Modified Rappaport Vassiliadis Medium, Granulated

Modified Rappaport Vassiliadis Medium, granulated is recommended as a selective enrichment medium for the isolation of *Salmonella* species from food and environmental specimens.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / 1110 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peptone from soyabean</td>
<td>5.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>8.000</td>
</tr>
<tr>
<td>Monopotassium phosphate</td>
<td>1.600</td>
</tr>
<tr>
<td>Magnesium chloride, 6H₂O</td>
<td>40.000</td>
</tr>
<tr>
<td>Malachite green</td>
<td>0.040</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 30.07 grams (the equivalent weight of dehydrated medium per litre) in 1000 ml distilled water. Heat gently if necessary to dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 115°C for 15 minutes.

**Principle And Interpretation**

Modified Rappaport Vassiliadis Medium is a selective broth for the enrichment of *Salmonella* from foodstuffs, environment and clinical specimens. The original formulation described by Rappaport et al (1) with magnesium chloride hexahydrate was modified by Vassiliadis et al (2) by lowering the concentration of malachite green and raising the incubation temperature to 43°C. This medium is recommended as the selective enrichment medium for isolation of *Salmonella* from food and environmental specimens.

The test specimen is added to Buffered Peptone Water (GM614/M614) and incubated at 35°C for 16 - 20 hours. This pre-enriched peptone water culture is inoculated into Modified Rappaport Vassiliadis Medium and incubated at 42 ± 1°C for 24 - 48 hours and further subcultured on Brilliant Green Agar (M016).

**Quality Control**

**Appearance**

Light yellow to light blue coloured granular medium

**Colour and Clarity of prepared medium**

Blue coloured clear solution without any precipitate

**Reaction**

Reaction of 3.0% w/v aqueous solution at 25°C. pH : 5.2±0.2

**pH**

5.00-5.40

**Cultural Response**

Cultural characteristics observed after an incubation at different temperatures for 24-48 hours, when subcultured on Brilliant Green Agar Base (M016) and then incubated at 35-37°C for 18-24 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Recovery at 37°C</th>
<th>Recovery at 42°C</th>
<th>Colour of colony</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Escherichia coli</em> ATCC 25922</td>
<td>50-100</td>
<td>fair</td>
<td>poor</td>
<td>yellowish green</td>
</tr>
<tr>
<td><em>Salmonella Paratyphi B</em> ATCC 8759</td>
<td>50-100</td>
<td>good</td>
<td>good</td>
<td>pink white</td>
</tr>
<tr>
<td><em>Salmonella Enteritidis</em> ATCC 50-100 13076</td>
<td>luxuriant</td>
<td>luxuriant</td>
<td>pink white</td>
<td></td>
</tr>
</tbody>
</table>

Please refer disclaimer Overleaf.
Salmonella Typhi ATCC 6539
50-100 fair-good fair pink red

Salmonella Typhimurium ATCC 14028
50-100 luxuriant luxuriant pink white

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

Revision : 00 / 2014