迈晨科技 M&C GENE TECHNOLOGY

Amphotericin B

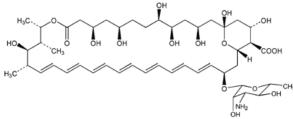
Cell Culture-Antibiotics

Catalogue Number: CO013/CO013.10/CO014

Product Description:

Amphotericin B is a polyene antifungal agent, first isolated by Gold et al from Streptomyces nodosus in 1955. It is an amphoteric compound composed of a hydrophilic polyhydroxyl chain along one side and a lipophilic polyene hydrocarbon chain on the other. Amphotericin B has a high affinity for sterols, primarily ergosterols, of fungal and bacterial cell membranes. After binding to sterols, it forms channels in the membranes, causing small molecules to leak out. Amphotericin B induces K+ leakage which is separate from its lethal action, as was demonstrated in human erythrocytes

and is due to the inhibitory effect on the Na+/K+ pump. At sub-lethal concentrations, this agent stimulates either the activity of some membrane enzymes or cellular metabolism, in particular stimulation of some cells of the immune system. Amphotericin B is poorly soluble in water and now available in four formulations. The classic amphotericin B deoxycholate (Fungizone™) formulation has been available since 1960 and is a colloidal suspension of amphotericin B. A bile salt, deoxycholate, is often used as the solubilizing agent.



amphotericin B

Molecular Formula: C47H73NO17

Molecular Weight: 924.08

Application: Amphotericin B is an effective agent against fungi and yeast.

Formulation: see table below

Storage: -20 °C

Working Concentration: 2.5 mg/L

Catalogue Number:	Concentration	Volume	Soluent	Appearance*
CO013	0.25 g/L	100 mL	1% DMSO in water	Hazy, yellow solution
CO013.10	0.25 g/L	10 mL	1% DMSO in water	Hazy, yellow solution
C0014	2.5 g/L	1 mL	100% DMSO	Clear, yellow solution

*The hazy appearance does not affect its anti-fungal and bacterial activity.

