Technical Information

Pseudomonas MiVeg Agar (For Fluorescein)

Product Code : VM1120

Application:- Pseudomonas MiVeg Agar (For Fluorescein) is recommended for the detection of fluorescein production by *Pseudomonas* species.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	10.0
MiVeg peptone No. 3	10.0
Dipotassium phosphate	1.5
Magnesium sulphate	1.5
Agar	15.0
Final pH (at 25°C)	7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Pseudomonas MiVeg Agar (For Fluorescein) is prepared by adding Missveg peptone in place of animal based peptones thus making the medium free from BSE/TSE risks. Pseudomonas MiVeg Agar (For Fluorescein) is the modification of Pseudomonas Agar (For Fluorescein) which is formulated as described by King et al (1) for the detection of fluorescein production, a water soluble, chloroform insoluble fluorescent pigment by *Pseudomonas* species (2). This medium enhances the fluorescein production and inhibits the pyocyanin formation. The fluorescein pigment produced by *Pseudomonas* diffuses into agar with yellow fluorescent colouration of the medium. Some strains of *Pseudomonas* produce small amounts of pyocyanin resulting in a yellow-green colouration.

MiVeg hydrolysate and MiVeg peptone No.3 supplies the essential nitrogenous nutrients, carbon, sulphur and trace elements for the growth of *Pseudomonas*. Glycerol serve as an energy source and also enhances pigment production. Dipotassium phosphate buffers the medium as well as increases the phosphorus content of the medium, thereby enhancing production of fluorescein pigment. Magnesium sulphate supply necessary cations required for the activation of fluorescein production. High Salt concentration i.e., more than 2% affects pigment production. UV light is bactericidal in nature, so make sure that there is good growth before placing culture under UV light (2). The formation of non pigmented colonies does not completely rule out a *Pseudomonas aeruginosa* isolate.

Methodology

Suspend 38 grams of powder media in 1000 ml distilled water containing 10ml 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 1.5% Agar gel.

Colour and Clarity of prepared medium

Yellow coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 3.8% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

pH Range

6.8 - 7.2

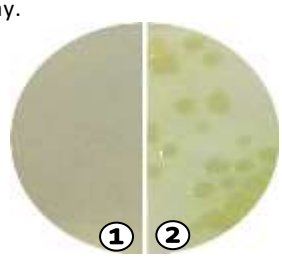
Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Colour of colony
Pseudomonas aeruginosa (17934)	30-300	luxuriant	greenish yellow
Pseudomonas aeruginosa (27853)	30-300	luxuriant	greenish yellow

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 day.



VM1120 Pseudomonas MiVeg Agar (For Fluorescein)
(Against dark background)
1. Control
2. *Pseudomonas aeruginosa*

Further Reading

1. King, Ward and Raney, 1954, J. Lab. Clin. Med., 44 : 301.
2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Volume I, Williams and Wilkins, Baltimore.

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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