Intented Use
The Thermo Scientific™ FitBag™ Media format enables simple, fast preparation of enrichment media and diluents.

Thermo Scientific™ Buffered Listeria Enrichment Broth is a selective enrichment medium for the detection of *Listeria monocytogenes* in food samples.

Summary and Explanation
Listeria Selective Enrichment Broth CM0862 is based on the formulation described by Lovett et al. and is recommended for the enrichment of *Listeria* species in food. Subsequent work has concluded that the enrichment properties can be improved by increasing the buffering capacity of the medium by the addition of potassium dihydrogen orthophosphate and disodium hydrogen orthophosphate. Buffered Listeria Enrichment Broth is therefore a modification of the original medium.

Typical Formula* grams per liter
Tryptone Soya Broth 30.0
Yeast extract 6.0
Potassium dihydrogen orthophosphate 1.35
Di-sodium hydrogen orthophosphate 9.60
Nalidixic acid 0.04
Cycloheximide 0.05
Acriflavine hydrochloride 0.015

*adjusted as required to meet performance standards

Each FitBag Media bag has been given a sterilizing dose of gamma irradiation.

Physical characteristics
- Colour: Straw
- Colour on reconstitution: Straw
- pH: 7.3 ± 0.2 at 25°C
- Clarity: Clear

Precautions
This product should only be used by trained individuals. This includes the safe disposal of used or unused reagents and as well as any other contaminated or potentially contaminated material. It is the responsibility of each laboratory to manage waste produced according to any federal, state and local applicable regulations.

Storage
Prior to use:
- Store FitBag Media at room temperature until expiry.

In-Use:
- Following the addition of water to the water compartment store for up to one week at room temperature, in the dark.
- Following powder hydration use immediately or store at Room temperature, in the dark, for up to 10 Days.

Ensure the sterility of the outlet tube is maintained.

Specimen Collection, Handling and Storage
Specimens should be collected and handled following the recommended guidelines.

Materials Required but Not Provided
1. Thermo Scientific™ 0.2µm Reusable Filter (DB0200A)
2. Thermo Scientific™ Dry-Bags™ Peristaltic Pump (DB2000A/DB3000A)
3. Thermo Scientific™ DiluFlux™ Pro Automated Gravimetric Dilutor (DB4100A/DB4150A)
4. Thermo Scientific™ Stainless Steel Bag Connector (BM9901A/DB4002A)
5. Laboratory equipment as required
6. Ancillary reagents and culture media
7. Quality control organisms as required

Directions

Water Addition
Using aseptic technique remove the red cap from the tube without the injection port and insert the sterile 0.2µm filter into the tube. Connect the peristaltic pump tubing to the filter and fill the bag to the required volume of 2.7, 4.5 or 9.0 litres, with water suitable for preparation of culture media.

Whilst filling the bag ensure that there are no airlocks within the inlet side of the filter. Air locks can be removed by briefly opening and closing the filter vent. Once filling has ceased, aseptically remove the filter and re-cap the tube or insert the second (individually packaged) sterile injection port.

Medium Preparation
Place the FitBag onto a flat surface and break the seal separating the dehydrated culture medium and the water by applying pressure to the water containing side. Manually agitate the FitBag Media bag to mix and completely dissolve the powder.

Sample Dilution
Media dispensing can be facilitated using an automated dilutor. Ensure dilutor tubing and connectors are sterilized prior to use.

Remove the tamper proof seal on the injection port and drill the port using a sterile bag connector. When not in use close the tubing with the attached clamp. Once empty, the bag can be disposed of with normal laboratory waste.

If the rehydrated FitBag is not consumed in a single use the bag may be sealed with the tube clamp and disconnected from the dilutor. It is recommended that the second filling port is then used to re-connect the bag for further use.

Quality Control

Microbiological Tests Using Optimum Inoculum Dilution

Growth characteristics (24 hours incubation at 30°C)

<table>
<thead>
<tr>
<th>Listeria monocytogenes</th>
<th>ATCC® 7644</th>
<th>0.25-1mm black/dimpled colonies and halo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listeria monocytogenes</td>
<td>ATCC® 13932 WDCM 00021</td>
<td>0.25-1mm brown/black dimpled colonies</td>
</tr>
</tbody>
</table>

Growth characteristics (48 hours incubation at 30°C)

<table>
<thead>
<tr>
<th>Enterococcus faecalis</th>
<th>ATCC® 29212 WDCM 00087</th>
<th>No growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escherichia coli</td>
<td>ATCC® 25922</td>
<td>No growth</td>
</tr>
</tbody>
</table>

Note:
It is the responsibility of the user to perform Quality Control testing taking into account the intended use of the medium, and in accordance with any local applicable regulations (frequency, number of strains, incubation temperature etc.)

Performance
Performance of the FitBag Buffered Listeria Enrichment Broth was evaluated using four bacterial strains including the following: *Listeria monocytogenes*, *Enterococcus faecalis* and *Escherichia coli*. All organisms gave expected growth characteristics according to the current test specification in the absence of performance data.

Limitations
A small number of atypical strains may give a weak reaction or fail to grow, especially when low numbers are present in the sample.
Packaging

<table>
<thead>
<tr>
<th>Product code</th>
<th>Suffix</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF0897</td>
<td>A</td>
<td>30 x 2.7L</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>20 x 4.5L</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>10 x 9.0L</td>
</tr>
</tbody>
</table>

Waste disposal
For waste disposal refer to the relevant Material Safety Data Sheet.

Bibliography

Symbol Legend

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="symbol.png" alt="Catalog number" /></td>
<td>Catalog number</td>
</tr>
<tr>
<td><img src="symbol.png" alt="Manufacturer" /></td>
<td>Manufacturer</td>
</tr>
<tr>
<td><img src="symbol.png" alt="Temperature limitation (storage temp.)" /></td>
<td>Temperature limitation (storage temp.)</td>
</tr>
<tr>
<td><img src="symbol.png" alt="Use by (expiration date)" /></td>
<td>Use by (expiration date)</td>
</tr>
<tr>
<td><img src="symbol.png" alt="Lot number" /></td>
<td>Lot number</td>
</tr>
<tr>
<td><img src="symbol.png" alt="Protect from light" /></td>
<td>Protect from light</td>
</tr>
<tr>
<td><img src="symbol.png" alt="Consult instructions for use" /></td>
<td>Consult instructions for use</td>
</tr>
</tbody>
</table>

Made in Italy