# Candida Chromogenic Agar

Cat. 1382

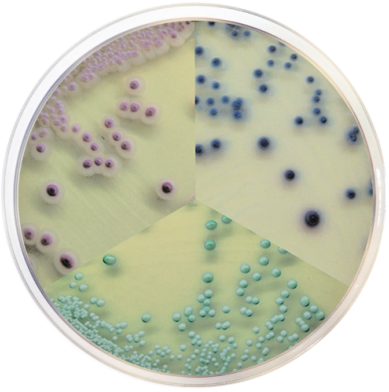
Differential and selective chromogenic medium for the isolation and quick identification of Candida spp. of clinical importance.

## Practical information

| Aplications | Categories |
|---|---|
| Selective isolation | Candida |

Industry: Clinical

CE
IVD



## Principles and uses

Candida Chromogenic Agar is an alternative chromogenic formulation to the traditional media for the detection and isolation of Candida spp.

In the medium Glucose is the fermentable carbohydrate providing carbon and energy. Peptone provides nitrogen, vitamins, minerals and amino acids essential for growth. Chloramphenicol is an antibiotic which aids in isolating pathogenic fungi from heavily contaminated material, as it inhibits most contaminating bacteria. It is a recommended antibiotic for use with media due to its heat stability and wide bacterial spectrum. The chromogenic mixture allows the identification and differentiation of all three species of Candida albicans, Candida tropicalis and Candida krusei by producing easy-to-read results in one plate, since they present different colored colonies, Bacteriological agar is the solidifying agent.

The different species of Candida produce different kinds of infections. Candidiasis, the most common opportunistic fungal infection is frequently caused by Candida albicans. Candida tropicalis and Candida glabrata infections occur less often. Candida spp. are present in clinical specimens due to environmental contamination, colonization, or a disease process. Candida albicans is the most common and is usually susceptible to the antigfungal agents' azole group. However, Candida glabrata, Candida tropicalis and Candida krusei are azole tolerant, thus the rapid identification of the different species of Candida is essential for its correct diagnosis and treatment.

## Formula in g/L

| | | | |
|---|---|---|---|
| Glucose | 20 | Bacteriological agar | 15 |
| Chloramphenicol | 0,5 | Chromogenic mixture | 0,4 |
| Peptone | 10 | | |

## Preparation

Suspend 45,9 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. AVOID OVERHEATING. DO NOT AUTOCLAVE. Dispense into Petri dishes.

## Instructions for use

For clinical diagnosis, use any type of clinical sample (saliva, vagina ... etc.).

- Inoculate on the surface. Parallel striae with the handle or hyssop.
- Incubate in aerobic conditions at 35±2 °C for 24, 48 and 72 hours.
- Reading and interpretation of the results.
- Colonies of Candida albicans are green, those of Candida krusei are purple-pink and those of Candida tropicalis are blue.

## Quality control

| Solubility | Appareance | Color of the dehydrated medium | Color of the prepared medium | Final pH (25ºC) |
|---|---|---|---|---|
| w/o rests | Fine powder | Light beige | Clear amber, slightly opalescent | 6,1±0,2 |

## Microbiological test

Incubation conditions: (35-37 ºC / 24-48-72 h).

| Microorganisms | Specification | Characteristic reaction |
|---|---|---|
| Candida albicans ATCC 10231 | Good growth | Green colony |
| Candida tropicalis ATCC 1369 | Good growth | Blue colony |
| Candida glabrata ATCC 2001 | Good growth | Light white-purple colony |
| Candida krusei ATCC 34135 | Good growth | Purple-pink colony |

## Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

## Bibliography

Sheehan, D.J. et. al.(1999) Current and Emerging Azole Antifungal Agents Clinical Microbiology Reviews, 12 (1): 40-79
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Ibrahim E.H. et al. (2001) The influence of inadequate antimicrobial treatment of bloodstream infections on patient outcomes in the ICU setting. Chest, 118 (1): 146-55