

## CANDIDA CHROMOGENIC AGAR

**CAT Nº: 1382**

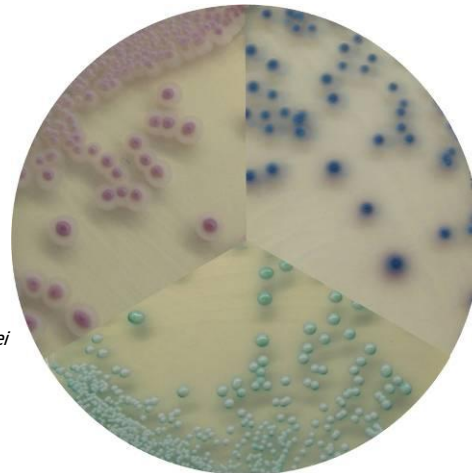
Differential and selective chromogenic medium for the isolation and quick identification of *Candida spp* of clinical importance

### FORMULA IN g/l

Glucose	20.00	Chromogenic Mixture	0.40
Peptone	10.00	Bacteriological Agar	15.00
Chloramphenicol	0.50		

**Final pH 6.1 ± 0.2 at 25°C**

*Candida krusei*  
ATCC 34135



*Candida tropicalis*  
ATCC 1369

*Candida albicans*  
ATCC 10231

### 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. The prepared medium should be stored at 8-15°C. The color is clear amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and light beige in color. If there are any physical changes, discard the medium.

### USES

CANDIDA CHROMOGENIC AGAR is an alternative chromogenic formulation to the traditional media for the detection and isolation of *Candida spp*.

In this chromogenic medium, the three different species of *Candida albicans*, *Candida tropicalis* and *Candida krusei* can be differentiated due to the chromogenic substrates present within the medium. Candida Chromogenic Agar allows the easy and rapid identification and differentiation of all 3 species by producing easy-to-read results in one plate, since they present different colored colonies.

Colonies of *Candida albicans* are green, those of *Candida krusei* are purple-pink and those of *Candida tropicalis* are blue.

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 3 species 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 antifungal 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.

## MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30-37°C and observed after 24, 48 and 72 hours.

Microorganisms	Growth	Colony Color
<i>Candida tropicalis</i> ATCC 1369	Good	Blue
<i>Candida albicans</i> ATCC 10231	Good	Green
<i>Candida krusei</i> ATCC 34135	Good	Purple-Pink
<i>Candida parasilosis</i> ATCC 22019	Good	Light White – Purple
<i>Candida glabrata</i> ATCC 2001	Good	Light White - Purple

## BIBLIOGRAPHY

Sheehan, D.J. et. al.(1999) Current and Emerging Azole Antifungal Agents Clinical Microbiology Reviews, 12 (1): 40-79

Odds, F.C. (1988) Candida and candidosis, 2nd ed, Baillière Tindall, London, England.

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



## STORAGE

Once opened keep powdered medium closed to avoid hydration.

