LISTERIA ENRICHMENT BROTH (DOUBLE PACK) TM 1223

INTENDED USE

For selective isolation of *Listeria monocytogenes* from clinical samples.

COMPOSITION

Ingredients	Gms/Ltr.
Part A	-
Casein enzymic hydrolysate	10.000
Peptic digest of animal tissue	10.000
Sodium chloride	5.000
Dextrose	1.000
Thiaminium dichloride	0.005
Acriflavin hydrochloride	0.010
Part B	-
Potassium thiocyanate	37.500

PRODUCT SUMMARY AND EXPLAINATION

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 mixinfected specimens.

PRINCIPLE

Thiaminium dichloride is the vitamin B source added to improve the growth of *Listeria*. Peptic digest of animal tissue, Casein enzymic hydrolysate provides essential nutrients. Thiocyanate inhibits gram negative bacteria. The suppression of Enterococci by combinations of selective agents and acridine dyes is reported by Bockemuhl.
Listeria Enrichment Broth can be further improved by adding Colimycin alongwith Nalidixic acid. The mix infected specimen is added directly to Listeria Enrichment Broth.

INSTRUCTIONS FOR USE

1. Dissolve 26.00 gms of Part A and 37.50 gms of Part B in 1000 ml of distilled water.
2. Gently heat to boiling with gentle swirling and dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder:
Part A : Cream to yellow homogeneous free flowing powder
Part B : White to cream homogeneous free flowing powder
Appearance of prepared medium: Yellow colour, clear solution.
pH (at 25°C): 7.4 ± 0.2

CULTURE RESPONSE

Cultural characteristics observed in presence of 10% Carbon dioxide after an incubation at 35 - 37°C for 48 hours.

Microorganisms	ATCC	Inoculum (CFU)	Growth
Enterococcus faecalis	29212	50 - 100	None-Poor
Escherichia coli	25922	>=10^3	Inhibited
Listeria innocua	33090	50 - 100	Luxuriant
Listeria ivanovii	19119	50 - 100	Luxuriant
Listeria monocytogenes	19112	50 - 100	Luxuriant
Listeria monocytogenes	19118	50 - 100	Luxuriant

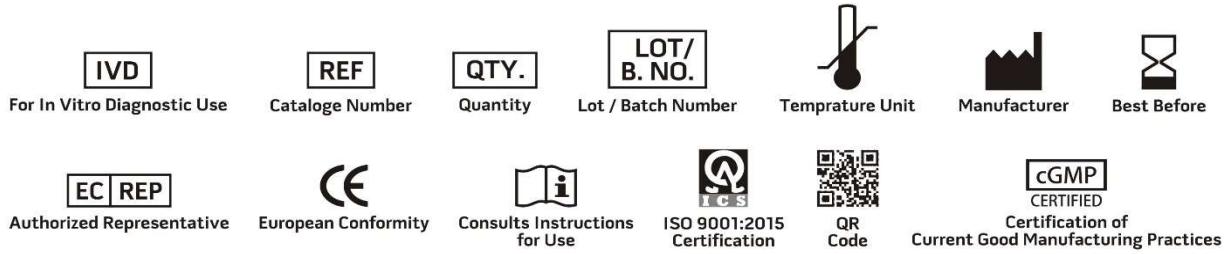
STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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.

REFERENCES

1. Feindt E., 1972, Inuug. Diss., Würzburg.
2. Obiger G. and Schonberg A., 1973, Fleischwirtschaft, 10:1450.

3. Lebnert C., 1964, Arch. Exp. Vet. Med.,8 : 891 and 1247.
4. Grey M.L. et al, 1948, J. Bact., 55:471.



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