PPLO Modified Broth Base w/o CV is used for isolation and cultivation of Mycoplasma species (pleuropneumonia like organisms).

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat infusion from</td>
<td>50.000</td>
</tr>
<tr>
<td>Peptone</td>
<td>10.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.8±0.2</td>
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</tbody>
</table>

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

**Directions**

Suspend 21 grams in 700 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 and aseptically add 300 ml Horse serum (RM1239) or 10 vials of Mycoplasma Enrichment Supplement (FD075). Mix well before dispensing.

**Principle And Interpretation**

PPLO Agar was 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).

PPLO Broth without crystal violet is prepared according to the formula described by Morton and Lecce (2). Crystal violet is omitted from this formula due to its inhibitory action on some Mycoplasma. It has been used for the cultivation of Mycoplasma for research studies (8, 9).

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. Mostly the Mycoplasma species are aerobic or facultatively anaerobic but some are microaerophilic. Few are anaerobic saprophytic Mycoplasma which grow best at 22-35°C while pathogenic strains grow at 35°C.

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 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

**Cultural Response**

M1586: Cultural characteristics observed in presence of 10% CO2 with added Horse serum (RM1239) OR 10 vials of Mycoplasma Enrichment Supplement (FD07 5), after an incubation at 22-35°C for 24-48 hours

**Organism**

Growth
**Mycoplasma bovis ATCC 25523**  
**Mycoplasma gallinarium ATCC 19708**  
**Mycoplasma pneumoniae ATCC 15531**  
**Streptococcus pneumoniae ATCC 6303**

good-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**

**Disclaimer**
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