Technical Information

Cetrimide MiVeg Agar Base

Product Code : VM1024

Application:- Cetrimide MiVeg Agar Base is a selective media used for isolation of *Pseudomonas aeruginosa* from clinical specimens.

Composition

Ingredients	Gms / Litre
MiVeg peptone No. 2	20.0
Magnesium chloride	1.4
Potassium sulphate	10.0
Cetrimide	0.3
Agar	15.0
Final pH (at 25°C)	7.2±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Cetrimide MiVeg Agar Base is prepared by using Miveg peptone No. 2 instead of Gelatin peptone which makes this media free from BSE/ TSE risk. This media is the modification of Cetrimide Agar Base which is based on the formula described by King et al (1). It is a selective medium used for the isolation of *Pseudomonas aeruginosa* from pus, sputum and drains etc & also used for determining the ability of an organism to produce fluorescein and pyocyanin. Cetrimide (Cetyltrimethylammonium bromide) is incorporated in the medium to inhibit bacteria other than *Pseudomonas aeruginosa* which acts as a quaternary ammonium compound, cationic detergent that causes nitrogen and phosphorus to be released from bacterial cells other than *Pseudomonas aeruginosa.* Pseudomonas aeruginosa should be inoculated first on non-selective medium such as Brain Heart Infusion Broth MiVeg (VM1210) or Soyabean MiVeg medium (VM1011) then transfer on Cetrimide Miveg Agar plate. If the count is high the test sample can be directly inoculated onto this medium. *Pseudomonas aeruginosa* colonies may appear blue, blue-green or nonpigmented.

Methodology

Suspend 46.7 grams of powder media in 1000 ml distilled water containing 10 ml glycerol. Mix thoroughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If desired, rehydrated contents of 1 vial of Nalidixic Selective Supplement (MS2130) may be added aseptically to 1000 ml medium.

Quality Control

Physical Appearance

Light 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

Light amber coloured, opalescent gel forms in petri plates.

Reaction

Reaction of 4.67% w/v aqueous solution containing 1% v/v glycerol is pH: 7.2 ±0.2 at 25°C

**pH range**

7.0-7.4

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
Escherichia coli (25922)	10^2-10^3	inhibited	0%	-
Pseudomonas aeruginosa (27853)	10^2-10^3	luxuriant	>50%	Greenish yellow
Pseudomonas maltophila (13637)	10^2-10^3	inhibited	0%	-
Staphylococcus aureus (25923)	10^2-10^3	inhibited	0%	-

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: 2-8^0 in sealable plastic bags for 2-5 days.
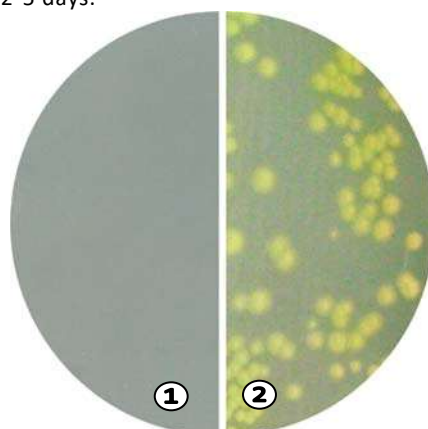
VM1024 Cetrimide MiVeg Agar Base

1. Control
2. *Pseudomonas aeruginosa*

Further Reading

1. King, Ward and Raney, 1954, J. Lab. Clin. Med., 44:301.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
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