

Technical Data Sheet

Amphotericin B

for biochemistry

Order number: 1148

Amphotericin B is an antifungal macrocyclic lactone used in the treatment of systemic fungal infections and in tissue culture to prevent fungi (including yeasts) from contaminating cell cultures. The macrolide binds to ergosterol which is the main component of fungal cell membranes. As a consequence, a transmembrane channel is formed, leading to an altered plasma membrane permeability and leakage of small cytoplasmic components (e.g. potassium ions).

Application

Amphotericin B prevents fungal growth (including strains of Candida, Rhizopus, Aspergillus, and Coccidioides) in cell and tissue culture. The minimum inhibitory concentration ranges from $0.03-1\,\mu\text{g/ml}$; as a working concentration (prevention, not treatment!) 2.5 $\mu\text{g/ml}$ is recommended. Amphotericin B is commonly combined with penicillin and streptomycin in the medium.

The solubility of Amphotericin in water, medium, and buffer solutions is very low. Stock solution (1000X) are prepared by dissolving 2.5 mg/ml in DMSO and diluted in the buffer/medium of choice (1 ml of 1000X stock solution in 1 L medium). Aqueous solutions should be used immediately.

Storage:

Store Amphotericin B powder at 2-8 °C. Protect from light!

Related products

1191	D(+)-Glucose anhydrous for cell biology
1264	Dimethyl sulfoxide for cell biology
1194	HEPES for cell biology
1210	L-Glutamine for cell biology
1229	Sodium hydrogen carbonate for cell biology
1243	Vitamin B12 for cell biology
1510	Penicillin/Streptomycin solution (in 0.85 % NaCl) for cell biology

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