

CHROMagar™ C.difficile

Instructions For Use

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

ENGLISH

Instructions For Use

MEDIUM PURPOSE

Chromogenic medium for detection of *Clostridium difficile*.

COMPOSITION

The product is composed of a powder base (B) and 1 supplement (S).

Product	=	Base (B)	+	Supplement (S)
Total g/L		54.7 g/L		325 mg/L
Composition g/L		Agar 15.0 Peptones and yeast extract 25.0 Salts 9.0 Growth factors 4.0 Chromogenic mix 1.7		Selective mix
Aspect		Powder Form		Powder form
STORAGE		15/30°C		2/8°C
FINAL MEDIA pH		7.8 +/- 0.2		

PREPARATION (Calculation for 1L)

Step 1

Preparation of the base
CHROMagar
C.difficile base (B)

- Disperse slowly 54.7g of powder base in 1L of purified water.
- Stir until agar is well thickened.
- Heat and bring to boil (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 1: 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).

- Cool in a water bath to 45-50°C. Swirl or stir gently to homogenize.

Step 2

Preparation of the
Supplement (S)
and addition to the
prepared base (B)

- Aseptically rehydrate 325 mg of CHROMagar C.difficile supplement, ref CD122(S), with 3ml of sterile water.
- Swirl well until complete dissolution.
- Filter sterilise at 0.45µ.
- Aseptically add the 3 ml of the reconstituted CHROMagar C.difficile supplement to the CHROMagar C.difficile base cooled at 45-50°C.
- Swirl gently to homogenize.

Final Media	HELPING CALCULATION
1 L	use 325 mg
5 L	use 1.63 gr
1 vial --> qsf 5 liters	

Step 3

Pour plates

- Pour 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.
Advice 2: Plates can be stored for up to two months under refrigeration (2/8°C) if properly prepared and protected from light and dehydration.

INOCULATION

- If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.
- Streak sample onto plate.
- Incubate in anaerobic conditions at 37°C for 24 hours.

Typical Samples

Stool, Environmental

Possible enrichment step
Direct streaking

INTERPRETATION

Microorganism	Typical colony appearance
<i>C.difficile</i>	→ colourless and fluorescent
Most of <i>other bacteria</i>	→ inhibited

Note: fluorescence under UV lamp (365nm.)

Typical colony appearance



The pictures shown are not contractual.

LIMITATIONS

- A confirmation test is required for a final identification as *C.difficile*.
- Research of toxins A and/or B can be directly performed by a classical immunochromatography test.

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 ATCC strains below:

Microorganism	Typical colony appearance
<i>C.difficile</i> ATCC® 43255	→ colourless and fluorescent
<i>C.perfringens</i> ATCC® 13124	→ inhibited
<i>E.faecalis</i> ATCC® 29212	→ inhibited
<i>E.coli</i> ATCC® 25922	→ inhibited
<i>C.albicans</i> ATCC® 10231	→ inhibited

WARNINGS

- Do not use plates if they show any evidence of contamination or any sign of deterioration.
- Do not use the product beyond its expiry date or if product shows any evidence of contamination or any sign of deterioration.
- For Laboratory use. This laboratory product should be used only by trained personnel in compliance with good laboratory practices.
- Any change or modification in the 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.
- For a good microbial detection: collection and transport of specimen should be well handled and adapted to the particular specimen according to good laboratory practices.

DISPOSAL OF WASTE





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

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

-  Quantity of powder sufficient for X liters of media
-  Expiry date
-  Required storage temperature
-  Store away from humidity

Need some Technical Documents?

Available for download on www.CHROMagar.com

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

Pack Size

5000 ml

250 Tests of 20ml

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Ordering References

CD122

Base

= CD122(B)
Weight: 273.5 gr

+

Supplement

CD122(S)
Weight: 1.63 gr