

# Pseudomonas Fluorescent Agar



Medium used for the isolation and identification of *Pseudomonas aeruginosa* from other *Pseudomonas* spp. on the basis of fluorescein production.

## • CONTENTS (Liter)

Dipotassium Phosphate	1.0 g
Magnesium Sulfate	0.5 g
Potassium Chloride	0.2 g
Sodium Nitrate	5.0 g
Bile Salt	1.0 g
Betaine	5.0 g
Agar	15.0 g
Final pH = 7.3 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 27.7 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

## • INTERPRETATION

*Pseudomonas Fluorescent Agar* is a medium used for the isolation and identification of *Pseudomonas aeruginosa* from other *Pseudomonas* spp. on the basis of fluorescein production which fluoresces greenish-blue when the growths are observed under a UV. Dipotassium phosphate and magnesium sulfate enhance fluorescein production. Potassium chloride maintains isotonic conditions. Sodium nitrate serves as the sole source of nitrogen. Bile salt inhibits the growth of Gram-positive bacteria. Betaine provides positive ions. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 ± 2°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

### Prepared medium

Appearance: slightly opalescent

Color: creamy white with precipitates

Incubation conditions: 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics	UV Test
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	greenish-yellow colony	greenish-blue
<i>Pseudomonas stutzeri</i>	17588	50-100	good	greenish-yellow colony	greenish-blue
<i>Pseudomonas chlororaphis</i>	9446	≥10 <sup>3</sup>	inhibited	-	-
<i>Pseudomonas putida</i>	17514	≥10 <sup>3</sup>	inhibited	-	-
<i>Escherichia coli</i>	25922	≥10 <sup>3</sup>	inhibited	-	-

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

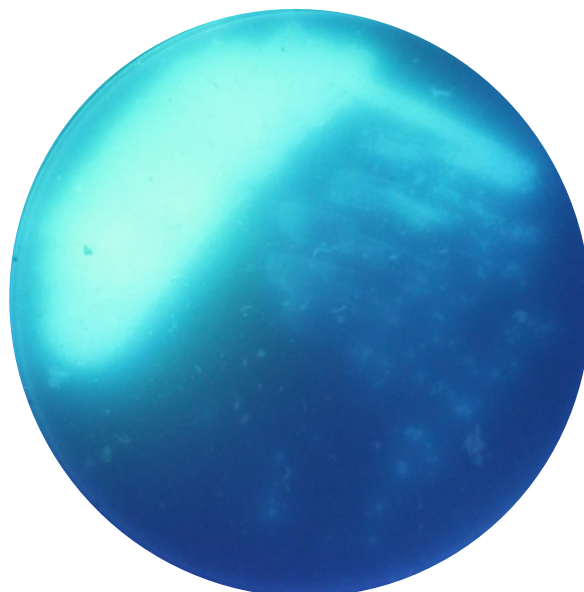
## • REFERENCES

1. King, E.O., M.K. Ward, and D.E. Raney (1954). Two simple media for the demonstration of pyocyanin and fluorescin. J. Lab. Clin. 44, 301.
2. The United States Pharmacopeia. 23rd ed. (1995).
3. Bacteriological Analytical Manual. 8th ed. (1995). AOAC International, Gaithersburg, MID.
4. EN 12780: 2002. Water quality – Detection and enumeration of *Pseudomonas aeruginosa* by membrane filtration.

## • PACKAGE

Cat. No : MB-P0609 Pseudomonas Fluorescent Agar	500 G
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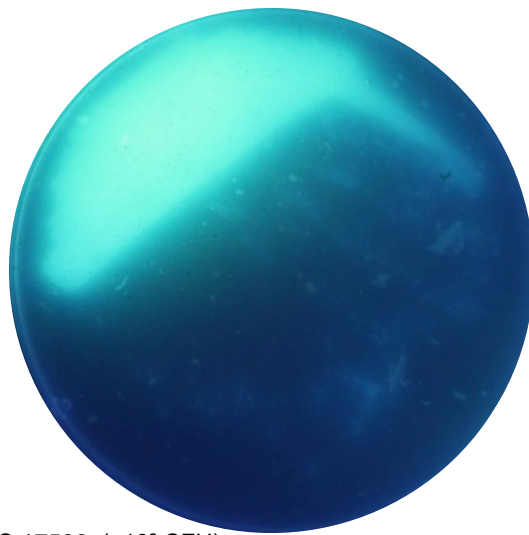
## • MICROBIAL CULTURE IMAGES



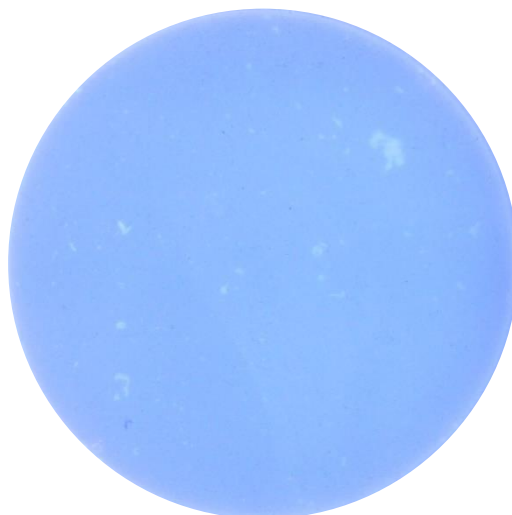
UV test

*Pseudomonas aeruginosa* ATCC 27853 ( $\geq 10^3$  CFU)

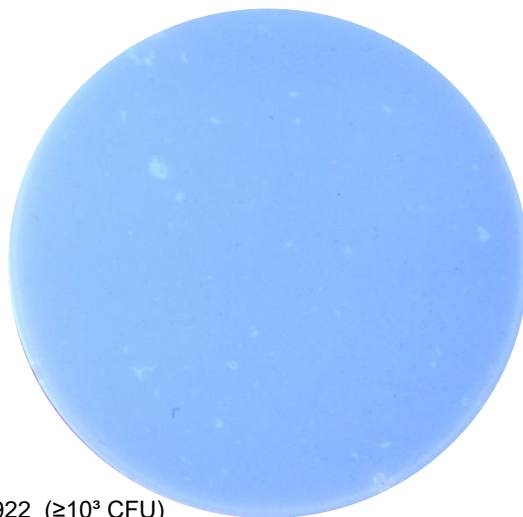
Incubation conditions : 35 ± 2°C / 18 - 24 hours



*Pseudomonas stutzeri* ATCC 17588 ( $\geq 10^3$  CFU) UV test



*Pseudomonas chlororaphis* ATCC 9446 ( $\geq 10^3$  CFU) UV test



*Escherichia coli* ATCC 25922 ( $\geq 10^3$  CFU) UV test

Incubation conditions :  $35 \pm 2^\circ\text{C}$  / 18 - 24 hours