

TM 233 – PPLO AGAR BASE (MYCOPLASMA AGAR BASE)

INTENDED USE

For isolation and cultivation of *Mycoplasma* species (PPLO).

PRODUCT SUMMARY AND EXPLANATION

PPLO Agar was described by Morton, Smith and Leberman. It was used in a study of the growth requirements of *Mycoplasma*, along with the identification and cultivation of this organism. Pivotal information regarding *Mycoplasma* has been documented by Sabin. Hayflick et al have reported the information regarding the cultivation of *Mycoplasma*. For the cultivation of *Mycoplasma*, the medium ingredients and all the supplements should be free of any toxic substances even in small amount.

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 facultative anaerobic but some are microaerophilic. Few are anaerobic saprophytic *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.

COMPOSITION

Ingredients	Gms / Ltr
Beef heart, infusion from	250.000
Peptone	10.000
Sodium chloride	5.000
Agar	15.000

PRINCIPLE

This medium consists of beef heart, infusion from and peptone which provides nitrogen and carbon source, long chain amino acids, vitamins, and other essential nutrients. Sodium chloride maintains the osmotic balance of these formulations.

INSTRUCTION FOR USE

- Dissolve 36.0 grams in 700 ml purified/ distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add 300 ml Horse serum or 10 vials of Mycoplasma Enrichment Supplement.
- Mix well before dispensing. 25% Ascitic fluid can be used instead of Horse serum.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.8 ± 0.2

INTERPRETATION



Cultural characteristics observed in presence of 10% Carbon dioxide with added, 1% Horse serum or 10 vials of Mycoplasma Enrichment Supplement after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Streptococcus pneumoniae</i>	6303	50-100	Good-luxuriant	≥50%	22-35°C	48 Hours
<i>Mycoplasma pneumoniae</i>	15531	50-100	Good-luxuriant	≥50%	22-35°C	48 Hours
<i>Mycoplasma gallinarum</i>	19708	50-100	Good-luxuriant	≥50%	22-35°C	48 Hours
<i>Mycoplasma bovis</i>	25523	50-100	Good-luxuriant	≥50%	22-35°C	48 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.







DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Chanock, James, Fox, Turner, Mufso and Hayflick, 1962, Soc. Exp. Biol. Med., 110:884.
2. Craven, Wenzel, Calhoun, Hendley, Hamory and Gwaltney, 1976, J. Clin. Microbiol., 4:225.
3. Hayflick and Chanock, 1965, Bacteriol. Rev., 29:185.
4. Morton, Smith and Leberman, 1951, Am. J. Syphilis Gonorrh. Veneral Diseases, 35: 361.
5. Morton and Lecce, 1953. J. Bacteriol., 66:646.



GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	 Manufacturer
 Temperature Unit	EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10, 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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