



Modified Sabouraud Chloramphenicol Agar

M1681

Intended Use:

A selective medium recommended for the isolation of all species of yeast and dermatophytes.

Composition**

Ingredients	g/ L
Peptone	3.000
Tryptone	3.000
Soya peptone	3.000
Yeast extract	2.000
Malt extract	1.000
Dextrose (Glucose)	19.000
Potassium dihydrogen phosphate	0.500
Disodium hydrogen phosphate	0.500
Chloramphenicol	0.500
Agar	13.000
Final pH (at 25°C)	6.4±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 45.5 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at Δ 118°C for 15 minutes. Avoid overheating. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Δ corresponds to 12 lbs pressure.

Principle And Interpretation

Sabouraud Dextrose Agar is a general purpose medium devised by Sabouraud for the cultivation of dermatophytes (1). The low pH is favorable for the growth of fungi and dermatophytes, and slightly inhibitory to contaminating bacteria from clinical specimens (2,3).

The addition of antibiotics, such as chloramphenicol (a broad spectrum antibiotics) is a modification designed to increase bacterial inhibition (3,4). Peptone, tryptone, yeast extract, soya peptone and malt extract provide nitrogenous compounds. Dextrose provides an energy source. Chloramphenicol inhibits a wide range of gram-positive and gram-negative bacteria making the medium selective for fungi. Phosphate buffers the medium.

Type of specimen

Clinical samples: skin scrapings; Food and dairy samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (7,8). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. 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.Certain pathogenic fungi may show poor growth on this medium.
- 2.Presence of chloramphenicol may inhibit certain pathogenic fungi.
- 3.Overheating of the medium may result in low productivity and softening of gel.
- 4.Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
- 5.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.

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

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.3% Agar gel

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.55% w/v aqueous solution at 25°C. pH : 6.4±0.2

pH

6.20-6.60

Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 48-72 hours (for *Trichophyton* species incubate for 7 days).

Organism	Inoculum (CFU)	Growth	Recovery
<i>Trichophyton rubrum</i> ATCC 28191	50-100	luxuriant	
# <i>Aspergillus brasiliensis</i> ATCC 16404 (00053*)	50-100	luxuriant	
<i>Candida albicans</i> ATCC 10231 (00054*)	50-100	luxuriant	≥50%
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 ⁴	inhibited	0%
<i>Lactobacillus casei</i> ATCC 9595	≥10 ⁴	inhibited	0%
<i>Saccharomyces cerevisiae</i> ATCC 9763 (00058*)	50-100	luxuriant	≥50%

Key : *Corresponding WDCM numbers. # - Formerly known as *Aspergillus niger*

Storage and Shelf Life

Store the dehydrated powder and prepared medium on receipt between 15-30°C in a tightly closed container. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. 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).

Reference

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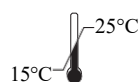
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