Technical Information

Antibiotic MiVeg Assay Medium No.13 (Nystatin MiVeg Assay Broth)

Product Code : VM1254

Application:- Antibiotic MiVeg Assay Medium No. 13 (Nystatin MiVeg Assay Broth) is used for the microbiological assay of Candicidin using *Saccharomyces cerevisiae* ATCC 9763.

Composition**

Ingredients	Gms / Litre
MiVeg peptone	10.000
Dextrose	20.000
Final pH (at 25°C)	5.6 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Antibiotic MiVeg Assay Medium No. 13 is prepared by vegetable based peptones instead of animal peptones, which makes the medium BSE-TSE risks free. This medium is numerically identical with the name assigned by Groove and Randall (1) and serve as the same purpose of Antibiotic Assay Medium No. 13 is formulated in accordance to CFR (2). Groove and Randall had elucidated the methods to perfrom antibiotic assays (1). Schmidt & Moyer reported the use of antibiotic assay medium for liquid formulation in performance of antibiotic assay (3). This medium is widely used in turbidometric assay of antifungals like Candicidin using test organisms like *Saccharomyces cerevisiae* . This is medium is also termed Sabouraud Liquid Broth Modified or Fluid Sabouraud Medium. This medium facilitates enhanced growth of test organism *Saccharomyces cerevisiae* employed in assay of Candicidin, a polyene antibiotic with antifungal activity. Antibiotic assay is performed by enumerating the blastospores or by analysing the turbidity of the medium. Dextrose serves as carbon source MiVeg Peptone provides essential nutrients and growth promoting factors. In this medium optimal pH for growth of *Saccharomyces cerevisiae* is maintained. Turbidimetric antibiotic assay is based on the change or inhibition of growth of a test microorganism in a liquid medium containing a uniform concentration of an antibiotic. After incubation of the test organism in the working dilutions of the antibiotics, the amount of growth is determined by measuring the light transmittance using spectrophotometer. The concentration of antibiotic is determined by comparing amounts of growth obtained with that given by the reference standard solutions. Use of this method is appropriate only when test samples are clear.

Methodology

Suspend 30 grams of powder media in 1000 ml purified/ distilled water. Mix thoroughly. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 10 minutes. Cool and dispense as desired.

Quality Control

Physical Appearance

Cream to yellow homogeneous, free flowing powder.

Colour and Clarity of prepared medium

Light amber clear solution in tubes.

Reaction

Reaction of 3.0% w/v aqueous solution at 25°C pH 5.6 ± 0.2

pH range

5.40-5.80

CulturalResponse/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Serial dilution with
Saccharomyces cerevisiae ATCC 9763	50-100	luxuriant	Candicidin

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 days.

Further Reading

1. Grove and Randall, 1955, Assay Methods of Antibiotics, Medical Encyclopedia, Inc. New York
2. Tests and Methods of Assay of Antibiotics and Antibiotic containing Drugs, FDA, CFR, 1983 Title 21, Part436,Subpart D, Washington, D.C.: U.S. Government Printing Office, paragraphs 436, 100-436, 106, p. 242-259, (April 1).
3. Schmidt and Moyer, 1944. J.Bact., 47:199.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for in fingement of any patents. Do not use the products if it fails to meet specificatons for identity and performens parameters.