

LISTERIA FRASER BROTH

Ready to use tubes



Fraser Broth - from left: uninoculated tube, *L.monocytogenes*.

INTENDED USE

Ready to use liquid medium for the second step of *Listeria* spp. enrichment

TYPICAL FORMULA (g/l)

Proteose Peptone	5.000
Tryptone	5.000
Beef Extract	5.000
Yeast Extract	5.000
Sodium Chloride	20.000
Disodium Hydrogen Phosphate anhydrous	9.500
Potassium Dihydrogen Phosphate	1.350
Aesculin	1.000
Lithium Chloride	3.000
Acriflavin HCl	0.025
Nalidixic Acid	0.020
Ferric Ammonium Citrate	0.500

Final pH 7.2 ± 0.2

DESCRIPTION

Listeria Fraser Broth Base, prepared according to the formulation described by Fraser complies with the recommendation of ISO 11290-1.

Fraser Broth is recommended by AFNOR V08-055, ISO 11290-1, USDA-FSIS for the secondary enrichment of *Listeria*, in foodstuff.

The presence of *Listeria* in the broth leads the blackening of the culture, due to the reaction of aesculetin, produced by the aesculin hydrolysis, with iron ions.

TECHNIQUE

1. Make a 1:9 dilution of the sample in Fraser Broth Half Concentration (eg 25 g of sample + 225 ml of liquid medium). Incubate at 30°C for 24 hours.

2. Streak 0.1 ml aliquots of Fraser Broth Half Concentration onto a plate of ALOA medium and onto a second selective plating medium of choice (e.g. PALCAM). Incubate at 37°C for 24 ± 2 hours. Reincubate negative plates for a further 24 ± 2 hours.
3. Subculture 0.1 ml Fraser Broth Half Concentration into 10 ml of Fraser Broth and incubate at 37°C for 24 hours. If no growth occurs incubate a further 24 hours.
4. Streak 0.1 ml aliquots of Fraser Broth onto a plate of ALOA medium and onto a second selective plating medium of choice (e.g. PALCAM). Incubate for 24 ± 2 hours. Reincubate negative plates for a further 24 ± 2 hours.
5. Confirm the typical colonies with biochemical tests.

PRECAUTIONS

For laboratory use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilize all biohazard waste before disposal.

STORAGE

Store at 2-8° away from direct light. When stored as directed the tubed media remain stable until the expiry date shown on the label. Do not use beyond stated expiry date. Media should not be used if there are any signs of deterioration, discoloration or contamination.

REFERENCES

- . Fraser, J.A., Sperber, W.H. (1988) J. Food Protect. **51**, 10, 762-765.
- . ISO 11290-1 Microbiology of food and animal feeding stuffs-Horizontal method for the detection and enumeration of *Listeria monocytogenes* Part 1 Detection method.
- . Normalisation Française, AFNOR (1993) V08-55.
- . Manuel Suisse des Denrées Alimentaires, Chapitre 56, E21, juillet 2000.
- . Rapporto ISTISAN 96/35 Istituto Superiore di Sanità; ISSN 1123-3117.

PACKAGING

551596 Listeria Fraser Broth 20 x 10ml ready to use tubes