

# UVM Modified Listeria Enrichment Broth



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

\*Equally use with MFDS (MB-U2193K), *Listeria* U.V.M.1 Broth (MB-L1031) and *Listeria* U.V.M.2 Broth (MB-L1045).

## • CONTENTS (Liter)

Tryptose	10.0 g
Beef Extract	5.0 g
Yeast Extract	5.0 g
Sodium Chloride	20.0 g
Disodium Phosphate	9.6 g
Monopotassium Phosphate	1.35 g
Esculin	1.0 g
Nalidixic Acid	0.02 g
Acriflavine HCl	0.012 g
Final pH = 7.2 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 51.98 G of powder in 1 L of distilled or deionized water. Heat 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

UVM Modified *Listeria* Enrichment Broth is a medium used for the isolation and cultivation of *Listeria* spp. Tryptose, beef extract and yeast extract provide nitrogen, vitamins, and minerals. Sodium chloride maintains the osmotic balance. Phosphates are the buffering agents. Esculin is hydrolyzed by *Listeria* species. Nalidixic acid inhibits the growth of Gram-negative bacteria and acriflavin HCl is added to suppress the growth of Gram-positive organisms.

## • TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 30°C for 24 ± 2 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance: clear to hazy

Color: yellow

Incubation conditions: 30°C / 24 ± 2 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Listeria monocytogenes</i>	15313	50-100	good
<i>Staphylococcus aureus</i>	25923	≥10 <sup>3</sup>	partial to complete inhibition

## • 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. Kramer and Jones. 1969. J. Appl. Bacteriol. 32:381.
2. Donnelly and Baigent. 1986. Appl. Environ. Microbiol. 52:689.
3. Donnelly C.W. and Baigent G.J. (1986) Appl. Environ. Microbiol. 52. 689-695.
4. McClain D. and Lee W.H. (1988) Assoc. Off. Anal. Chem. 71. 660-664.
5. Bailey J.S., Fletcher D.L. and Cox N.A. (1990) J. Food Prot. 53. 473-477.
6. Refer to the MFDS.

## • PACKAGE

Cat. No : MB-U2193 UVM Modified Listeria Enrichment Broth	500 G
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