

PPLO Agar Base w/o Crystal Violet

Cat. 1140

For the isolation and culture of PPLO microorganisms: Mycoplasma in clinical specimens and mixed cultures.

Practical information

Applications	Categories
Selective enrichment	Mycoplasma
Selective isolation	Mycoplasma

Industry: Clinical



Principles and uses

PPLO Agar Base w/o Crystal Violet is used in the study of the growth requirements of Mycoplasma, along with the identification and cultivation of this organism. PPLO stands for Pleuro Pneumonia-Like Organisms and was described by Morton, Smith and Leberman.

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

PPLO colonies have a round shape and a a dense center with a less dense periphery, giving a “fried egg” appearance on agar.

Formula in g/L

Bacteriological agar	14	Beef heart infusion	6
Peptone	10	Sodium chloride	5

Preparation

Suspend 35 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. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C and, if desired, aseptically add 1% serum fraction or 25 % ascetic fluid. Homogenize gently and dispense into Petri dishes.

Instructions for use

Inoculation method:

- Grow the microorganism in PPLO Broth Base w/o Crystal Violet (Cat. 1262).
- Inoculate the test sample in PPLO Agar w/o Crystal Violet with 0,1 ml of serial dilutions. Use the pour plate method or the swab-inoculation technique.
- Incubate at 35±2 °C with 5-10% CO₂, for a maximum of 7 days.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber, slightly opalescent	7,8±0,2

Microbiological test

Incubation conditions: (35±2 °C, 5-10% CO₂ atmosphere / 7 days).

Microrganisms	Specification
Mycoplasma pneumoniae ATCC 15531	Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

Adler, H.E. and AJ Da Massa. 1967 Use of formalized Mycoplasma gallisepticum antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. Appl. Microbiol 15:245-248.
Morton HE and JG Lecce. 1953. Selective action of thallium acetate and crystal violet for pleuropneumonia like organisms of human origin. J. Bacteriol 66:646-649.

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