

# Listeria Enrichment Broth



Medium used for the isolation and cultivation of *Listeria monocytogenes*.

\*Equally use with MFDS (MB-2192K) and Listeria Enrichment Broth (Lovett) (MB-L1326).

## • CONTENTS (Liter)

Pancreatic Digest of Casein	17.0 g
Enzymatic Digest of Soybean Meal	3.0 g
Dextrose	2.5 g
Sodium Chloride	5.0 g
Dipotassium Phosphate	2.5 g
Yeast Extract	6.0 g
Cycloheximide	0.05 g
Acriflavine HCl	0.015 g
Nalidixic Acid	0.04 g
Final pH = 7.3 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 36.11 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

## • INTERPRETATION

Listeria Enrichment Broth is a medium used for the isolation and cultivation of *Listeria monocytogenes*. Pancreatic digest of casein, enzymatic digest of soybean meal and yeast extract provide nitrogen, vitamins and minerals. Dextrose is a carbohydrate source. Sodium chloride maintains the osmotic balance. Dipotassium phosphate is the buffering agent. Cycloheximide is used to inhibit growth of saprophytic fungi. Acriflavine HCl suppresses growth of Gram-positive bacteria. Nalidixic acid inhibits growth of Gram-negative organisms.

## • TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 30 ± 2°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

### Prepared medium

Appearance: clear to slightly opalescent

Color: light yellow

Incubation conditions: 30 ± 2°C / 18 - 48 hours

Microorganism	ATCC	Inoculate CFU	Growth
<i>Listeria monocytogenes</i>	15313	50-100	good
<i>Staphylococcus aureus</i>	25923	10 <sup>2</sup> -10 <sup>3</sup>	partially inhibited
<i>Saccharomyces cerevisiae</i>	76625	≥10 <sup>3</sup>	inhibited
<i>Escherichia coli</i>	25922	≥10 <sup>3</sup>	inhibited

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. Lovett et al (1987) j. food Protection 50: 188.
2. International Dairy Federation. 1995. Milk and Milk Products - Detection of *Listeria monocytogenes*. No 143A. Brussels, Belgium.
3. Refer to the MFDS.

## • PACKAGE

Cat. No : MB-L2192 Listeria Enrichment Broth	500 G
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