

CONFIRM' *L. MONO* BROTH

CONFIRMATION OF *LISTERIA MONOCYTOGENES*

1 INTENDED USE

The **CONFIRM' *L. mono* broth**[®] is a liquid media destined for the confirmation of the genus & species *Listeria monocytogenes*, isolated from a single characteristic colony from **COMPASS[®] *Listeria* Agar**, within the context of the alternative methods for the detection and enumeration of *Listeria monocytogenes* certified NF VALIDATION.



BK 23/02-11/02, BKR 23/05-12/07,
METHODES ALTERNATIVES D'ANALYSE
POUR L'AGROALIMENTAIRE

Certifié par AFNOR Certification <http://nf-validation.afnor.org/>

2 PRINCIPLES

The **COMPASS[®] *Listeria*** method allows the detection of *Listeria monocytogenes* by the formation of blue to blue-green colonies surrounded by an opaque halo. Certain strains of *Listeria ivanovii* can present the same characteristics, but usually of a much smaller size. These two species must be differentiated by confirmation tests.

The **CONFIRM' *L. mono* broth**[®] is based on the correlation between the pathogenicity and the fermentation of rhamnose leading to an acidification with bacteria belonging to the genus *Listeria* as demonstrated by Groves & Welshimer in 1977.

CONFIRM' *L. mono* broth[®] therefore permits a distinction between *Listeria monocytogenes* (rhamnose positive) from *Listeria ivanovii* (rhamnose negative).

3 TYPICAL COMPOSITION

The composition can be adjusted in order to obtain optimal performance.

For 1 liter of media :

- Special mixture of peptones..... 7,00 g
- Sodium chloride 5,00 g
- Rhamnose..... 5,00 g
- Colored indicator 0,05 g

pH of the ready-to-use at 25°C : 6,6 ± 0,2.

4 INSTRUCTIONS FOR USE

- Sample a characteristic colony (blue, surrounded by an opaque halo) from **COMPASS[®] *Listeria* Agar**.
- Inoculate into a tube of CONFIRM' *L. mono* broth.
- Incubate at 37 ± 1 °C for 6 to 24 hours.

- ✓ **Inoculation :**
One characteristic colony
- ✓ **Incubation :**
6 to 24h at 37 ± 1 °C

5 RESULTS

The demonstration of rhamnose fermentation is assured by the color change to yellow of the broth culture, due to the fall in pH.

Any tube turning yellow after the inoculation as described confirms the presence of *Listeria monocytogenes*.

See Annex 1 : PHOTO SUPPORT

NOTES

A negative result or a brown coloration after 6 hours is considered discordant. The laboratory should proceed with supplementary tests to verify the validity of the results being given, for example by prolonging the incubation for up to 24 hours.

In the event of a doubtful reaction after 24 hours of incubation, it is recommended to initiate another type of confirmation test (biochemical gallery, for example).

6 QUALITY CONTROL

Prepared media : clear, violet liquid.

Typical cultural response after 6 hours of incubation at 37 ± 1 °C :

Microorganisms		Broth coloration
<i>Listeria monocytogenes</i>	WDCM 00109	Yellow
<i>Listeria monocytogenes</i>	WDCM 00021	Yellow
<i>Listeria ivanovii</i>	WDCM 00018	Violet
<i>Staphylococcus aureus</i>	WDCM 00034	Violet
<i>Bacillus cereus</i>	WDCM 00001	Violet

7 STORAGE / SHELF LIFE

Media in vials : 2-8 °C, shielded from light.

The expiration date is indicated on the label.

8 PACKAGING

18 vials x 1 mL BM16208

9 ADDITIONAL INFORMATION

CONFIRM' L. mono Agar[®], CONFIRM' L. mono broth[®] & COMPASS[®] are trademarks of SOLABIA S.A.S.

The information provided on the labels take precedence over the formulations or instructions described in this document and are susceptible to modification at any time, without warning.

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Origin of revision : Modification of a strain in the quality control section.

ANNEX 1 : PHOTO SUPPORT

CONFIRM *L. mono* broth®

Confirmation of *Listeria monocytogenes*

Results :

Reaction obtained after 24 hours of incubation at 37 °C.

Listeria monocytogenes

⌚ Incubation
37 ± 1°C



T0



3 h



5 h



6 h



24 h

Uncertain result

Positive result

Listeria ivanovii

⌚ Incubation
37 ± 1°C



T0



3 h



5 h



6 h

Negative result