

**ANTIBIOTIC ASSAY MEDIUM NO. 19****TM 025**

For microbiological assay of Amphotericin B, Netamycin & Nystatin using *Saccharomyces cerevisiae*

Composition

Ingredients	Gms/Ltr.
Agar	23.50
Sodium chloride	10.00
Dextrose	10.00
Pancreatic digest of animal tissue	9.40
Yeast extract	4.70
Beef extract	2.40

* Dehydrated powder, hygroscopic in nature, store, in a dry place in tightly- sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Dissolve 60.0gms 1000ml distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15psi (121°C) for 15 minutes. Cool to 40-45°C and mix well before pouring into sterile petri plates.

Appearance: Yellow colour, clear to slightly opalescent gel

pH (at 25°C): 6.1 ± 0.2

Principle

ANTIBIOTIC ASSAY MEDIUM No. 19 is used for microbiological assay of Amphotericin B, Netamycin & Nystatin using *Saccharomyces cerevisiae*. This media is formulated as according to the guidelines of the by FDA, European Pharmacopeia, Code of Federal Regulations, and the USP. The Antibiotic Media are identified numerically and also, where applicable, with names assigned by "Grove and Randall" in Assay Methods of Antibiotics. Isolation and identification of the pathogens responsible for the disease is necessary before selecting the appropriate antibiotic for testing. The techniques adopted to test microbial sensitivity to a particular antibiotic are called antibiotic assay methods. Medium contains Pancreatic digest of animal tissue, Beef extract and Yeast extract those provides nitrogen, carbon and vitamins (particularly B group) sources to the medium. Dextrose is added as a source of carbohydrate. Agar is a solidifying agent.

Interpretation

Cultural characteristics observed after inoculating (10^3 CFU/ml), on incubation at $25 \pm 30^\circ\text{C}$ for 18 – 24 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Inhibition zones
<i>Saccharmyces cerevisiae</i>	9763	10^3	Good - Luxuriant	Amphotericin B, Netamycin
<i>Saccharmyces cerevisiae</i>	2601	10^3	Good - Luxuriant	Nystatin

References

1. Grove and Randall. Assay Methods of Antibiotics, Medical Encyclopedia Inc. New York. United States Pharmacopoeia Convention.
2. United States Pharmacopeia/ National Formulary (USP22 / NF 17), U.S. Pharmacopeial

PRODUCT DATA SHEET

- Convention, Inc., Rockville, Maryland. (1990).
3. United States Pharmacopeia / National Formulary (USP 23 / NF18), U.S. Pharmacopeial Convention, Inc., Rockville, Maryland. (1995).
 4. Tests and Methods of Assay of Antibiotics and Antibiotic Containing Drugs, FDA, CFR, Title 21. Part 436. Subpart D. Washington, D. (1983).