

CHROMagar™ **Campylobacter**

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

ENGLISH

Instructions For Use

REFERENCES

Pack Size	Ordering References	Base (B)	Supplement (S)
5000 mL <small>250 Tests of 20 mL</small>	CP572	CP572(B) Weight: 256 g	CP572(S) Weight: 1.05 g
25 L <small>1250 Tests of 20 mL</small>	CP573-25	CP573-25(B) Weight: 1280 g	CP573-25(S) Weight: 5.25 g

MEDIUM PURPOSE

Chromogenic medium for detection, differentiation and enumeration of thermotolerant *Campylobacter*

"*Campylobacter* bacteria are a major cause of foodborne diarrhoeal illness in humans and are the most common bacteria that cause gastroenteritis worldwide. In developed and developing countries, they cause more cases of diarrhoea than foodborne *Salmonella*. The high incidence of *Campylobacter* diarrhoea, as well as its duration and possible sequelae, makes it highly important from a socio-economic perspective. In developing countries, *Campylobacter* infections in children under the age of two years are especially frequent, sometimes resulting in death." World Health Organisation (WHO) – fact sheet n° 255

In clinical, CHROMagar™ *Campylobacter* allows the detection of thermotolerant *Campylobacter* in faeces. In the food industry and veterinary field, according to the ISO 10272-1 it can be used as second selective culture media. Samples are isolated directly on the plate.

COMPOSITION

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

Product	Base (B)	Supplement (S)
Total g/L	51.2 g/L	0.21 g/L
Composition g/L	Agar 15.0 Peptone and yeast extract 25.0 Salts 9.0 Chromogenic and selective mix 2.2	Chromogenic and selective mix 0.21
Aspect	Powder Form	Powder Form
STORAGE	15/30 °C	2/8 °C
FINAL MEDIA pH	7.4 +/- 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 1L)

Step 1

Preparation of the base CHROMagar™ *Campylobacter* (B)

- Disperse slowly 51.2 g of powder base in 1 L 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 1: 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)

- In a transparent vessel, add 210 mg of Supplement (S) in 10 mL of purified water.
- Swirl well until complete dissolution.
- Filter to sterilize at 0.45 µm.

Final Media **HELPING CALCULATION**

1 L	0.21 g into 10 mL of purified water
5 L	1.05 g into 50 mL of purified water

Step 3

Base + S

- Add the 10 mL of the supplement solution to the melted base (Step1) at 45-50 °C.
- Swirl or stir gently to homogenize.

Step 4

Pouring

- Pour into sterile Petri dishes.
- Let it solidify and dry (longer than usual).

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 1 month under refrigeration (2/8 °C) if properly prepared and protected from light and dehydration.

Advice 2: If not fully used, rehydrated CHROMagar™ *Campylobacter* supplement can be stored one month at 2-8 °C or at -20 °C.

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SPECIMEN COLLECTION AND HANDLING

CHROMagar™ Campylobacter can be used with the following specimens:

- In clinical field : stools.
- In food industry and veterinary field : recreational water, pets, poultry, dairy and powder milk.

Sampling and transport equipment must be used in accordance with the recommendations of their suppliers for the conservation of *Campylobacter* strain

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, as well as prior appropriate enrichment step.

- If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.
- Streak sample onto plate.
- Incubate at 42 °C for 36 - 48 h in micro-aerophilic conditions.

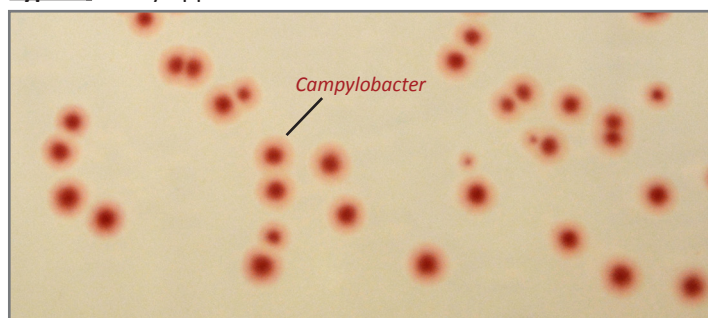
Advice 3: A candle jar can be used for creating a microaerophilic atmosphere.

INTERPRETATION

Qualitative reading and interpretation of the petri dishes

Microorganism	Typical colony appearance
<i>Campylobacter coli</i>	→ red
<i>Campylobacter jejuni</i>	→ red
<i>Campylobacter lari</i>	→ red
Most other microorganisms	→ blue or inhibited

Typical colony appearance



The pictures shown are not contractual

PERFORMANCE

In the following study, 100 stools were tested, being positive 26 after 24-72 h incubation at 42 °C in an micro-aerophilic atmosphere.

	CHROMagar™ Campylobacter	Reference Method (Karmali)
Sensitivity	100 % *	100 %
Specificity	94 % *	57 %

* Data obtained from the study «Evaluation comparative de trois milieux de culture sélectifs; CHROMagar™ Campylobacter (CHROMagar™), Karmali (Oxoid) et Campyloset (bioMérieux), pour la recherche des Campylobacter thermotolérants à partir des échantillons fécaux» D. Bensersa-Nedjar and Al, Ricai, 2016

LIMITATIONS AND COMPLEMENTARY TESTS

- Final identification may require complementary tests such as hippurate hydrolysis and latex agglutination (Microgen), directly from the plate.
- Other final identification tests can be done from a subculture on blood agar (oxydase, acetate test, ...).
- *C. fetus* might not grow in this 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	Recovery
<i>C. jejuni</i> ATCC® 33291	red	> 70 %
<i>C. coli</i> ATCC® 33559	red	> 80 %
<i>C. lari</i> ATCC® 35221	red	> 80 %
<i>E. faecalis</i> ATCC® 29212	inhibited	--
<i>C. albicans</i> ATCC® 60193	inhibited	--
<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/vials tightly after each preparation and keep them in a low humidity environment, protected from moisture and light.
- Do not use the culture medium poured into a petri dish after a first use.
- After opening the bottles and with an appropriate conversation, open bottles can be used under the same conditions until each product's expiry date.
- Reading and interpretation should be performed using isolated colonies.
- Some precipitates may be observed in the agar but these do not affect the performance of the product.
- 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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- 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 Material Safety Data Sheet (MSDS) 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

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CHROMagar™
The Chromogenic Media Pioneer

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