

Catalog # 10-2430 Amphotericin B

CAS# 1397-89-3 NSC 527017 Lot # X101413

Amphotericin B is a powerful antimycotic, effective against a wide variety of fungi, including yeast, via two mechanisms: forming pores in the plasma membrane, leading to leakage and death¹, and causing oxidative stress². Other mechanisms have more recently been proposed, including formation of intracellular amphotericin B-containing vesicular bodies that target vacuoles.³ Amphotericin B is also effective against some parasites, such as *Leishmania* spp.⁴ Because of its potency and broad-spectrum activity, it is a common additive used to maintain sterility in cell culture and viral transport media.

- 1) Kinsky et al. (1970), Antibiotic interaction with model membranes; Annu. Rev. Pharmacol., 10 119
- 2) Sokol-Anderson et al. (1986), Amphotericin B-Induced Oxidative Damage and Killing of Candida Albicans; J. Infect. Dis., **154** 75
- 3) Grela et al. (2019), Modes of the antibiotic activity of amphotericin B against Candida albicans; Sci. Rep., 9 17029
- 4) Paila et al. (2010), Amphotericin B inhibits entry of Leishmaniz donovani into primary macrophages; Biochem. Biophys. Res. Commun., 399 429

PHYSICAL DATA

Molecular Weight: 924.08

Molecular Formula: C₄₇H₇₃NO₁₇

Purity: 90% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 18 mg/ml)
Physical Description: Yellow or orange solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.

Solutions in DMSO may be stored at -20°C for up to 3 months.

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