

TM 1444 – LISTERIA SELECTIVE AGAR BASE

INTENDED USE

For selective isolation and cultivation of *Listeria monocytogenes*.

PRODUCT SUMMARY AND EXPLANATION

Listeria monocytogenes has been isolated from numerous environmental sources such as silage, soil, decaying vegetation, sewage, damp earth, straw and faeces. Listeria Selective Agar Base with Listeria Selective Supplement is used for isolation and cultivation of *L. monocytogenes* from clinical specimens. The basic media is formulated as per Lovett et al with the addition of agar.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	17.000
Soya peptone	3.000
Yeast extract	6.000
Sodium Chloride	5.000
Dipotassium hydrogen phosphate	2.500
Dextrose (Glucose)	2.500
Agar	15.000

PRINCIPLE

This medium consists of Tryptone, Soya peptone and yeast extract which provide carbon and nitrogen compounds essential for bacterial metabolism. Dextrose is the energy source. The medium is rendered selective by addition of selective supplement. Amphotericin B inhibits the growth of saprophytic fungi. Nalidixic acid inhibits growth of gram-negative organisms and acriflavin suppresses gram-positive microorganism. *Listeria monocytogenes* is a highly pathogenic organism and proper precautions should be taken while handling.

INSTRUCTION FOR USE

- Dissolve 51.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to room temperature and aseptically add rehydrated contents of 1 vial of Listeria Selective Supplement II, or 2 vials of Listeria Selective Supplement II, as desired.
- Mix well before dispensing.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Fluorescent yellow coloured, clear to slightly opalescent solution.
pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Listeria monocytogenes</i>	19118	50-100	Luxuriant	>=70%	35-37°C	24-48 Hours
<i>Listeria monocytogenes</i>	19112	50-100	Luxuriant	>=70%	35-37°C	24-48 Hours
<i>Listeria monocytogenes</i>	19111	50-100	Luxuriant	>=70%	35-37°C	24-48 Hours
<i>Escherichia coli</i>	25922	>=10 ³	Inhibited	0%	35-37°C	24-48 Hours
<i>Candida albicans</i>	10231	>=10 ³	Inhibited	0%	35-37°C	24-48 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	None-poor	0-10%	35-37°C	24-48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Gray M. L., 1960, Science, 132:1767.
2. Lee W.K. and McClain D., 1986, Appl. Environ, Microbiol., 52:1215.
3. McClain D. and Lee W.H., 1988, J. Assoc. off. Anal. Chem., 71:660.
4. Lovette J., Francis D.W and Hunt J.M., 1987, J. Food Protection, 50:188.



GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	 Manufacturer
 Temperature Unit	EC REP MedNet GmbH Buckstrasse 10 48163 Muenster, Germany Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019