Technical Information

Pseudomonas MiVeg Agar (For Pyocyanin)

Product Code : VM1119

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

Composition

Ingredients	Gms / Litre
MiVeg special peptone	20.00
Potassium sulphate	10.00
Magnesium chloride	1.40
Agar	15.00
Final pH (at 25°C)	7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Pseudomonas MiVeg Agar is prepared by adding Miveg special peptone instead of special peptone thus making the medium free from BSE/TSE risks. This medium is the modification of Pseudomonas Agar which is based on the formulation described by King et al (1) for detecting pyocyanin, a water soluble pigment by *Pseudomonas* species (2). This medium enhances pyocyanin formation but inhibits the formation of fluorescein pigment. The pyocyanin pigment produces from *Pseudomonas,* diffusses into the agar with blue colouration of the medium. Some *Pseudomonas* strains produce small amounts of fluorescein resulting in a blue-green colouration.

MiVeg special peptone supplies nitrogenous growth nutrients, carbon, sulphur and trace elements for *Pseudomonas* species. Potassium sulphate and magnesium chloride in the medium enhances the pyocyanin production and suppresses the fluorescein production. Glycerol serve as an energy source of the medium and also enhances pigment production.

Methodology

Suspend 46.4 grams of powder media in 1000 ml distilled water containing 10ml glycerol. Mix well 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

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

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

Reaction

Reaction of 4.64% w/v aqueous solution (containing 1% v/v glycerol) is pH 7.0 ± 0.2 at 25°C.

pH Range

6.8-7.2

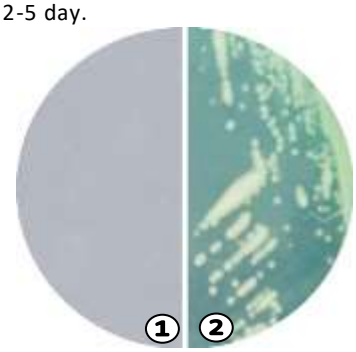
Cultural Response/Characteristics

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Colour of medium
Pseudomonas aeruginosa (27853)	30-300	luxuriant	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: 2-8^0 in sealable plastic bags for 2-5 day.



VM1119 Pseudomonas MiVeg Agar (For Pyocyanin)
(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.
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