PPLO Broth Base w/ CV (Mycoplasma Broth Base w/ CV) with the addition of enrichment, is used for isolation and cultivation of Mycoplasma species (pleuropneumonia like organisms) from clinical specimens and mixed cultures.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef heart, infusion from</td>
<td>250.000</td>
</tr>
<tr>
<td>Peptic digest of animal tissue</td>
<td>10.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Crystal violet</td>
<td>0.010</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.8±0.2</td>
</tr>
</tbody>
</table>

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

**Directions**

Suspend 21 grams in 700 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45°C and aseptically add 2.85 ml of 1% Potassium Tellurite (FD052) along with 300 ml Horse serum (RM1239) or 10 vials of Mycoplasma Enrichment Supplement (FD075). Mix well and dispense into sterile test tubes. 25% Ascitic fluid can be used instead of Horse serum.

**Principle And Interpretation**

PPLO Media were described by Morton, Smith and Leberman (1). It was used in a study of the growth requirements of Mycoplasma (2), along with the identification and cultivation of this organism. (3-5). Pivotal information regarding Mycoplasma has been documented by Sabin (6). Hayflick et al have reported the information regarding the cultivation of Mycoplasma (7).

For the cultivation of Mycoplasma the medium ingredients and all the supplements should be free of any toxic substances even in small amounts. Many Mycoplasma require serum for their good growth and also presence of antibiotic is necessary to prevent the growth of contaminating organisms. Crystal violet and potassium tellurite inhibits many gram-negative and gram-positive bacteria. Mostly the Mycoplasma species are aerobic or facultatively anaerobic but some are microaerophilic. Few are anaerobic saprophythic Mycoplasma which grow best at 22-35°C while pathogenic strains grow at 35°C. Mycoplasma when grow in the agar medium show typical morphology, and form colonies below the agar surface and do not grow without serum.

After subculture to plates of PPLO Agar, possible broth cultures produce colonies exhibiting the typical morphology, i.e., fried egg appearance.

Plates or tubes should be incubated in an atmosphere containing 5-10% carbon dioxide and examined after incubation of 48 hours but they should not be discarded as negative until after incubation for 3 weeks.

**Quality Control**

**Appearance**

Cream to yellow homogeneous free flowing powder

**Colour and Clarity of prepared medium**

Yellow coloured may have purple tinge, clear solution in tubes. clear solution in tubes.

**Reaction**

Reaction of 2.1% w/v aqueous solution at 25°C. pH : 7.8±0.2

**pH**

7.60-8.00

Please refer disclaimer Overleaf.
M268: Cultural characteristics observed in presence of 10% Carbon dioxide with added 1% Potassium tellurite (FD052), 1% Horse serum (RM1239) and Mycoplasma Enrichment Supplement (FD075) after an incubation at 22-35°C for 48 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Mycoplasma bovis</em> ATCC 25523</td>
<td>good-luxuriant</td>
</tr>
<tr>
<td><em>Mycoplasma gallinarium</em> ATCC 19708</td>
<td>good-luxuriant</td>
</tr>
<tr>
<td><em>Mycoplasma pneumoniae</em> ATCC 15531</td>
<td>good-luxuriant</td>
</tr>
<tr>
<td><em>Streptococcus pneumoniae</em> ATCC 6303</td>
<td>good-luxuriant</td>
</tr>
</tbody>
</table>

**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**


Disclaimer:

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