Endo HiVeg™ Agar / Agar Base / Agar, Modified  MV029 / MV1077 / MV1075

Composition**:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>MV029 Grms/Litre</th>
<th>MV1077 Grms/Litre</th>
<th>MV1075 Grms/Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>HiVeg peptone</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Lactose</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Dipotassium phosphate</td>
<td>3.50</td>
<td>3.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Sodium sulphite</td>
<td>2.50</td>
<td>2.50</td>
<td>3.30</td>
</tr>
<tr>
<td>Basic fuchsin</td>
<td>0.50</td>
<td>—</td>
<td>0.30</td>
</tr>
<tr>
<td>Agar</td>
<td>15.00</td>
<td>12.00</td>
<td>12.50</td>
</tr>
</tbody>
</table>

Final pH (at 25°C) 7.5 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Directions:

Suspend 41.5 grams of MV029 or 38 grams of MV1077 or 38.6 grams of MV1075 in 1000 ml distilled water. Add 4 ml of 10% Basic Fuchsin (FD059) in MV1077. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before pouring into sterile petri plates.

Caution: Basic fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin.

Principle and Interpretation:

This medium is prepared by replacing Peptone digest of animal tissue with HiVeg peptone that is free of BSE/TSE risk. Endo HiVeg Agar media are the modifications of Endo Agar media which was developed by Endo (1) for differentiation of lactose fermenters and lactose non-fermenters. Endo HiVeg Agar media like Endo Agar media are used for microbiological examination of potable water and waste water, dairy products and food (2, 3, 4). The selectivity of Endo Agar is due to Sodium sulfite / Basic fuchsin combination, which results in the supression of gram positive organisms. Coliforms ferment the lactose, produce pink to rose red colonies and similar colouration of the medium. The colonies of organisms that do not ferment the lactose are colourless to faint against the pink background of the medium.

Lactose fermenting coliforms produce acid and hydrogen sulphide. The aldehyde in turn liberates fuchsin from the fuchsin-sulphite complex, giving rise to a red colouration of the medium. The colonies of organisms that do not ferment the lactose are colourless to faint against the pink background of the medium.

Quality Control:

Appearance of Powder
Light purple coloured, homogeneous, free flowing powder that may contain a large amount of minute to small dark particles.

Gelling
Firm, comparable with 1.5% of MV029 or 1.2% of MV1077 and 1.25% of MV1075 Agar gel.

References: