Amphotericin B
Item No. 11636

CAS Registry No.: 1397-89-3

Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ<sub>max</sub>: 227, 283, 346, 364, 383, 407 nm

Laboratory Procedures
For long term storage, we suggest that amphotericin B be stored as supplied at -20°C. It should be stable for at least two years.

Amphotericin B is supplied as a crystalline solid. A stock solution can be made by dissolving amphotericin B in the solvent of choice. Amphotericin B is soluble in DMSO, which should be purged with an inert gas. The solubility of amphotericin B in DMSO is approximately 2 mg/ml.

Amphotericin B is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, amphotericin B should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Amphotericin B has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Amphotericin B is a classic antifungal polyene macrolide that has been used in the treatment of systemic fungal infections, primarily caused by C. albicans, A. fumigatus, and parasitic L. protozoans, as well as in tissue culture to prevent fungi from contaminating cell cultures. Amphotericin B binds with ergosterol, the main component of fungal cell membranes, forming a transmembrane channel that results in altered plasma membrane permeability and leakage of vital cytoplasmic components, such as K<sup>+</sup>, ultimately inducing cell death. Because prolonged use of amphotericin B is associated with infusion-related events and nephrotoxicity, lipid-based formulations have been devised for more favorable clinical relevance.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/11636

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS, NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals herein. Cayman warrants only to the original customer that the material will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman be liable for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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