

Pseudomonas Agar for Detection of Fluorescein Plate

Intended Use

Pseudomonas Agar for Detection of Fluorescein Plate is used for enhancement of fluorescein production by *Pseudomonas* species.

Summary

Pseudomonas species may produce water-soluble pigments in culture media. This property is sometimes used as a characteristic for the taxonomic classification of different species of *Pseudomonas*. Most strains of *P. aeruginosa* produce pyocyanin (blue) or pyoverdin (Yellow) or both, as well as pyorubrin (red), pyomelanin (Brown), or various combinations of these pigments.

P. aeruginosa and other *Pseudomonas* isolated from humans often produce water soluble fluorescent pigments; pyoverdin is also one of these. Fluorescent pigment-producing strains fluoresce under short-wave ultraviolet light. The fluorescence of *Pseudomonas* is best observed at 254 nm.

Pseudomonas Agar (for fluorescein) is a modification of formulation described by King *et al.*, This medium is recommended by USP for use in Microbial Limit Tests.

Principle

Pancreatic digest of casein and Peptic digest of animal tissue provide nutrients, carbon, sulphur and trace elements for growth. The equal proportion of pancreatic digest of casein and peptic digest of animal tissue is helpful for fluorescein production by *Pseudomonas*.

Dibasic potassium phosphate serves as the buffer. Magnesium sulphate enhance fluorescein production. Glycerol, as an energy source, also increases fluorescein production. Agar is the solidifying agent.

Formula*

Ingredients	g/L
Pancreatic Digest of Casein	10.0
Peptic Digest of Animal Tissue	10.0
Anhydrous Dibasic Potassium Phosphate	1.5
Magnesium Sulphate	1.5
Agar	15.0
Final pH (at 25°C)	7.2 ± 0.2

*Adjusted to suit performance parameters.

Additional Material Required

Bacteriology Incubator.

Instructions for use

1. Open the sterile pack and remove the respective plate aseptically.
2. Inoculate/streak the plate as per standard procedure.
3. Incubate the plates in inverted position as per standard guidelines.

Reading and interpretation

1. After incubation, observe the microbial growth and count the colonies.
2. Interpretation is assured by user.
3. User is responsible to define the action limits as per standard guidelines and alert limits on the basis of trend analysis & other relevant data.

Quality Control

Appearance: Gel with smooth and even surface, without any cracks, bubbles and drying or shrinking of media.

Colour of Medium: Off white to white coloured medium with slight haze.

Quantity of Medium: 26 ± 2 g in 90 mm petriplate.

pH at 25°C ± 2°C: 7.2 ± 0.2

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP and growth is observed after an incubation at 30°C-35°C for 18-24 hours.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 30°C-35°C for 18 hours.

Indicative Properties: The test results observed are within the specified temperature and time, inoculating ≤ 100 cfu of appropriate microorganism.

Growth Promoting + Indicative

Organism (ATCC)

Pseudomonas aeruginosa (9027)

Pseudomonas aeruginosa Strain Boston 41501 (27853)

Growth

Good

Good

Flourescence in UV light

Positive

Positive

Note:

For Good growth - growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Storage and Shelf Life

1. Store between 15°C-25°C to avoid water condensation. Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.
2. Under optimal conditions, the medium has a shelf life of 6 months. Use before expiry mentioned on the label.

Reference

1. Garibaldi J.A. Journal of Bacteriology, Nov. 1967.1296-1299.
2. Judy A. Daly, Boshard R. and John M. Masten, Journal of clinical Microbiol. June 1984, 742-743.
3. Data on File: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.

205160990100

Product

Pseudomonas Agar for Detection of Fluorescein Plate

Pack Size

100 Plates

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
