Mycoplasma Cultivation Broth Base

M1498

Intended Use:

With the addition of enrichment supplement, it is recommended for isolation and cultivation of *Mycoplasma* (Pleuropneumonia like organisms).

Composition**

Ingredients	g / L
Peptone special	10.000
HM peptone B #	5.000
Sodium chloride	10.000
Mineral supplement	0.500
Final pH (at 25°C)	7.8±0.2

**Formula adjusted, standardized to suit performance parameters
Equivalent to Beef extract

Directions

Suspend 25.5 grams in 700 ml purified/distilled water. Heat if necessary to dissolve the medium completely. If desired, distribute in 70 ml aliquots in flasks or tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add contents of one vial (30 ml) of HYTD Cultivation Supplement (FD198) to 70 ml sterile medium flask or tube. Mix well and dispense in sterile tube further if required.

Principle And Interpretation

Mycoplasma Cultivation Broth is used for the isolation & cultivation of *Mycoplasma* from clinical specimens, such as sputum and mixed cultures. For the cultivation of *Mycoplasma* the medium ingredients and all the supplements should be free of any toxic substances even in small amounts. The components contained in this basal medium do not exhibit inhibitory or toxic effects. This medium is devised on the basis of Morton et al Media (1). A special mineral supplement has been added to original formula to improve the growth and colony characteristics of the organism. After enrichment of basal medium with yeast extract, horse serum and antibiotics the medium supports the growth of *Mycoplasma.*

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.

Type of specimen

Clinical samples - nasopharyngeal and oropharyngeal swabs, pharmaceutical samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. 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 clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Since *Mycoplasma* species are aerobic or facultatively anaerobic but some are microaerophilic, proper incubation should be carried out for optimal recovery.
2. Since the medium is highly enriched, care must be taken during preparation and inoculation to avoid contamination.

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 recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Yellow coloured clear to slightly opalescent solution

Reaction

Reaction of 2.55% w/v aqueous solution at 25°C. pH : 7.8±0.2

pH

7.60-8.00

Cultural Response

Cultural characteristics observed with added 10 vial of HYTD Cultivation Supplement (FD198) in presence of 10% Carbon dioxide, after an incubation at 35-37°C for 48 hours.

Organism	Growth
Mycoplasma bovis ATCC 25523	good-luxuriant
Mycoplasma gallinarium ATCC 19708	good-luxuriant
Mycoplasma pneumoniae ATCC 15531	good-luxuriant
Streptococcus pneumoniae ATCC 6303	good-luxuriant

Storage and Shelf Life

Store below 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle inorder to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. 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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1. Morton, Smith and Leverman, 1951, Am. J. Syphilis Gonorrh. Veneral Diseases, 35 : 361.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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IVD *In vitro* diagnostic medical device

10°C 30°C Storage temperature

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CE CE Marking

Do not use if package is damaged