

BacterLab Division



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CHROMOGENIC AGAR MEDIUM

BacterChrom™ Identification Listeria

Ready-to-use chromogenic medium on 90mm plates for the confirmation of *L. monocytogenes* species from suspect colonies

Code: 01030



1. INTENDED USE

BacterChrom™ Identification Listeria is a selective chromogenic medium designed for the confirmation and differentiation of *Listeria monocytogenes* species from colonies isolated on **BacterChrom™ Listeria**. This medium supports microbiological testing in food safety and environmental monitoring by distinguishing pathogenic *L. monocytogenes* from other *Listeria* species, such as *L. ivanovii* and *L. innocua*.

This medium is intended for use in food processing facilities, helping to prevent contamination across various stages of the production chain.

The packaging with semi-permeable Cellophane film helps balance the humidity of the environment during storage.

2. PRINCIPLES

BacterChrom™ Identification Listeria incorporates chromogenic substrates that react with specific enzymatic activities of *Listeria monocytogenes*, producing distinct colony appearances. The selective agents inhibit the growth of non-target organisms, ensuring specificity. This allows for a rapid presumptive identification process, simplifying laboratory workflows and supporting food safety protocols.

3. TYPICAL COMPOSITION

For 1 liter of medium

Peptone and yeast extract	23,0 g
Chromogenic mix	8,8 g
Sodium chloride	5,5 g
Agar	15,0 g
Selective and enrichment mix	6,5 g

pH of the ready-to-use medium at 25°C: $6,6 \pm 0,2$

4. PREPARATION

The environmental plates are ready-to-use, no preparation required.

5. INSTRUCTIONS FOR USE

- Allow to warm to room temperature before inoculation, dry the plates in an incubator with the covers partially removed.
- Select typical isolated colonies from **BacterChrom™ Identification Listeria**, characterized by blue colonies with a white halo after 24 ± 2 hours of incubation at $37 \text{ °C} \pm 1 \text{ °C}$.
- Do a zigzag streak on the surface of the medium.
- Incubate 18 hours to 24 hours at $37 \text{ °C} \pm 1 \text{ °C}$.

6. RESULTS

Qualitative reading and interpretation of the plates:

Microorganism	Typical colony appearance
<i>L. monocytogenes</i>	pink surrounded by a white halo
<i>L. ivanovii</i>	colourless surrounded by a white halo
<i>L. innocua</i>	pink without halo
<i>L. seeligeri</i>	colorless without halo
<i>B. cereus</i>	colorless with irregular edge (intense halo)

7. QUALITY CONTROL

BacterLab ensures the quality of each product batch by testing with ATCC reference strains.

Reference strains	Incubation conditions	Expected results
<i>L. monocytogenes</i> ATCC 13932	Incubate for 18 – 24 hours at 35 – 37 °C	pink with halo colonies
<i>L. innocua</i> ATCC 33091		pink without halo colonies
<i>L. ivanovii</i> ATCC 19119		colorless with halo colonies
<i>B. cereus</i> ATCC 10876		colorless with big halo colonies

8. STORAGE AND TRANSPORT CONDITIONS

- Storage: 2 – 8°C.
- Transportation: Ambient temperature.

9. PACKAGING

- Packaging: 10 plates/ box or as per customer request.

10. SHELF LIFE

- Expiration Date: 03 months from the manufacturing date.

11. BIBLIOGRAPHY

- CHROMagar, 2021. *CHROMagar™ Technical Data Sheet: NT-EXT-026 V9.1 NOTICE IDLIST*. Available at: <https://www.chromagar.com/wp-content/uploads/2021/11/NT-EXT-026-V9.1-NOTICE-IDLIST.pdf>.