

TM 1968 – ANTIBIOTIC ASSAY MEDIUM F

INTENDED USE

For microbiological assay of Amphotericin B and Nystatin using *Saccharomyces cerevisiae* and *Candida tropicalis*.

PRODUCT SUMMARY AND EXPLANATION

Grove and Randall have elucidated those antibiotic assays and media in their comprehensive treatise on antibiotic assays. Antibiotic assay Medium F is recommended for the microbiological assay of Nystatin and Amphotericin B using *Saccharomyces cerevisiae* and *Candida tropicalis*. It is recommended by European Pharmacopoeia and British Pharmacopoeia.

Freshly prepared plates should be used for antibiotic assays. Test organisms are inoculated in sterile seed agar cooled to 40-45°C and spread evenly over the surface of solidified base agar. After incubation the concentration of the antibiotic being assayed is determined by measuring the zone of inhibition obtained, with that of reference standard antibiotic. All conditions in the microbiological assay must be carefully controlled. The use of standard culture media in the test is one of the important steps for good results.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	9.400
Yeast extract	4.700
Beef extract	2.400
Sodium chloride	10.000
Dextrose (Glucose)	10.000
Agar	23.500

PRINCIPLE

Peptone, yeast extract and beef extract provides nitrogenous source and other essential nutrients. Sodium chloride maintains the osmotic equilibrium. Dextrose is supplemented as a carbon and energy source.

INSTRUCTION FOR USE

- Dissolve 60 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates or dispense as desired.

Advice: Recommended for the microbiological assay of Amphotericin B and Nystatin.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	Strain	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period
<i>Saccharomyces cerevisiae</i>	9763 ATCC	50-100	Luxuriant	≥70%	Amphotericin B , Nystatin	30-37°C	18-24 Hours
<i>Candida albicans</i>	1433-83 CIP	50-100	Luxuriant	≥70%	Nystatin	30-37°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. British Pharmacopoeia, 2016, The Stationery office British Pharmacopoeia
2. European Pharmacopoeia, 2017, European Department, for the Quality of Medicines
3. Grove and Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc, New York.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual Clinical Microbiology, 11th Edition. Vol. 1.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative MedNet GmbH Borkstrasse 10, 48163 Münster, Germany	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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