Ready Prepared Media

Technical Information

Sabouraud Dextrose Agar Plate w/Chloramphenicol (50mg/L) and Cycloheximide (500mg/L)

Product Code: PM 1664

Application : Recommended for selective isolation and cultivation of pathogenic fungi

Composition**

Ingredients	Gms / Litre
Peptone	10.000
Dextrose (Glucose)	20.000
Chloramphenicol	50mg
Cycloheximide	500mg
Agar	15.000
Final pH (at 25°C)	6.8±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Sabouraud Dextrose Agar was originally formulated by Sabouraud (1) and further modified by Emmons (2) by reducing dextrose content and adjusting the pH close to neutral.

Peptone is the source of nitrogenous growth factors while dextrose provides an energy source for the growth of microorganisms. The media can be rendered selective for fungi by antibiotics such as Chloramphenicol (3) and Cycloheximide (4), which inhibit some bacteria as well as some saprophytic and pathogenic fungi. This medium inhibits fungi like *Cryptococcus neoformans, Aspergillus, Nocardia,* certain *Candida* species but allow the dermatophytes to grow well.

Type of specimen

Clinical Samples - Skin scrapings, nail scrapings,etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet.
2. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
3. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validatethe medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
4. Further biochemical tests should be carried out for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Methodology

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

Quality Control

Appearance

Sterile Sabouraud Dextrose Agar Plate w/Chloramphenicol (50mg/L) and Cycloheximide (500mg/L) with smooth surface and absence of black particles/cracks/bubbles .

Colour of medium

Light amber coloured medium

Quantity of medium

25 ml of medium in 90 mm disposable plates.

Reaction

6.60-7.00

Sterility Test

Passes release criteria

Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 2-3 weeks .

Oragnism	Inoculum (CFU)	Growth	Recovery
# *Aspergillus brasiliensis* ATCC 16404 (00053*)	50-100	non-poor	
Candida albicans ATCC10231 (00054*)	50-100	poor-fair	<=20%
Escherichia coli ATCC 25922 (00013*)	>=10^3	inhibited	0%
Saccharomyces cerevisiae A TCC 9763 (00058*)	50-100	non-poor	<=20%
Trichophyton mentagrophytes ATCC 9533	50-100	luxuriant	
Trichophyton rubrum ATCC 28191	50-100	luxuriant	

Key : (*) - Corresponding WDCM numbers.

(#) - Formerly known as Aspergillus niger

Storage and Shelf Life

On receipt store between 2-8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Further Reading

1. Sabouraud R., 1892, Ann. Dermatol. Syphilol., 3:1
2. Emmons C., Binford C., Uty J. and Kwon-Chung, 1970, Medical Mycology, 2nd ed., Philadelphia: Lea and Febiger.
3. Ajello L., 1957, J. Chron. Dis., 5:545.
4. MacFaddin J. F., 1985, Media For Isolation-Cultivation Identification - Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition
6. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1

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 infringement of any patents.
- Do not use the products if it fails to meet specificatons for identity and performens parameters.