

Pseudomonas Agar for Detection of Pyocyanin Plate

Intended Use

Pseudomonas Agar for Detection of Pyocyanin Plate is used for enhancement of pyocyanin 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 pyoverdine (Yellow) or both, as well as pyorubrin (red), pyomelanin (Brown), or various combinations of these pigments.

Pseudomonas Agar (for Pyocyanin) 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 Gelatin provides nutrients, amino acids and trace elements for growth. Magnesium chloride and Potassium sulfate enhance pyocyanin production. Glycerin as an energy source also increases pyocyanin production. Agar is the solidifying agent.

Formula*

Ingredients	g/L
Pancreatic Digest of Gelatin	20.0
Anhydrous Magnesium Chloride	1.4
Anhydrous Potassium Sulfate	10.0
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: Light yellow coloured, clear to slightly opalescent gel.

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.

Organism (ATCC)	Growth	Colour of colony	Pyocyanin
<i>Pseudomonas aeruginosa</i> (9027)	Good	Blue-green	Positive
<i>Pseudomonas aeruginosa</i> Strain Boston 41501 (27853)	Good	Blue-green	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.	Product	Pack Size
205161000100	Pseudomonas Agar for Detection of Pyocyanin Plate	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.