

Product Data Sheet

Anidulafungin

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| Cat. No.: | B1224 |
| CAS No.: | 166663-25-8 |
| Formula: | C ₅₈ H ₇₃ N ₇ O ₁₇ |
| M.Wt: | 1140.24 |
| Synonyms: | |
| Target: | Microbiology & Virology |
| Pathway: | Antibiotic |
| Storage: | Store at -20°C |



Solvent & Solubility

insoluble in EtOH; insoluble in H₂O; ≥20.8 mg/mL in DMSO

| In Vitro | Preparing Stock Solutions | Mass | | | |
|----------|---------------------------|----------------------|-----------|-----------|-----------|
| | | Solvent | 1mg | 5mg | 10mg |
| | | Concentration | | | |
| | | 1 mM | 0.8770 mL | 4.3850 mL | 8.7701 mL |
| | | 5 mM | 0.1754 mL | 0.8770 mL | 1.7540 mL |
| | | 10 mM | 0.0877 mL | 0.4385 mL | 0.8770 mL |

Please refer to the solubility information to select the appropriate solvent

Biological Activity

| | | |
|---------------------------|-----------------------------|---|
| Shortsummary | Antifungal drug | |
| IC ₅₀ & Target | | |
| In Vitro | Cell Viability Assay | |
| | 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: | 48 hrs |
| | Applications: | Anidulafungin potently inhibited Aspergillus species, with a MEC90 value of |

| | | |
|---------|--|---|
| | 0.02 mg/mL. The ranges of MIC and MEC of Anidulafungin against <i>A. fumigatus</i> , <i>A. flavus</i> , <i>A. niger</i> , <i>A. glaucus</i> group and <i>A. versicolor</i> were 0.00125 ~ 0.005 µg/mL and 0.005 ~ 10.24 µg/mL, respectively. | |
| In Vivo | Animal experiment | |
| | Animal models: | Mice infected with strains FMR 9965, FMR 8756, FMR 9960, FMR 10084 or FMR 9966 of <i>Aspergillus flavus</i> |
| | Dosage form: | 1, 5 or 10 mg/kg; i.p.; q.d., for 7 days |
| | Applications: | In Mice infected with strains FMR 9965, FMR 8756, FMR 9960, FMR 10084 or FMR 9966 of <i>Aspergillus flavus</i> , Anidulafungin at the doses of 5 and 10 mg/kg significantly prolonged survival. There were no substantial difference between the doses of 5 and 10 mg/kg. Moreover, in spleens and kidneys, Anidulafungin significantly reduced the fungal load in a dose-dependent manner. According to the bioassay results, at day 5 of treatment, the Anidulafungin serum levels were beyond the corresponding minimum effective concentrations of all strains. |
| | Other notes: | Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal. |

Product Citations

1. Hoyer AR, Johnson CJ, et al. "Echinocandin Treatment of *Candida albicans* Biofilms Enhances Neutrophil Extracellular Trap Formation." *Antimicrob Agents Chemother.* 2018 Aug 27;62(9). pii: e00797-18.PMID:29987146

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References

- [1]. Zhanel GG1, Karlowsky JA, Harding GA, Balko TV, Zelenitsky SA, Friesen M, Kabani A, Turik M, Hoban DJ. In vitro activity of a new semisynthetic echinocandin, LY-303366, against systemic isolates of *Candida* species, *Cryptococcus neoformans*, *Blastomyces dermatitidis*, and *Aspergillus* species. *Antimicrob Agents Chemother.* 1997 Apr;41(4):863-5.
- [2]. Calvo E, Pastor FJ, Mayayo E, Salas V, Guarro J. In vitro activity and in vivo efficacy of anidulafungin in murine infections by *Aspergillus flavus*. *Antimicrob Agents Chemother.* 2011 Mar;55(3):1290-2.

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 APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term 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.



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