



Catalogue No.	Description
FCM-127	Actero™ MediaBox™ Demi-Fraser Enrichment Broth (5 Liter)
FCM-128	Actero™ MediaBox™ Demi-Fraser Enrichment Broth (10 Liter)
FCM-129	Actero™ MediaBox™ Demi-Fraser Enrichment Broth (20 Liter)

## MediaBox Demi-Fraser Enrichment Broth: Ready to Use

### INTENDED USE

MediaBox DFB is a selective broth used for the initial enrichment of *Listeria species* bacteria from foods, food ingredients and environmental surfaces.

**MediaBox Demi-Fraser Enrichment Broth is not intended for Clinical or veterinary use.**

### SUMMARY & EXPLANATION

A modification of Fraser Broth Base, this media was developed by Fraser and Sperber for the rapid detection of *Listeria* from food and environmental samples. The addition of ferric ammonium citrate allows for the selective enrichment of *Listeria spp.*

**Storage Instructions:** On receipt, store the MediaBox at room temperature 15 - 25°C.

### Preparation / Composition (in g/L):

Casein Digest Peptone .....	5.0g
Meat Peptone .....	5.0g
Beef Extract .....	5.0g
Yeast Extract.....	5.0g
Nalidixic Acid.....	0.010g
Esculin .....	1.0g
Monopotassium Phosphate .....	1.35g
Sodium Chloride .....	20.0g
Disodium Phosphate.....	9.6g
Acriflavin.....	0.012g
Lithium Chloride.....	3.0g

### Final pH: 7.2 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

### PROCEDURE FOR MEDIABOX:

**Materials not provided:** Ancillary tubing and connectors required can be purchased separately, see list of accessory tubing and connectors itemized later in the instructions for use.

**Instructions:** Observe aseptic techniques. Stand the MediaBox in the safety cabinet with the Cap at the top.

Remove the sterile cap and replace with a suitable sterile dispensing cap and tubing set. Set-up your dispensing tubing by connecting it to a pump or

dilutor you will use to control dispensing of the broth.

Have your sterile connecting tubing with suitable connector ready to link to the MediaBox. Remove the sterile caps from both the dispensing tube attached to the MediaBox and the sterile connector stopper to your dispensing tubing. Connect the two pieces to permit flow of the broth into your dispensing tubing. Turn the MediaBox on its side with the dispensing cap and tubing toward the bottom of the MediaBox on the bench. Turn on your pump or dilutor and commence dispensing the broth into blender bags, bottles, tubes or other suitable vessels.

### User Quality Control:

1. Examine initial Demi-Fraser Enrichment Broth dispensed from the MediaBox to confirm that the liquid is not cloudy or changed color to black, as this could indicate bacteria contamination in the MediaBox.
2. Inspect the MediaBox upon receipt for any signs of dampness on the outer box as this could indicate leakage of broth during transport.

### RESULTS

After initial enrichment of samples spiked with *Listeria species* at low concentrations (less than 10 cfu) for 24 - 48 hours at 35 ± 2°C the broth should turn black, streak 10-20µl of the sample onto a suitable chromogenic agar plate. The plates should show isolated colonies in streaked areas and confluent growth in areas of heavy inoculation. Blue colonies with halos are either *L. ivanovii* or *L. monocytogenes*. Blue colonies with no halo are other *Listeria species*.

### Test Procedure

To enrich *Listeria spp.* from a food sample, food ingredient or environmental swab, consult FDA: BAM, Health Canada Compendium of Methods or any other appropriate reference.

