Arabinose Agar Base

Arabinose Agar is recommended for selective isolation of Enterococcus faecium from faeces, sewage and water samples.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peptone, special</td>
<td>23.000</td>
</tr>
<tr>
<td>Corn starch</td>
<td>1.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Arabinose</td>
<td>10.000</td>
</tr>
<tr>
<td>Phenol red</td>
<td>0.100</td>
</tr>
<tr>
<td>Agar</td>
<td>15.000</td>
</tr>
</tbody>
</table>

Final pH (at 25°C) 7.8±0.2

**Formula adjusted, standardized to suit performance parameters**

**Directions**

Suspend 27.05 grams in 500 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C and aseptically add the rehydrated contents of 1 vial of Enterococcus faecium Selective Supplement (FD226). Mix well and pour into sterile Petri plates.

**Principle And Interpretation**

Arabinose Agar Base is based on arabinose fermentation by Enterococcus species. Enterococcus species are becoming increasingly important agents of human diseases, largely because of their resistance to antimicrobial agents (1), thereby becoming a major cause of nosocomial infections (2). The use of selective medium for the isolation of Enterococci has been previously reviewed and Arabinose Agar Base with Enterococcus faecium Selective Supplement (FD226) (containing cephalaxin and aztreonam) is recommended for the selective isolation of E. faecium from heavily contaminated sites (3).

Peptone special serves as a source of nitrogen, carbon and essential growth nutrients. Corn starch neutralizes the toxic metabolites formed where as sodium chloride maintains the osmotic equilibrium. Arabinose is the fermentable carbohydrate. E. faecium ferments arabinose, producing acidic conditions. This acidity developed is visualized as a colour change from red to yellow, due to the phenol red indicator in the medium.

**Quality Control**

**Appearance**
Light yellow to pink homogeneous free flowing powder

**Gelling**
Firm, comparable with 1.5% Agar gel

**Colour and Clarity of prepared medium**
Red coloured clear to slightly opalescent gel forms in Petri plates.

**Reaction**
Reaction of 5.41% w/v aqueous solution at 25°C. pH : 7.8±0.2

**pH**
7.60-8.00

**Cultural Response**
M1576: Cultural characteristics observed with added Enterococcus faecium Selective Supplement(FD226) after an incubation at 35-37°C for 24-48 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum(CFU/Growth)</th>
<th>Recovery</th>
<th>Colour of Colony</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escherichia coli ATCC 25922</td>
<td>&gt;=10³ inhibited</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Please refer disclaimer Overleaf.
Enterococcus faecalis ATCC 29212
50-100 good-luxuriant >=50% colourless-pink
Enterococcus faecium ATCC 50-100 good-luxuriant >=50% yellow
Enterococcus hirae ATCC 10541 50-100 good-luxuriant >=50% colourless-pink
Pseudomonas aeruginosa ATCC 27853 >=10³ inhibited 0%
Staphylococcus aureus ATCC 25923 >=10³ inhibited 0%

Storage and Shelf Life
Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on label.

Reference

Revision : 02 / 2015

Disclaimer :
User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.