

TM 1223 – LISTERIA ENRICHMENT BROTH (DOUBLE PACK)

INTENDED USE

For selective enrichment of *Listeria monocytogenes* from clinical specimens

PRODUCT SUMMARY AND EXPLANATION

Listeria Enrichment Broth was proposed by Feindt for the cultivation and isolation of *Listeria* species from clinical and non-clinical specimens. Obiger and Schonberg reported the superiority of this media to yield *Listeria* from mix-infected specimens. Listeria Enrichment Broth can be further improved by adding Colimycin alongwith Nalidixic acid. The mix infected specimen is added directly to Listeria Enrichment Broth. or subjected to cold enrichment and then cultured on Listeria Selective Agar. Haemolytic forms can be identified by inoculating Blood Agar.

COMPOSITION

Ingredients	Gms / Ltr
Part I	
Tryptone	10.000
Peptone	10.000
Dextrose (Glucose)	1.000
Sodium chloride	5.000
Thiaminium dichloride	0.005
Acriflavine hydrochloride (Trypaflavin)	0.010
Part II	
Potassium thiocyanate	37.500

PRINCIPLE

This medium consists of Tryptone, Peptone which provides essential nutrients. Thiaminium dichloride is the vitamin B source added to improve the growth of Listeria. Thiocyanate inhibits gram-negative bacteria.

INSTRUCTION FOR USE

- Dissolve 26.0 grams of Part I and 37.5 grams of Part II in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into flasks or tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder White to cream homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed in presence of 10% Carbon dioxide (CO₂) after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Enterococcus faecalis</i>	29212	50-100	None-poor	0-10%	35-37°C	48 Hours
<i>Escherichia coli</i>	25922	$\geq 10^4$	Inhibited	-	35-37°C	48 Hours
<i>Listeria innocua</i>	33090	50-100	Luxuriant	$\geq 70\%$	35-37°C	48 Hours
<i>Listeria ivanovii</i> subsp. <i>ivanovii</i>	19119	50-100	Luxuriant	$\geq 70\%$	35-37°C	48 Hours
<i>Listeria monocytogenes</i>	19112	50-100	Luxuriant	$\geq 70\%$	35-37°C	48 Hours
<i>Listeria monocytogenes</i>	19118	50-100	Luxuriant	$\geq 70\%$	35-37°C	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 2-8°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. Beerens H. and Tahon-Castel M.M., 1966, Ann. Inst. Pasteur, 111:90.
2. Feindt E., 1972, Inuug. Diss., Würzburg.
3. Grey M.L. et al, 1948, J. Bact., 55:471.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Lebnert C., 1964, Arch. Exp. Vet. Med., 18:891 and 1247.
7. Obiger G. and Schonberg A., 1973, Fleischwirtschaft, 10:1450.



8. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

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 Authorized Representative MedNet GmbH Barkstrasse 10, 48163 Münster, Germany	 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**
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