

Sabouraud Dextrose Agar Plate**(M800)**

Recommended for the cultivation of yeasts and molds.

Composition

Ingredients	g/ L
Dextrose	40.00
Mixture of Peptone and Tryptone ..	10.00
Agar.....	15.00

Description

Fungi can be grouped simply on the basis of morphology as either yeasts or moulds. Fungal diseases that occur on the skin, hair and mucous membrane are called superficial mycoses, and the organism that cause them, the dermatophytes. Where fungi are to be isolated, it is good practice to use a medium that favors their growth but is not optimal for the growth of bacteria. Sabouraud Dextrose Agar is Carliers modification of the formulation described by Sabouraud for the cultivation of fungi (yeasts, moulds),and aciduric microorganisms. Peptone and Tryptone provides carbonaceous, nitrogenous compounds, long chain amino acids, vitamins and other essential growth nutrients. Dextrose (Glucose) provides an energy source. High dextrose concentration and low pH favors fungal growth and inhibits contaminating bacteria from clinical specimens.

Specimen Collection and Handling

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

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Follow good microbiological lab practices while handling specimens and culture.

Limitations

1. Individual organisms differ in their growth requirement and may show variable growth patterns.
2. Each lot of the medium has been tested for the organisms specified on the COA.
3. The surface of the medium should be dry when inoculated.
4. Environmental Monitoring Test : Exposure of media plates for 4 h as a settle plate or in air sampler or even under laminar air flow may lead reduction in some available moisture on the surface.
5. Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet.

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.

Quality control**Physical/Chemical control**

Color : Light yellow to amber pH: 5.40-5.80

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Microbiological activity

Organisms	Inoculum CFU/ml	Growth
Candida albicans ATCC 10231	50-100	Good growth, white colonies, 24-48hrs incubation at 35°C
Aspergillus brasiliensis ATCC 16404	50-100	Good growth, White mycelium, black spores, 5 days incubation at 25°C
Escherichia coli ATCC 25922	50-100	Moderate-good growth, 24-48hrs incubation at 35°C

Storage and Shelf Life

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.

Reference

1. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
2. Pelczar M. J., Jr., Reid R. D., Chan E. C. S., 1977, Microbiology, 4th Ed., Tata McGraw-Hill Publishing Company Ltd, New Delhi.