



Ready Prepared Media

Technical Information

Sabouraud Dextrose Agar Plate w/Cycloheximide

Product Code: PM 6387

Application: Recommended for selective isolation of fungi .

Composition**

Ingredients	Gms / Litre
Dextrose (Glucose)	40.000
Mycological, peptone	10.000
Agar	15.000
Cycloheximide	500mg
Final pH (at 25°C)	5.6±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Sabouraud Dextrose Agar is Carliers modification (2) of the formulation described by Sabouraud (6) for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections. This medium is also employed to determine microbial contamination in food, cosmetics, and clinical specimens (1).

Mycological peptone provides nitrogenous compounds. Dextrose (Glucose) provides an energy source. High dextrose concentration and low pH favours fungal growth and inhibits contaminating bacteria from test samples (5). Cycloheximide inhibits some saprophytic and pathogenic fungi. Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet. For heavily contaminated samples, the plate must be supplemented with inhibitory agents for inhibiting bacterial growth with lower pH.

Type of specimen

Clinical samples - Skin scraping, nail scraping .

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4).After use, contaminated materials must be sterilized by autoclaving before discarding .

Warning and Precautions

In Vitro diagnostic 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



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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 validate the 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 w/ Cycloheximide in 90mm disposable plate .

Colour

Light amber coloured medium.

Quantity of Medium

25ml of medium in 90mm disposable plates

pH

5.40-5.80

Sterility Check

Passes release criteria

Growth Promotion Test

Growth Promotion was carried out in accordance with the standard method and growth was observed after a specified period. Recovery rate is considered as 100% for fungus growth on Sabouraud Dextrose Agar.

Cultural Response

Cultural characteristics observed after incubation at 20-25 °C for for 2-3 days. (*- Formerly known as *Aspergillus niger*)

Organism

Inoculum (CFU)

Growth

Incubation at 30-35°C for 24-48 hours.

Candida albicans ATCC10231 (00054*)

50-100

poor-fair

Incubation at 20-25 °C for 2-3 days

**Aspergillus brasiliensis* ATCC 16404 (00053*)

50-100

non-poor (for 5-7 days)

Saccharomyces cerevisiae ATCC 9763 (00058*)

50-100

non-poor



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Trichophyton rubrum ATCC 28191	50-100	luxuriant (for 5-7 days)
Trichophyton mentagrophytes ATCC 9533	50-100	luxuriant (for 5-7 days)
Escherichia coli ATCC 25922 (00013*)	$\geq 10^3$	Inhibited

Key : (*) Corresponding WDCM numbers .

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 sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Further Reading

1. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C.
2. Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. 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.
5. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Tenover FC, Tenover RH (editors) 2003, Manual of clinical Microbiology, 8th ed., ASM, Washington, D.C
6. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.

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
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