Corn Meal Agar

Cat. 1164

For chlamydospore production by Candida albicans and for the culture of phytopatological fungi.

Practical information

Aplications	Categories
Growth	Yeasts and molds
Detection	Candida

Industry: Clinical / Food

Principles and uses

Corn Meal Agar is a general-purpose medium used for the cultivation of fungi.

Candida albicans is the etiological agent in Candidiasis, which ranges from a mild to severe skin, nail, and mucous membrane infections. One of the most important differentiating characteristics of C. albicans is its capacity to form chlamydospores on some media. Chlamydospore production is an important characteristic for diagnosis used in the identification of C. albicans.

Corn Meal infusion provides nitrogen, vitamins, minerals and amino acids essential for growth. Bacteriological agar is the solidifying agent.

Corn Meal is valuable for the morphologic differentiation of many yeast-like organisms. It suppresses the vegetative growth of many fungi and at the same time stimulates the sporulation.

Corn Meal Agar allows Candida albicans to produce chlamydospores, which is one of the best criterions for identification. Walker and Huppert reported that the addition of 1% Tween 80 enhanced chlamydospore formation.

Formula in g/L

Bacteriological agar	15	Corn meal infusión	2

Preparation

Suspend 17 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. Sterilize in autoclave at 121ºC for 15 minutes. Cool to 50ºC, mix well and dispense into Petri dishes.

Instructions for use

- For observe the chlamydospore production, streak the Corn Meal plates with the Tween 80 added.
- Place a coverslip over the streak marks.
- Incubate the plates at 25±2 ºC for 48-60 hours.
- Observe the chlamydospore formation in the coverslip under a microscope.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o restsCorn Meal is valuable for the morphologic	Fine powder	Beige	White opaque	6,0 ± 0,2

Microbiological test

Incubation conditions: (25±2 ºC / 48-60 h)

Microrganisms	Specification	Characteristic reaction
Candida albicans ATCC 10231	Good growth	Chlamydospores (+)
Aspergillus brasiliensis ATCC 16404	Good growth	Chlamydospores (-)
Saccharomyces cerevisiae ATCC 9763	Good growth	Chlamydospores (-)

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

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