

PSEUDOMONAS AGAR F

Dehydrated medium for isolation and differentiation of *Pseudomonas*

TYPICAL FORMULA (g/L)

Peptospecial	20.0
Magnesium sulfate	1.5
Di-potassium phosphate	1.5
Agar	14.0
Final pH 7.2 ± 0.2	

DESCRIPTION

PSEUDOMONAS AGAR F is a dehydrated medium used for isolation and differentiation of *Pseudomonas* based on the formation of fluorescein. It is recommended by Unites States of Pharmacopoeia XXIII (1995) for use in the performance of Microbial Limit Tests.

PRINCIPLE

The ratio of peptones in peptospecial is conducive of fluorescein production by *Pseudomonas*. These peptones contain phosphorus, which is stimulatory of fluorescein production. The addition of dipotassium phosphate increases the phosphorus content of the medium, thereby enhancing production of the fluorescent pigment. Magnesium sulfate provides essential ions for fluorescein production. The added glycerol acts as a source of energy and contributes to the pigment production.

PREPARATION

Suspend 37,0 g of powder in 990 mL of distilled or deionized water. Add 10 mL of Glycerol Supplement (code 80021). Sterilize in autoclave at 121°C for 15 minutes. Aseptically dispense into final containers.

TECHNIQUE

Specimens must first be isolated in pure culture on an appropriate medium. The isolate should be Gram-stained and examined to confirm that morphology is appropriate for *Pseudomonas*. Using a sterile loop inoculate the surface of the culture medium with several colonies. Incubate at 36 ± 1 °C for 18-24 hours. If the isolate fails to grow or grows slowly, reincubate at 28 ± 2 °C for 1-2 days and observe for growth and pigment production.

INTERPRETATION OF RESULTS

Pseudomonas aeruginosa appears on **Pseudomonas Agar F** as colonies surrounded by a yellow to greenish-yellow zone resulting from fluorescein production. If pyocyanin is also synthesized, a bright green color is produced which fluoresces under UV light.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared media at 2-8 °C.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product is designed for *in vitro* diagnostic use and must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

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- KING, E.O., WARD, M.K. A RANEY, D.E.: Two simple media for the demonstration of pyocyanin and fluorescein. *J. Lab.Clin.Med.*, 44; 401-307 (1954). Unites States Pharmacopoeia XXII, Chapter "Microbial limit Tests", 1995.



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PRODUCT SPECIFICATIONS

NAME
PSEUDOMONAS AGAR F

PRESENTATION
 Dehydrated culture medium

STORAGE
 10-30°C

Code	Content	Packaging
610309	500 g	500 g of powder in plastic bottle
620309	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM
 7.0 ± 0.2

USE
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TECHNIQUE
 Refer to technical sheet of the product.

APPEARANCE of the MEDIUM
Dehydrated medium
 Appearance: free-flowing, homogeneous.
 Colour: light beige.
Prepared medium
 Appearance: slightly opalescent.
 Colour: light to medium amber.

SHELF LIFE
 4 years

- QUALITY CONTROL**
- Control of general characteristics, label and print
 - Sterility control
 7 days at 25 ± 1°C, in aerobiosis
 7 days at 36 ± 1°C, in aerobiosis
 - Microbiological control
 Inoculum for productivity: 10-100 UFC/ml
 Incubation conditions: 36 ± 1°C for 18-24 hours, in aerobiosis

Microorganism	ATCC	Growth	Pigment Production	Fluoresces under UV light
<i>Pseudomonas aeruginosa</i>	27853	good/very good	Greenish-yellow	+
<i>Pseudomonas aeruginosa</i>	9027	good/very good	Greenish-yellow	+
<i>Pseudomonas fluorescens</i>	17483	good/very good	Greenish-yellow	+
<i>Aeromonas hydrophila</i>	7966	good/very good	-	-
<i>Escherichia coli</i>	25922	good/very good	-	-
<i>Enterobacter cloacae</i>	13047	good/very good	-	-

TABLE OF SYMBOLS

LOT Batch code	Temperature limitation	Manufacturer	Contains sufficient for <n> tests	IVD <i>In vitro</i> Diagnostic Medical Device
REF Catalogue number	Keep away from heat	Use by	Caution, consult accompanying documents	



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