

Sabouraud Cycloheximide Dextrose Agar

Cat. 1088

For the selective cultivation of yeasts and molds.

Practical information

Applications	Categories
Growth	Yeasts
Growth	Pathogenic fungi

Industry: Cosmetics / Clinical / Food

Principles and uses

Sabouraud Cycloheximide Dextrose Agar is a selective medium that can be used for cultivating yeasts, molds and aciduric microorganisms. It is also used for cultivating pathogenic fungi, particularly those associated with skin infections. This medium is at the same time used for determining the microbial and fungal content of cosmetics and for the mycological evaluation of food.

Dextrose is the fermentable carbohydrate that provides carbon and energy. Peptone mixture is source of nitrogen, vitamins and amino acids. Bacteriological agar is the solidifying agent. The high dextrose concentration and acidic pH make this medium selective for fungi.

This medium is a modification of the Dextrose Agar (Cat. 4513) described by Sabouraud, with the addition of cycloheximide. Cycloheximide is an antibiotic which inhibits saprophytic fungi but allows the growth of pathogenic fungi: *Cryptococcus neoformans*, *Aspergillus fumigatus* and some species of *Candida* (*albicans*, *krusei*).

Formula in g/L

Dextrose	40	Bacteriological agar	15
Cycloheximide	0,4	Peptone mixture	10

Preparation

Suspend 65,4 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Distribute and sterilize in autoclave at 118-121 °C for 15 minutes. AVOID OVERHEATING as it facilitates the hydrolysis of the components and the medium remains soft.

Instructions for use

- For clinical specimens, refer to laboratory procedures for details on specimen collection and handling.
- For cosmetic, food or environmental monitoring samples, follow appropriate standard methods for details on sample collection and preparation according to sample type and geographic location.
- Incubate at 30 °C for 3-7 days.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber, slightly opalescent	5,6±0,2

Microbiological test

Incubation conditions: (30 °C / 3-7 days).

Microorganisms	Specification
<i>Penicillium</i> spp	Light/inhibited growth

Aspergillus brasiliensis ATCC 16404
Candida albicans ATCC 2091
Trichophyton mentagrophytes ATCC 24957
Escherichia coli ATCC 25922

Light/inhibited growth
Good growth
Good growth
Good/moderate growth

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

M.R. Pascual Anderson (1982) Técnicas para Análisis Microbiológico de Alimentos y Bebidas.
Sabouraud R. 1892. Ann. Dermatol. Syphilol. 3:1061.
Jarett, L., and A.C. Sonnenwirth (ed) 1980. Gradwohl's clinical laboratory methods and diagnosis, 8th ed. CV Mosby.
Curry, A. S., J. G. Graf, and G. N. McEwen, Jr. (ed) 1993. CTFA Microbiology Guidelines. The Cosmetic, Toiletry, and Fragrance Association, Washington, D.C.