

LISTERIA ENRICHMENT BROTH

Powdered and ready to use selective broth for the enrichment of *Listeria* spp.

Typical formula (g/l)

Tryptic Digest of Casein	17.000
Soy Peptone	3.000
Yeast Extract	6.000
Cycloheximide	0.050
Nalidixic Acid	0.040
Acridine HCl	0.015
Sodium Chloride	5.000
Dipotassium Hydrogen Phosphate	2.500
Glucose	2.500

Directions

Suspend 36.1g in 1000 ml of cold distilled water. Heat to dissolve, distribute and sterilise by autoclaving at 115°C for 15 minutes.

pH 7.3 ± 0.2

Description

Listeria Enrichment Broth is based on the typical formulation described by J.Lovett for the enrichment of *L. monocytogenes* in foodstuffs. It contains cycloheximide, acriflavine and nalidixic acid as antibacterial and antifungal drugs. Because all these agents are thermostable they are included in the powdered medium and can be sterilised by autoclaving (Martindale the Extra Pharmacopoeia, 1982, Haley et al. 1980).

Technique

Add 25g of sample to 225 ml of Listeria Enrichment Broth. Blend until the test portion is thoroughly dispersed. Incubate the inoculated enrichment medium for 48hrs at 30°C. Streak a loopful of the enrichment culture onto a surface of the ALOA Agar plate (code 401605) or PALCAM Agar Plate (code 401604) and Oxford Agar Plate (code 401603). Incubate at 37°C for 24-48 hours. Examine for the presence of typical colonies. Carry on the suitable identification tests.

Note: Techniques for the detection of *Listeria* in foods vary, depending on the material under examination and local laws. Refer to various compendia or to national regulations for the complete procedures.

User quality assurance (37°C-24 hrs)

Productivity control: *L.monocytogenes* ATCC 19111 growth

Selectivity control: *S.aureus* ATCC 25923: inhibited

Storage

Dehydrated medium: 10-30°C

User prepared tubes: 7days at 2-8°C

Ready to use flasks: 2-8°C

References

- FDA (1995) Bacteriological Analytical Manual, 8th ed. Revision A, 1998. Published by AOAC International.
- Haley, L.D., Trandel, J.B., Coyle, M.B. (1980) Practical methods for culture and identification of fungi in the clinical microbiological laboratory. Cumitech n. 11, ASM, Washington, D.C.
- Lovett, J. Hitchins A.D.(1988) FDA Federal Register, 53;x 44148-44153
- Lovett, J., Francis D.W. and Hunt J.M. (1987) J. Food Prot. **50**,188-192
- Martindale The Extra Pharmacopoeia (1982) Twenty-eighth Edition. The Pharmaceutical Press, London.

Packaging

4016011	Listeria Enrichment Broth,	100 g (2.77 l)
4016012	Listeria Enrichment Broth,	500 g (13.8 l)
4016014	Listeria Enrichment Broth,	5 kg (138.5 l)
5116013	Listeria Enrichment Broth,	6 x 225ml ready to use flasks