Tryptone Soya Serum Bacitracin Vancomycin Agar (TSBV) M1948

Tryptone Soya Serum Bacitracin Vancomycin Agar (TSBV) is recommended for the selective isolation and presumptive identification of *Actinobacillus actinomycetemcomitans*.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tryptone</td>
<td>15.000</td>
</tr>
<tr>
<td>Soya Peptone</td>
<td>5.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>1.000</td>
</tr>
<tr>
<td>Agar</td>
<td>15.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.1±0.2</td>
</tr>
</tbody>
</table>

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

**Directions**

Suspend 41 grams in 900 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add the rehydrated contents of one vial of TSBV Supplement (FD323) along with 100ml of Horse Serum (RM1239). Mix well and pour into sterile Petri plates.

**Principle And Interpretation**

Tryptone Soya Serum Bacitracin Vancomycin Agar is enriched media recommended for the selective isolation and identification of *Actinobacillus actinomycetemcomitans* by J.Slots(1). TSBV agar are used in oral microbiological studies. (2). The detection rate for *A.actinomycetemcomitans* in the adult group is 67% with severe periodontitis,it suggests that this bacterium is important not only in localized juvenile peri-odontitis but also in periodontitis in adults(3).

Tryptone and Soya peptone provide amino acids and other complex nitrogenous substances. Dextrose is the energy source. Dipotassium hydrogen phosphate buffers the medium. Yeast extract is the rich source of vitamin B complex. The medium is enriched with Horse serum for the good growth of *A.actinomycetemcomitans*. Bacitracin and Vancomycin inhibits most gram-positive and gram-negative anaerobes.

**Quality Control**

**Appearance**
Cream to yellow homogeneous free flowing powder

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

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

**Reaction**
Reaction of 4.1% w/v aqueous solution at 25°C. pH : 7.1±0.2

**pH**
6.90-7.30

**Cultural Response**
Cultural characteristics observed after an incubation at 35-37°C under 5% CO2 for 24-48 hours.

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

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Please refer disclaimer Overleaf.
Actinobacillus actinomycetemcomitans 50-100 good-luxuriant \( \geq 50\%
\)

Fusobacterium nucleatum 50-100 good-luxuriant \( \geq 50\%
\)

Enterococcus faecalis ATCC 29212 \( \geq 10^3 \) inhibited

Clostridium difficile ATCC 11204 \( \geq 10^3 \) inhibited

**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**