

ANTIBIOTIC MEDIUM N° 12

CAT N°: 1525

Medium used to assay Amphotericin B

FORMULA IN g/l

Peptone	10.00	Yeast Extract	5.00
Dextrose	10.00	Beef Extract	2.50
Sodium Chloride	10.00	Bacteriological Agar	25.00

Final pH 6.1± 0.1 at 25°C

PREPARATION

Suspend 62.5 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. The prepared medium should be stored at 8-15°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

ANTIBIOTIC MEDIUM N° 12 is recommended for preparing test plates for the cylinder plate assay of the antifungal agents nystatin and anisomycin, using only *Saccharomyces cerevisiae* as the test organism. It is used for the assay of amphotericin B.

Peptone and Beef extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is source of vitamins, particularly the B-group. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Dextrose is the fermentable carbohydrate providing carbon and energy. Bacteriological Agar is the solidifying agent.

The potency of an antibiotic can be demonstrated under appropriate conditions by its inhibitory effect on microorganisms. This method is based on the diffusion of an antibiotic solution from a cylinder placed on the surface of an inoculated agar medium. The diameter of an inhibition zone after incubation depends, in part, on the concentration or activity of the antibiotic.

Incubate at 30°C ± 2°C and observe for 40-48 hours.

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30 ± 2°C and observed after 40-48 hours.

Microorganisms	Growth
<i>Saccharomyces cerevisiae</i> ATCC 2601	Good

BIBLIOGRAPHY

United States Pharmacopeial Convention, Inc. 2001. The United States pharmacopeia 25/ The national formulary 20-2002. United States Pharmacopeial Convention, Inc., Rockville.Md.
Abraham, Chain Fletcher, Florey, Gardner, Hestley and Jennings. 1941. Lancett ii 177.

STORAGE

Once opened keep powdered medium closed to avoid hydration.

