

Sabouraud Dextrose Agar with Chloramphenicol

Intended Use

Recommended for the selective cultivation of yeasts and moulds from clinical and non-clinical samples.

Typical Composition (g/litre)

Peptone 5.0; Tryptone 5.0; Dextrose (Glucose) 40.0; Chloramphenicol 0.05.0; Agar 15.0

Mode of Action

Sabouraud Dextrose Agar with Chloramphenicol is recommended for cultivation of yeasts and moulds. Sabouraud described this medium originally for the cultivation of fungi. Tryptone and peptone provide nitrogenous and carbonaceous compounds, long chain amino acids, and other essential growth nutrients. Dextrose provides an energy source. Chloramphenicol inhibits a wide range of Gram-positive and Gram-negative bacteria, which makes the medium selective for fungi. The low pH favors fungal growth and inhibits contaminating bacteria from clinical specimens.

Preparation

Suspend 65.05 grams in 1 liter purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Final pH (at 25°C) 5.6±0.2

Storage

Store between 15-25°C in a tightly closed container. Use before expiry date on the label.

Specimen

Clinical samples - Blood; Food and dairy samples.

Experimental Procedure and Evaluation

For clinical samples, follow appropriate techniques for handling specimens as per established guidelines. For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines. Cultural characteristics observed after an incubation at 20-25°C for 48-72 hours (Incubate for 7 days for Trichophyton species).

Quality Control

Organism	Inoculum	Growth	Recovery
<i>Aspergillus brasiliensis</i> ATCC 13048	50 -100	50 - 100	-
<i>Escherichia coli</i> ATCC 25922	$\geq 10^4$	Inhibited	0 %
<i>Candida albicans</i> ATCC 10231	50 - 100	50 - 100	≥ 50 %
<i>Lactobacillus casei</i> ATCC 334	$\geq 10^4$	Inhibited	0 %
<i>Saccharomyces cerevisiae</i> ATCC 9763	50-100	Good-Luxuriant	≥ 50 %
<i>Trichophyton rubrum</i> ATCC 28191	50 -100	Good-Luxuriant	-

Reference

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
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6. Sabouraud K., 1892, Ann. Dermatol. Syphilol.
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