



## HiCrome™ Candida Differential Agar

M1297A

### Intended Use

HiCrome™ Candida Differential Agar is recommended for rapid isolation and identification of *Candida* species from mixed cultures in clinical and non-clinical samples.

### Composition\*\*

Ingredients	Gms / Litre
Peptone, special	15.000
Yeast extract	4.000
Dipotassium hydrogen phosphate	1.000
Chromogenic mixture	7.220
Chloramphenicol	0.500
Agar	15.000
Final pH ( at 25°C)	6.3±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 42.72 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

### Principle And Interpretation

Perry and Miller (3) reported that *Candida albicans* produces an enzyme b -N-acetyl- galactosaminidase and according to Rousselle et al (4) incorporation of chromogenic or fluorogenic hexosaminidase substrates into the growth medium helps in identification of *C.albicans* isolates directly on primary isolation. HiCrome™ Candida Differential Agar is a selective and differential medium, which facilitates rapid isolation of yeasts from mixed cultures and allows differentiation of *Candida* species namely *C.albicans*, *C.krusei*, *C.tropicalis* and *C.glabrata* on the basis of colouration and colony morphology. On this medium results are obtained within 48 hours and it is useful for the rapid and presumptive identification of common yeasts in Mycology and Clinical Microbiology Laboratory.

Peptone special and yeast extract provides nitrogenous, carbonaceous compounds and other essential growth nutrients. Phosphate buffers the medium well. Chloramphenicol suppresses the accompanying bacterial flora. *C.albicans* appear as light green coloured smooth colonies, *C.tropicalis* appear as blue to metallic blue coloured raised colonies. *C.glabrata* colonies appear as cream to white smooth colonies, while *C.krusei* appear as purple fuzzy colonies.

### Type of specimen

Clinical samples - skin scrapings, urine.

### Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4).

After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations

1. Variations in colour intensity may be observed for *Candida* isolates depending on the presence of enzymes.
2. Other *Candida* species may produce light mauve coloured colonies which is also produced by other yeast cells. This must be confirmed by further biochemical tests.
3. Other filamentous fungi also exhibit colour on this medium.

## Performance And Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

### Quality Control

#### Appearance

Cream to beige homogeneous free flowing powder

#### Gelling

Firm, comparable with 1.5% Agar gel

#### Colour and Clarity of prepared medium

Light amber coloured, clear to slightly opalescent gel forms in Petri plates

#### Reaction

Reaction of 4.27% w/v aqueous solution at 25°C. pH : 6.3±0.2

#### pH

6.10-6.50

#### Cultural Response

M1297A: Cultural characteristics observed after an incubation at 25-30°C for 40-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony
<i>Candida albicans</i> ATCC 10231 (00054*)	50-100	good-luxuriant	≥50%	light green
<i>Candida glabrata</i> ATCC 15126	50-100	good-luxuriant	≥50%	cream to white
<i>Teunomyces krusei</i> ATCC 24408	50-100	good-luxuriant	≥50%	purple, fuzzy
<i>Candida tropicalis</i> ATCC 750	50-100	good-luxuriant	≥50%	blue to purple
<i>Candida kefyr</i> ATCC 66058	50-100	good-luxuriant	≥50%	cream to white with slight purple centre
<i>Candida guilliermondii</i> ATCC 6260	50-100	good-luxuriant	≥50%	violet pink
<i>Candida utilis</i> ATCC 9950	50-100	good-luxuriant	≥50%	pale pink to pinkish purple
<i>Candida parapsilosis</i> ATCC 22019	50-100	good-luxuriant	≥50%	white to cream
<i>Candida membranifaciens</i> ATCC 20137	50-100	good-luxuriant	≥50%	white to cream
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 <sup>4</sup>	inhibited	0%	
<i>Staphylococcus aureus</i> ATCC 25923 (00034*)	≥10 <sup>4</sup>	inhibited	0%	

Key : \*Corresponding WDCM numbers. # - Formerly known as *Candida krusei*

### Storage and Shelf life

Store dehydrated powder and prepared medium at 2-8°C. Use before expiry period on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Use before expiry date on the label. Product performance is best if used within stated expiry period.

### Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

## References

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
3. Perry J. L. and Miller G. R., 1987, J. Clin. Microbiol., 25: 2424 -2425.
4. Rousselle P., Freydiere A., Couillerot P., de Montclos H. and Gille Y., 1994, J. Clin. Microbiol. 32:3034-3036.

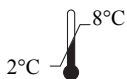
Revision : 04/ 2019



In vitro diagnostic medical device



CE Marking



Storage temperature



Do not use if package is damaged



HiMedia Laboratories Pvt. Limited,  
23 Vadhani Industrial Estate,  
LBS Marg, Mumbai-86, MS, India



CE Partner 4U ,Esdoornlaan 13, 3951  
DB Maarn The Netherlands,  
[www.cepartner4u.eu](http://www.cepartner4u.eu)

### Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.