Rappaport Vassiliadis Medium

Rappaport Vassiliadis Medium is recommended for enrichment of Salmonellae under conditions of high osmotic pressure, low pH and 43°C, with modest nutritional requirements.

Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papaic digest of soyabean meal</td>
<td>4.500</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>7.200</td>
</tr>
<tr>
<td>Potassium dihydrogen phosphate</td>
<td>1.260</td>
</tr>
<tr>
<td>Dipotassium hydrogen phosphate</td>
<td>0.180</td>
</tr>
<tr>
<td>Magnesium chloride, anhydrous</td>
<td>28.600</td>
</tr>
<tr>
<td>Malachite green</td>
<td>0.036</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>5.2±0.2</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 41.78 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense as desired into tubes and sterilize by autoclaving at #115°C for 15 minutes.

Note: # - Corresponds to 10 lbs pressure

Principle And Interpretation

Rappaport Vassiliadis Medium is designed according to the revised formulation by Van Schothorst et al (1) and is recommended for the selective enrichment of Salmonellae from food and environmental specimens. Present medium is a modification of the Rappaport Vassiliadis Enrichment Broth described by Van Schothorst and Renauld (2). Addition of magnesium chloride to the medium was reported by Peterz et al (3).

Salmonella species can be isolated from human faeces without pre-enrichment by using this medium. Salmonella generally survive at little high osmotic pressure, grow at slightly low pH and are resistant to malachite green compared to other bacteria. Papaic digest of soyabean meal provides essential growth nutrients. Potassium phosphate buffers the medium to maintain the constant pH. Sodium chloride maintains the osmotic balance. Malachite green is a dye which inhibits many gram-positive bacteria.

Quality Control

Appearance
Light yellow to light blue homogeneous free flowing powder

Colour and Clarity of prepared medium
Greenish blue clear to slightly opalescent with a slight precipitate.

Reaction
Reaction of 4.18% w/v aqueous solution at 25°C. pH : 5.2±0.2

pH
5.00-5.40

Cultural Response
M880B: Cultural characteristics observed after an incubation at specified temperature for 18-24 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Recovery at 35-37°C</th>
<th>Recovery at 42±1°C</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Escherichia coli ATCC 25922</em></td>
<td>fair</td>
<td>poor</td>
</tr>
<tr>
<td><em>Salmonella Enteritidis ATCC 13076</em></td>
<td>luxuriant</td>
<td>luxuriant</td>
</tr>
</tbody>
</table>

Please refer disclaimer Overleaf.
Salmonella Paratyphi B  
ATCC 8759  
good  
good

Salmonella Typhi ATCC  
6539  
fair-good  
fair

Salmonella Typhimurium  
ATCC 14028  
luxuriant  
luxuriant

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 the label.

Reference