Pseudomonas Isolation MiVeg Agar Base

Product Code : VM1406

Application:- Pseudomonas Isolation MiVeg Agar Base is used for selective isolation and identification of *Pseudomonas aeruginosa* from clinical and nonclinical specimens.

Composition

Ingredients	Gms / Litre
MiVeg peptone	20.0
Magnesium chloride	1.4
Potassium sulphate	10.0
Triclosan (Irgasan)	0.025
Agar	13.6
Final pH (at 25°C)	7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Pseudomonas Isolation MiVeg Agar Base is prepared by adding MiVeg peptone in place of Peptic digest of animal tissue thus making the medium free from BSE/TSE risks. Pseudomonas Isolation MiVeg Agar Base is a modification of the Medium A formulated by King et al (1) which was developed for improved detection and differentiation of *Pseudomonas.* MiVeg peptone supplies all the essential growth nutrients. Glycerol serve as an energy source of the medium and is also promotes production of pyocyanin pigment which is characteristic of *Pseudomonas* (2, 3). Potassium sulphate and magnesium chloride also helps in pyocyanin production. Triclosan (4) selectively inhibits gram-positive and gram-negative bacteria but *Pseudomonas* species are resistant to it. Some pyocyanin producing strains may also produce small amounts of fluorescein and thus results in formation of blue-green to green pigment.

Methodology

Suspend 45.03 grams of powder media in 1000 ml distilled water containing 20ml glycerol. Mix thoroughly and heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.36% Agar gel.

Colour and Clarity of prepared medium

Yellow coloured, slightly opalescent gel forms in petri plates.

Reaction

Reaction of 4.5% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

pH Range

6.8-7.2

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)	10^2-2×10^3	inhibited	0%	–
Proteus mirabilis (25933)	10^2-2×10^3	inhibited	0%	–
Pseudomonas aeruginosa (10145)	10^2-10^3	luxuriant	>50%	green
Pseudomonas aeruginosa (27853)	10^2-10^3	luxuriant	>50%	blue-green

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: $2\text{-}8^0$ in sealable plastic bags for 2-5 day.
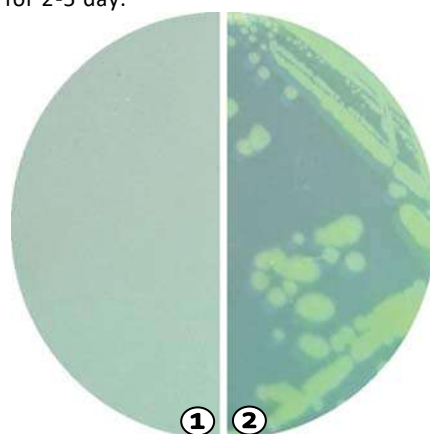
VM1406 Pseudomonas Isolation MiVeg Agar Base
1. Control
2. *Pseudomonas aeruginosa* (10145)

Further Reading

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

2. Forbes BA, Sahm DF, Weissfeld AS, 2002, Bailey and Scott's Diagnostic Microbioligy, 11th ED., The C.V Mosby Co., St. Louis.

3. MacFaddin J.F., 1985, Media for Isolation - Cultivation -Identification-Mainte nance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

4. Furia and Schenkel, 1968, Soap and Chemical specialities.

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.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for in fingement of any patents.Do not use the products if it fails to meet specificatons for identity and performens parameters.