₁₇
FW: 1,140.3
Purity: ≥95%
UV/Vis.: λ_{max}: 303 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Anidulafungin is supplied as a crystalline solid. A stock solution may be made by dissolving the anidulafungin in the solvent of choice, which should be purged with an inert gas. Anidulafungin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of anidulafungin in these solvents is approximately 10 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of anidulafungin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of anidulafungin in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Anidulafungin is a semisynthetic echinocandin antifungal.¹ It inhibits 1,3-β-D glucan synthase from several *C. albicans* clinical isolates (IC₅₀s = 0.89-7.96 ng/ml for the wild-type enzyme).² Anidulafungin is active against various *Candida* species, including *C. albicans*, *C. parapsilosis*, *C. tropicalis*, and *C. guilliermondi* (MICs = ≤0.03-4 μg/ml), as well as *A. fumigatus* (MIC₉₀ = ≤0.03 μg/ml).¹ It increases survival and decreases the severity of pulmonary lesions in *A. fumigatus*-infected neutropenic rabbits when administered at a dose of 10 mg/kg.³ Formulations containing anidulafungin have been used in the treatment of candidemia and candidiasis.

References

1. Vazquez, J. A. and Sobel, J. D. Anidulafungin: A novel echinocandin. *Clin. Infect. Dis.* **43**(2), 215-222 (2006).
2. Garcia-Effron, G., Park, S., and Perlin, D.S. Correlating echinocandin MIC and kinetic inhibition of *fkp1* mutant glucan synthases for *Candida albicans*: Implications for interpretive breakpoints. *Antimicrob Agents Chemother.* **53**(1), 112-122 (2009).
3. Petraitis, V., Petraitiene, R., Groll, A.H., et al. Antifungal efficacy, safety, and single-dose pharmacokinetics of LY303366, a novel echinocandin B, in experimental pulmonary aspergillosis in persistently neutropenic rabbits. *Antimicrob Agents Chemother.* **42**(11), 2898-2905 (1998).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM