Enterococcus Differential Agar Base (TITG Agar Base)

For selective isolation and differentiation of Enterococcus faecalis and Enterococcus faecium

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proteose peptone</td>
<td>10.000</td>
</tr>
<tr>
<td>Beef extract</td>
<td>8.000</td>
</tr>
<tr>
<td>Glucose</td>
<td>10.000</td>
</tr>
<tr>
<td>Thallium acetate</td>
<td>1.000</td>
</tr>
<tr>
<td>Agar</td>
<td>14.000</td>
</tr>
<tr>
<td><strong>Final pH (at 25°C)</strong></td>
<td><strong>6.05 ±0.05</strong></td>
</tr>
</tbody>
</table>

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

**Directions**

Suspend 43 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add rehydrated contents of one vial of TTC solution 1% (FD057). Mix well and pour into sterile Petri plates.

**Principle And Interpretation**

Enterococci were formerly classified as faecal streptococci. Enterococci serves as an indicator organism in monitoring food samples as it is cause of faecal contamination. Of the various species of Enterococci, E.faecalis and E.faecium are frequently found in humans. The presence of Enterococci in food samples has been studied. (2,4).

A variety of selective media have been recommended for the isolation of Enterococcus species (3). Enterococcus Differential Agar Base was designed for the selective isolation and differentiation between Enterococcus faecalis and Enterococcus faecium. The differentiation is based depending upon the reduction of tetrazolium. Enterococcus faecalis produces colonies with a deep red centre and a narrow white periphery, whereas Enterococcus faecium produces white or pale pink coloured colonies.

Proteose peptone and beef extract serves as a source of nitrogen and vitamins. Glucose serves as a source of carbohydrate. The medium incorporates thallium acetate as a selective inhibitory agent(1).

**Quality Control**

**Appearance**

Cream to yellow homogeneous free flowing powder

**Gelling**

Firm, comparable with 1.4% Agar gel

**Colour and Clarity of prepared medium**

Light yellow coloured clear to slightly opalescent gel forms in Petri plates

**Reaction**

Reaction of 4.30% w/v aqueous solution at 25°C. pH : 6.05±0.05

pH

6.00-6.10

**Cultural Response**

Cultural characteristics observed with added TTC Solution 1% (FD057) after an incubation at 35-37°C for 18-24 hours.

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Recovery</th>
<th>Colour of colony</th>
</tr>
</thead>
</table>

Please refer disclaimer Overleaf.
### HiMedia Laboratories

#### Technical Data

**Enterococcus faecalis ATCC 50-100**  
29212  
good-luxuriant  
>=50%  
red or maroon

**Escherichia coli ATCC**  
25922  
>=10³  
inhibited  
0%

**Enterococcus faecium ATCC 50-100**  
19434  
good-luxuriant  
>=50%  
Colourless

**Lactococcus lactis ATCC**  
19435  
>=10³  
inhibited  
0%

### Storage and Shelf Life

Store below 30°C and the prepared medium at 2 - 8°C. Use before expiry date on label.

### Reference


Revision : 0 / 2013

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