

Technical Information

Mycoplasma MiVeg Agar Base

Product Code : VM1266

Application:- Mycoplasma MiVeg Agar Base (PPLO MiVeg Agar Base) with the addition of enrichment, is recommended for isolation and cultivation of *Mycoplasma* (pleuropneumonia like organisms).

Composition

Ingredients	Gms / Litre
MiVeg infusion	6.00
MiVeg peptone	10.00
Sodium chloride ² ss	5.00
Agar	15.00
Final pH (at 25°C)	7.8±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Mycoplasma MiVeg Agar Base is prepared by using vegetable peptones in place of animal based peptones thus the media becomes free from BSE/TSE risks. This medium is the modification of the medium which are devised by Morton et al (1) and is used for the isolation of *Mycoplasma* from clinical specimens, such as sputum and mixed cultures.

The medium ingredients and all the supplements should be free of any toxic substances even in small amounts for the cultivation of *Mycoplasma*. Many *Mycoplasma* require serum for their good growth and to prevent the growth of contaminating organisms addition of antibiotic is necessary. 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. Typical morphology is shown by *Mycoplasma* when grown in the agar medium and form colonies below the agar surface and do not grow without serum.

The inoculated plates should be incubated in an atmosphere containing 5-10% carbon dioxide and examined after incubation of 48 hours. The inoculated plates should not be discarded as negative until after incubation for 3 weeks.

Methodology

Suspend 36 grams of powder media in 700 ml distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45°C and aseptically add 300 ml Horse serum (BA2239) or 10 vials of Mycoplasma Enrichment Supplement (MS2075). Mix well before pouring into sterile petri plates.

Quality Control

Physical Appearance

Yellow coloured, may have slightly greenish tinge, 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 3.6 % w/v aqueous solution pH: 7.8 ±0.2 at 25°C

pH range

7.6-8.0

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35°C for 48-72 hours with 10% Carbon dioxide, and added Horse serum

(BA2239)/Mycoplasma Enrichment Supplement (MS2075).

Organisms (ATCC)	Inoculum (CFU)	Growth
<i>Mycoplasma bovis</i> (25523)	10^2 - 10^3	good-luxuriant
<i>Mycoplasma gallinarum</i> (19708)	10^2 - 10^3	good-luxuriant
<i>Mycoplasma pneumoniae</i> (15531)	10^2 - 10^3	good-luxuriant
<i>Streptococcus pneumoniae</i> (6303)	10^2 - 10^3	good-luxuriant

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. Morton, Smith and Leverman, 1951, Am. J. Syphilis Gonorrh. Venereal Diseases, 35 : 361.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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