

O.A. LISTERIA AGAR

Chromogenic selective medium for *Listeria monocytogenes* isolation and identification (ISO 11290).

TYPICAL FORMULA (g/l)

Meat Peptone	18.0
Tryptone	6.0
Yeast Extract	10.0
Sodium Pyruvate	2.0
Glucose	2.0
Magnesium Glycerophosphate	1.0
Magnesium Sulphate	0.5
Sodium Chloride	5.0
Lithium Chloride	10.0
Disodium hydrogen phosphate anhydrous	2.5
5-bromo-4-chloro-3-indolyl- β -D-glucopyranoside	0.05
Agar	15.0
Nalidixic Acid	20.0 mg
Ceftazidime	20.0 mg
Cycloheximide	50.0 mg
Polymyxin B Sulphate	76700 IU
L- α -fosphatidylinositol	2.0
Final pH 7,2 \pm 0.2	

DESCRIPTION

O.A. LISTERIA AGAR is a chromogenic selective and differential medium for *Listeria monocytogenes* identification and isolation from foodstuffs and other samples and it is recommended in ISO Draft 11290 Part 1 and 2.

PRINCIPLE

The selectivity of the medium is due to lithium chloride and to the addition of antimicrobial selective mixture containing ceftazidime, polymyxin B, nalidixic acid and cycloheximide. The differential activity is due to the presence in the medium of the chromogenic compound X-glucoside as a substrate for the detection of β -glucosidase enzyme, common to all *Listeria* species. The specific differential activity is obtained by means a substrate (L- α -fosphatidylinositol) for a phospholipase C enzyme that is present in *Listeria monocytogenes*.

TECHNIQUE

This medium can be used according to the usual methods for the isolation of *Listeria monocytogenes* after 2 steps or 1 step enrichment. Make a 1:9 dilution of the sample in Listeria Fraser Broth (code 20131) and incubate at 30°C for 24 hours. Streak 0.1 ml of this suspension onto O.A. LISTERIA AGAR plate and incubate at 36 \pm 1°C for 24-48 hours.

INTERPRETATION OF RESULTS

Thanks to the combination of two substrates, it is possible to differentiate the colonies of *Listeria spp.*, which grow with a green-blue colour, from the colonies of *Listeria monocytogenes* which grow with green-blue colonies surrounded by an opaque halo.

STORAGE

2-8°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation. It is nevertheless recommended that the safety data sheet be consulted on its correct use. The product is designed for *In vitro* diagnostic use and must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

- Artault, S., Bind, J.L., Delaval, Y., Dureuil, N., Gillard, N., (2000) AFNOR Validation of the ALOA method for the detection of *Listeria monocytogenes* in foodstuffs. Colloque de la Societè Francaise de Microbiologie, Paris 19-20 Octobre, 2000.
- ISO 11290 1/2 (Draft, May 2002) Microbiology of food and animal feeding stuffs – Horizontal method for detection and enumeration of *Listeria monocytogenes*.
- Ottaviani, F., Ottaviani, M., Agosti, M., (1997) Esperienze su un agar selettivo e differenziale per *Listeria monocytogenes*. Industrie alimentari, XXXVI, luglio-agosto, 888.



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PRODUCT SPECIFICATION

NAME

O.A.LISTERIA AGAR

PRESENTATION

90 mm ready plates containing 22 ± 1 ml of medium.

STORAGE

2-8°C

PACKAGING

Code	Content	Packaging
10620	20 plates	<ul style="list-style-type: none"> 5 plates in thermically soldered film 4 x 5 plates in cardboard boxes
10223	10 plates 140 mm	<ul style="list-style-type: none"> 5 plates in thermically soldered film 2 x 5 plates in cardboard boxes

pH OF MEDIUM

7.2 ± 0.2

USE

O.A. LISTERIA AGAR is a chromogenic selective and differential medium for *Listeria monocytogenes* identification and isolation from foodstuffs and other samples and it is recommended in ISO Draft 11290 Part 1 and 2.

TECHNIQUE

Refer to technical sheet of the product.

APPEARANCE of the MEDIUM

Amber medium, slightly opalescent.

SHELF LIFE











120 days

QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control
7 days at 25 ± 1°C, in aerobiosis
7 days at 36 ± 1°C, in aerobiosis
- Microbiological control
Inoculum for productivity: 10-100 UFC/ml
Inoculum for selectivity: 10⁴-10⁵ UFC/ml
Inoculum for specificity: ≤ 10⁴ UFC/ml
Incubation conditions: 24-48 h at 36 ± 1°C

Microorganism		Growth	Color
<i>Listeria monocytogenes</i>	ATCC 19111	good	green-blue colonies surrounded by an opaque halo
<i>Listeria monocytogenes</i>	ATCC 13932	good	green-blue colonies surrounded by an opaque halo
<i>Listeria innocua</i>	ATCC 33090	good	green-blue colonies
<i>Enterococcus faecalis</i>	ATCC 19433	inhibited	
<i>Escherichia coli</i>	ATCC 25922	inhibited	
<i>Candida albicans</i>	ATCC 10231	inhibited	

TABLE OF SYMBOLS

 In Vitro Diagnostic Medical Device	 Do not reuse	 Manufacturer	 Contains sufficient for <n> tests	 Temperature limitation
 Catalogue number	 Fragile, handle with care	 Use by	 Caution, consult accompanying documents	 Batch code



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