Gelatin Agar Slant

**Intended Use:**
Recommended for cultivation and identification of *Vibrio* species.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gelatin</td>
<td>30.000</td>
</tr>
<tr>
<td>Tryptone</td>
<td>10.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>10.000</td>
</tr>
<tr>
<td>Agar</td>
<td>15.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.2±0.2</td>
</tr>
</tbody>
</table>

**Directions**

Streak the test inoculum aseptically into the slant and incubate at appropriate conditions. Incubate the slants at 30-35°C for 18-24 hours.

**Principle And Interpretation**

Members of the genus *Vibrio* are facultative anaerobes capable of both respiratory and fermentative metabolism. The natural habitat for *Vibrio* species is aquatic, in both fresh water and salt water. The growth and biochemical reactivity of most species are enhanced in different test media supplemented with 1-2 % sodium chloride. *Vibrios* are fairly easy to isolate from both clinical and environmental material, though some species may require growth factors and/or vitamins. Media can be made selective for *Vibrio*s by adding appropriate selective agents (2). High concentrations of NaCl and alkaline pH have also been used to select certain *Vibrio* species, based on the ability of most *Vibrio* ’s to grow at pH values above 8.0 and at 3% or higher concentrations of NaCl. Gelatin Agar is formulated in accordance with APHA (5) for the cultivation and characterization of *Vibrio* species from foods and faeces. Clinical specimens must be obtained early in the disease as possible because the duration of excretion of the pathogen is short.

Weigh 25 grams of sample such as seafood or vegetables either blended or cut into small pieces and add into 2 flasks. Add 225 ml Alkaline Peptone Water (M618) to one flask and 225 ml of Glucose Phosphate Broth (M070) in another flask. Mix well. Incubate at 35° ± 2°C for 6 to 8 hours. Inoculate one loopful from each flask on the non-selective Gelatin Agar. *V.cholerae* appear transparent and usually have a characteristic cloudy zone around colony, which becomes more definite after few minutes of refrigeration. When these colonies are viewed in oblique light they appear iridescent green to bronze coloured and finely granular.

**Type of specimen**

Food samples, Water samples

**Specimen Collection and Handling**

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (5).

For water samples, follow appropriate techniques for sample collection and processing as per guidelines (1).

After use, contaminated materials must be sterilized by autoclaving before discarding.

**Warning and Precautions**

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection.

Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Please refer disclaimer Overleaf.
### Limitations
1. Further biochemical and serological tests must be carried out for further identification.

### Performance and Evaluation
Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at the recommended temperature.

### Quality Control

**Appearance**
Sterile Gelatin Agar slant in glass tube.

**Colour of medium**
Yellow coloured, clear to slightly opalescent gel forms in Petri plates.

**Quantity of medium**
8ml of medium in glass tube.

**Reaction**
7.00-7.40

**Sterility Test**
Passes release criteria.

### Cultural Response
Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Recovery</th>
<th>Gelatin liquefaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Vibrio cholerae</em> ATCC 15748</td>
<td>50-100</td>
<td>luxuriant</td>
<td>&gt;=50%</td>
<td>positive reaction, clear zone around the colony within 24-48 hours</td>
</tr>
<tr>
<td><em>Vibrio parahaemolyticus</em> ATCC 17802 (00037*)</td>
<td>50-100</td>
<td>luxuriant</td>
<td>&gt;=50%</td>
<td>positive reaction, clear zone around the colony within 24-48 hours</td>
</tr>
</tbody>
</table>

Key: *Corresponding WDCM numbers.

### Storage and Shelf Life
On receipt store between 2-8°C Use before expiry date on the label. Product performance is best if used within stated expiry period.

### Disposal
User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

### Reference
Disclaimer:

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