

CHROMagar™ Candida Plus

Instructions For Use
For Research Use Only (RUO)
Not for use in diagnostic procedures.

REFERENCES

Pack Size	Ordering References	Weight
5000 mL = 250 Tests of 20 mL	CA242	Weight: 254.5 g
25 L = 1250 Tests of 20 mL	CA243-25	Weight: 1 272.5 g
10 kg = 9 800 Tests of 20 mL	CA243-10KG	Weight: 10 kg

MEDIUM PURPOSE

Chromogenic medium for detection and differentiation of major clinical *Candida* species, including *C. auris*

The *Candida* are yeasts involved in various infections called Candidiasis, which can affect damaged skin, respiratory tract, digestive and urogenital systems. These Candidiasis can be severe with significant morbidity for nosocomial infections or in immunocompromised patients. Although *C. albicans* is still the main species involved, the use of antifungal agents has given rise to other species such as *C. tropicalis*, *C. krusei* and *C. glabrata*.

In 2016, The World Health Organization added to this list *C. auris*, with a prevalence of over 90 % resistant to fluconazole. In addition, some strains are multidrug resistant to amphotericin B, voriconazole, and/or echinocandins. It is recommended to carry out an early diagnosis of *Candida* in order to provide specific treatment as quickly as possible. *Candida* can be isolated by swabbing the skin, throat, rectum, or urogenital tract.

CHROMagar™ Candida Plus is the first chromogenic isolation medium to detect and differentiate *C. auris* in addition to other major clinical *Candida* species such as *C. albicans*, *C. tropicalis*, *C. glabrata* or *C. krusei*.

COMPOSITION

The product is composed of a powder base.

Product	=	Base
Total g/L		50.9 g/L
Composition g/L		Agar 15.0 Peptones 11.0 Chromogenic and selective mix 24.9
Aspect		Powder Form
STORAGE		15-30 °C
FINAL MEDIA pH		6.1 +/- 0.2

Need some Technical Documents?

Available for download on www.CHROMagar.com

- Certificate of Analysis (CoA) --> One per Lot
- Material Safety Data Sheet (MSDS)

PREPARATION (Calculation for 1 L)

Step 1

Preparation

- Suspend CHROMagar™ Candida Plus in the proportion of 50.9 g into 1 L of purified water.
- Stir until agar is well thickened.
- Heat and bring to boiling (100 °C) while swirling or stirring regularly. DO NOT HEAT TO MORE THAN 100 °C. DO NOT AUTOCLAVE AT 121 °C.

Warning: If using an autoclave, do so without pressure.

Advice: For the 100 °C heating step, mixture may also be brought to a boil in a microwave oven: after initial boiling, remove from oven, stir gently, then return to oven for short repeated bursts of heating until complete fusion of the agar grains has taken place (large bubbles replacing foam).

Step 2

Pouring

- Cool in a water bath to 45-50 °C, swirling or stirring gently.
- Pour medium into sterile Petri dishes.
- Let it solidify and dry.

Storage

- Store in the dark before use.
- Prepared media plates can be kept for one day at room temperature.
- Plates can be stored for up to one month under refrigeration (2/8 °C) if properly prepared and protected from light and dehydration.

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SPECIMEN COLLECTION AND HANDLING

CHROMagar™ Candida Plus can be used with the following specimens: Skin, throat, armpits, urogenital tract and rectal swab.

Sampling and transport equipment must be used in accordance with the recommendations of their suppliers for the conservation of *Candida* strains.

MATERIAL REQUIRED BUT NOT PROVIDED

Standard microbiological laboratory material for culture media preparation, control, streaking, incubation and waste disposal.

INOCULATION

Related samples are inoculated by direct streaking on the plate.

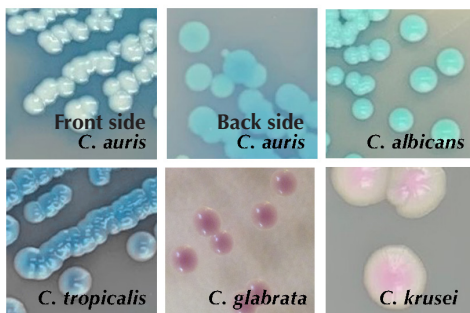
- If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.
- Streak sample onto plate.
- Incubate in aerobic conditions at 30-37 °C for 36-48 hours.

INTERPRETATION

Qualitative reading and interpretation of the Petri dishes

Microorganism	Typical colony appearance
<i>C. albicans</i>	→ green-blue
<i>C. auris</i>	→ light blue with blue halo, blue from the back side of the plate
<i>C. tropicalis</i>	→ metallic blue with pink halo
<i>C. krusei</i>	→ pink and fuzzy
<i>C. glabrata</i>	→ mauve
Bacteria	→ mostly inhibited

Typical colony appearance



The pictures shown are not contractual.

PERFORMANCE

In the following study, 23 surveillance samples were tested and read after 48 h incubation at 37 °C. This result is indicated for *Candida* species: *C. albicans*, *C. tropicalis*, *C. glabrata*, *C. krusei* and *C. auris*.

	CHROMagar™ Candida Plus
Sensitivity	≈ 100 % *
Specificity	≈ 100 % *

* Data obtained from the study: «Evaluation of a novel chromogenic medium for *Candida* spp. identification and comparison with CHROMagar™ Candida for the detection of *Candida auris* in surveillance samples» Juan V. Mulet *et al.*, 2020.

LIMITATIONS AND COMPLEMENTARY TESTS

- The final identification must be confirmed by biochemical tests or by mass spectrophotometry (eg. MALDI-TOF). They can be done directly from the suspicious colonies observed on the medium.

QUALITY CONTROL

Please perform Quality Control according to the use of the medium and the local QC regulations and norms.

Good preparation of the medium can be tested, isolating the following ATCC strains:

Microorganism	Typical colony appearance
<i>C. albicans</i> ATCC® 60193	→ green-blue
<i>C. auris</i> ATCC® MYA-5001	→ light blue with blue halo, blue from the back side of the plate
<i>C. tropicalis</i> ATCC® 1369	→ metallic blue with pink halo
<i>C. krusei</i> ATCC® 14243	→ pink and fuzzy
<i>C. glabrata</i> ATCC® 2001	→ mauve
<i>E. coli</i> ATCC® 25922	→ inhibited

WARNINGS AND PRECAUTIONS

- For Research Use Only (RUO). Not for use in diagnostic procedures.
- This laboratory product should be used only by trained personnel (healthcare professional, etc). Wear appropriate protective clothing, gloves and eye/face protection and handle appropriately with procedures and good laboratory practices.
- Use of the medium may be difficult for people who have problems recognising colours.
- Culture media should not be used as manufacturing material or components.
- Do not ingest or inhale the product.
- Do not use the product after the expiry date.
- Do not use the product if it shows any evidence of contamination or any sign of deterioration (compacted powder, color change, ...).
- Do not use the product if the packaging is damaged.
- Any change or modification in the production procedure may affect the results.
- Any change or modification of the required storage temperature may affect the performance of the product.
- Unappropriate storage may affect the shelf life of the product.
- Recap the bottles tightly after each preparation and keep them in a low humidity environment, protected from moisture and light.
- Do not re-use the culture medium poured into a Petri dish after a first use.
- After opening the bottles and with an appropriate conservation, open bottles can be used under the same conditions until each product's expiry date.
- Reading and interpretation should be performed using isolated colonies.
- Interpretation of the test results should be made taking into consideration colonial and microscopic morphology and if necessary, the results of any other tests performed.

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ENGLISH

Instructions For Use

- Laboratory, chemical or biohazardous wastes must be handled and discarded in accordance with all local and national regulations.
- For hazard and precaution recommendations related to some chemical components in this medium, please refer to the pictogram(s) mentioned on the labels. The Safety Data Sheet (SDS) is available on www.chromagar.com
- Any incident or complaint related to the environment must be declared to the manufacturer at the following email address: chromagar@chromagar.com
- Any serious incident occurring in connection with the environment must be declared to the competent authorities and to the manufacturer at the following email address: chromagar@chromagar.com

DISPOSAL OF WASTE









After use, all plates and any other contaminated materials must be sterilized or disposed of by appropriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at 121 °C for at least 20 minutes.

LITERATURE REFERENCES

Please refer to our website page «Publications» for scientific publications about this particular product.

Web link: <http://www.chromagar.com/publication.php>

IFU/LABEL INDEX

-  Catalogue reference
-  Consult instructions for use
-  Quantity of powder sufficient for X liters of media
-  Expiry date
-  Required storage temperature
-  Store away from humidity
-  Protect from light
-  Manufacturer


REVISION HISTORY

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CHROMagar™
The Chromogenic Media Pioneer

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