62353 Listeria Enrichment Broth according to FDA/IDF-FIL (LE Broth)

For the selective enrichment of Listeria from clinical specimens and other materials.

Composition:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Grams/Litre</th>
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</thead>
<tbody>
<tr>
<td>Casein peptone</td>
<td>17.0</td>
</tr>
<tr>
<td>Soy peptone</td>
<td>3.0</td>
</tr>
<tr>
<td>D(+)-Glucose</td>
<td>2.5</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.0</td>
</tr>
<tr>
<td>Dipotassium hydrogenphosphate</td>
<td>2.5</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Final pH 7.3 +/- 0.2 (at 25°C)

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions:
Dissolve 18 g in 500 ml distilled water. Autoclave at 121°C for 15 minutes. Dissolve the contents of a vial of Listeria selective supplement (Cat. No. 62348 or 1.11781.0010) in 1 ml sterile distilled water and add to the broth cooled to below 50°C. Mix carefully by gentle swirling.
Usually 25 g of sample is added to 225 ml broth and incubated for about 48 hours at 30°C. Inoculate with about 100 µl Broth a Listeria Selective Agar (Cat. No. 62355), PALCAM Listeria Selective Agar (Cat. No. 75977) or Oxford-Agar (Cat. No. 75805) plate.

Principle and Interpretation:
The Enrichment Broth is based on the formulation of CASO Broth (Cat. No. 22098) with additional 6 g/litre Yeast extract. Casein peptone, Soy peptone and Yeast extract provide nitrogen, vitamins and minerals. The natural sugars from Soy peptone and Glucose promote organism growth. Sodium chloride is for the osmotic balance, while dipotassium hydrogen phosphate is a buffering agents.
The Listeria Selective Supplements according to IDF-FIL (Cat. No. 1.11781.0010) and Listeria Selective Supplement according to FDA (Cat. No. 62348) suppress the growth of most other bacteria (none Listeria).

Cultural characteristics after 48 hours at 30°C.

<table>
<thead>
<tr>
<th>Organisms (ATCC)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listeria monocytogenes (19118)</td>
<td>+++</td>
</tr>
<tr>
<td>Staphylococcus aureus (25923)</td>
<td>+++</td>
</tr>
<tr>
<td>Escherichia coli (25922)</td>
<td>-</td>
</tr>
</tbody>
</table>
References:
4. IDF Standard 143, Milk and Milk products; detection of Listeria monocytogenes (1990)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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