CHROMagar™ AOLA

according to ISO 11290

Instructions For Use

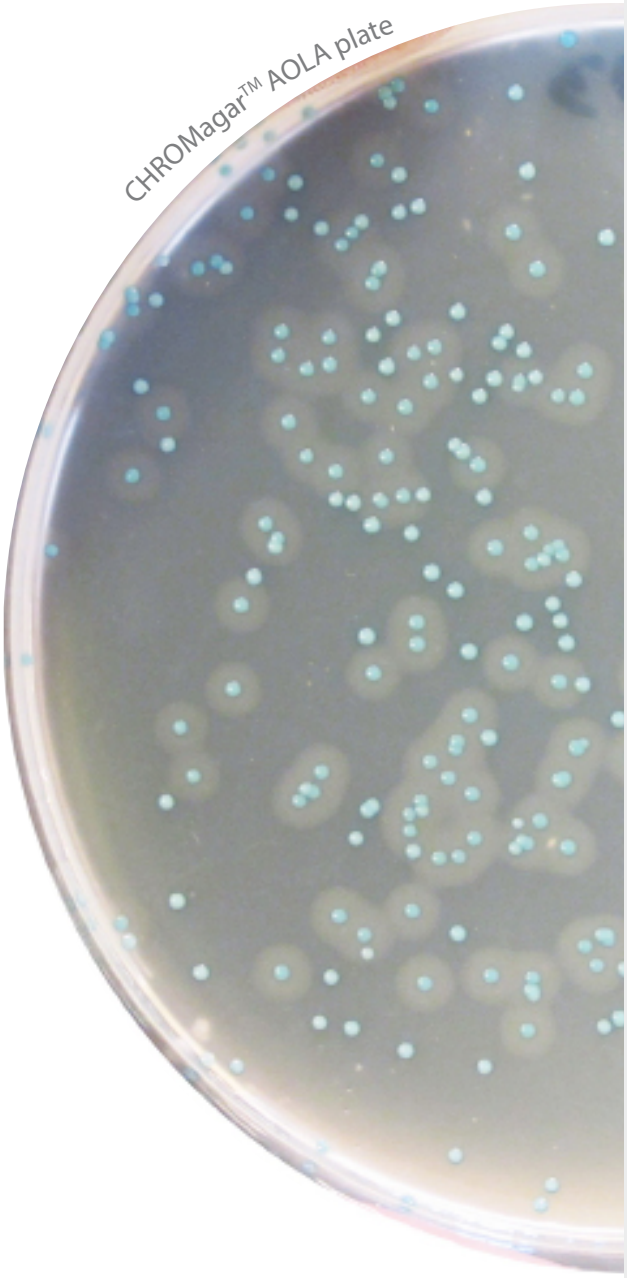
Available in several languages

NT-EXT-065

Version **6.0**

Click below for:

ENGLISH



CHROMagar™ The Chromogenic Media Pioneer

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MEDIUM PURPOSE

Chromogenic medium for detection, enumeration and isolation of *Listeria monocytogenes* and *Listeria* spp.

Listeria monocytogenes is a widespread bacteria, present in the soil, sewage or faecal matter. Its ability to form listerial biofilms on contact surfaces makes it difficult to eliminate. This pathogen can cause serious food poisoning and is therefore frequently a microbial Q.C. target in food processing facilities to avoid food contamination. Contamination can occur at all steps of the food manufacturing chain from raw materials to place of consumption.

COMPOSITION

The product is composed of a powder base (B) and 3 supplements.

Product =	Base (B)	+ Supplement E1	+ Supplement E2	+ Supplement S
Total g/L	70.6 g/L	2.0 g/L	7.0 g/L	0.08 g/L
Composition g/L	Agar 15.0 Peptone and yeast extract 34.0 Salts & growth factors 21.0 Chromogenic mix 0.6	Enrichment mix 2.0	Enrichment mix 7.0	Selective mix 0.08
Aspect	Powder Form	Liquid Form	Powder Form	Powder Form
STORAGE	**15-30 °C**	**2-8 °C**	**15-30 °C**	**2-8 °C**
FINAL MEDIA pH	7.2 +/- 0.2			

PREPARATION **(Calculation for 1 L)**

Step 1
Preparation of the base (B)

- Disperse slowly 70.6 g of powder base to 940 mL of purified water.
- Stir until agar is well homogenized.
- Heat at 121 °C +/-1 °C during 15 min.
- Cool in a water bath at 45-50 °C +/-2 °C.

Final Media	HELPING CALCULATION
25 L	1765 g in 23,5 L of purified water

Step 2
Preparation of supplements **E1 and E2**

- In two different vessels containing 25 mL of purified water, add respectively 2 g of supplement E1 and 7 g of supplement E2.
- Agitate both by magnetic stirring at least 30 min at high speed (1200 rpm)
- Heat at 121 °C +/-1 °C during 15 min.
- Cool in a water bath at 45-50 °C +/-2 °C.
- Aseptically mix both and agitate by magnetic stirring at least 30 min at high speed (1200 rpm) until obtaining a creamy homogeneous suspension.

Final Media	HELPING CALCULATION	
25 L	50 g in 625 mL of purified water	E1
25 L	175 g in 625 mL of purified water	E2

Step 3
Preparation of supplement **S**

- Add 80 mg of supplement (S) to 10 mL of purified water.
- Stir until complete dissolution. Filter at 0.45 µm

Aspect of the prepared supplement: colourless, translucent.

Final Media	HELPING CALCULATION	
25 L	2 g in 250 ml of purified water	S

Step 4
Final Mixing

- Aseptically add the 10 mL of supplement (S) and the 50 mL of the supplement (E1 + E2) into the melted base cooled at 45-50 °C +/-2 °C.
- Swirl gently to homogenize.

Step 5
Pouring

- Pour immediately 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.

INOCULATION

Related samples can be processed by direct streaking on the plate, as well as prior enrichment.

- If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.
- Streak sample onto plate.
- Incubate in aerobic conditions at 37 °C for 24 h ± 2 h. If suspected colonies of *L. monocytogenes* or *Listeria* spp. are not visible at 24 h, continue incubation until 48 h ± 2 h.

Typical Samples

All types of samples

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Appropriate enrichment step in broth (Half-Fraser/Fraser) (ISO 11290) + Direct streaking or spreading technique

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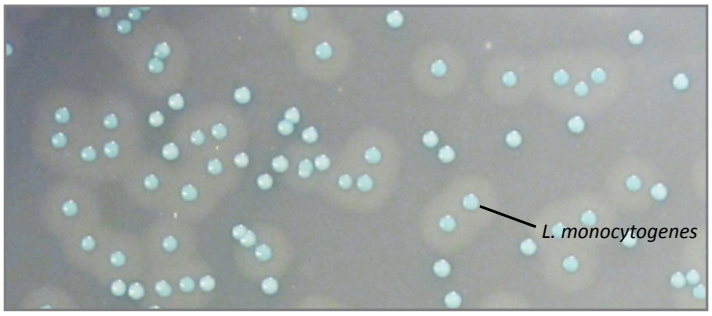
INTERPRETATION

Microorganism	Typical colony appearance
L. monocytogenes	→ blue colonies with white halo
L. innocua	→ blue colonies without white halo
Other microorganisms	→ blue, colourless or inhibited

Typical colony appearance



PERFORMANCE & LIMITATIONS

• Some strains of *L. ivanovii,* generally appearing as very small colonies, may also give blue colonies with white halo and are distinguishable with further identification tests.
• Positive results should be confirmed with tests as described in the ISO 11290 norm.

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
L. monocytogenes ATCC® 13932 (WDCM 00021)	→ blue with halo
L. monocytogenes ATCC® 35152 (WDCM 00109)	→ blue with halo
L. innocua ATCC® 33090 (WDCM 00017)	→ blue without halo
E. faecalis ATCC® 29212 (WDCM 00087)	→ inhibited
E. coli ATCC® 25922 (WDCM 00013)	→ 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.
• Inappropriate 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.
• 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

REF 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

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		Ordering References		Base (B)		Supplement 1 (E1)		Supplement 2 (E2)		Supplement (S)
10 Kg	=	AO883-10Kg	=	AO883-10Kg/B	+	AO883-140/E1	+	AO883-140/E2	+	AO883-140/S

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