PPLO Broth Base w/o Crystal Violet

Cat. 1262

For the enrichment of PPLO microorganisms. Mycoplasma in clinical specimens and mixed cultures.

Practical information

Aplications	Categories
Selective enrichment	Mycoplasma

Industry: Clinical

CE IVD

Principles and uses

PPLO Broth Base w/o Crystal Violet is used in the studies of the growth requirements of Mycoplasma, along with the identification and cultivation of this organism. PPLO stands for Pleuro Pneumonia-Like Organisms, an old name for Mycoplasma. PPLO Broth w/o Crystal violet is prepared according to the formula described by Morton and Lecce.

Peptone and beef heart infusion provide nitrogen, vitamins, minerals and amino acids essential for growth, whilst the sodium chloride provides the osmotic balance. Crystal violet is not included in this formula since it is inhibitory on some Mycoplasma.

Although some species are normal human respiratory tract flora, Mycoplasma pneumoniae is a major cause of respiratory disease (primary atypical pneumonia, sometimes called “walking pneumonia”). Mycoplasma hominis, Mycoplasma genitalium and Ureaplasma urealyticum are important colonizers (and possible pathogens) of the human genital tract.

Formula in g/L

Beef heart infusion	6	Peptone	10
Sodium chloride	5		

Preparation

Suspend 21 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121 ºC for 15 minutes. Cool to 45-50 ºC and, if desired, aseptically add supplements and additives. Homogenize gently.

Instructions for use

- Inoculate and incubate at 35±2 ºC under 5-10% CO2 during 24-72 hours.
- Subculture to PPLO Agar (Cat. 1140) and incubate at 35±2 ºC under 5-10% CO2 for up to 7 days.
- Examine daily for growth.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Beige	Amber	7,8±0,2

Microbiological test

Incubation conditions: (35±2 ºC / 5-10 % CO2 / 24-72 h).

Microrganisms	Specification
Mycoplasma pneumoniae ATCC 15531	Good growth

Mycoplasma gallinarum ATCC 19708	Good growth
Mycoplasma bovis ATCC 25523	Good growth

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

Leland DS, MA Lapworth, RB Jones and MLV French 1982. Comparative evaluation of media for isolation of Ureaplasma urealyticum and genital Mycoplasmas species. J. Clin. Microbiol. 16:709-714.
Kenny GE 1985 Mycoplasmas, p. 407-411 In EH Lennette, A Balows Manual of clinical microbiology, 4th ed. American Society for Microbiology, Washington DC.
Morton and Lecce. 1953. J. Bacteriol. 66:646.