

PSEUDOMONAS ISOLATION AGAR

Selective medium for the isolation of *Pseudomonas* spp from clinical and nonclinical materials.

TYPICAL FORMULA	(g/l)
Peptone	20.0
Magnesium Chloride	1.4
Potassium Sulfate	10.0
Irgasan	0.025
Glycerol	20.0 ml
Agar	15.0
Final pH 7.0 ± 0.2	

DESCRIPTION

PSEUDOMONAS ISOLATION AGAR is a selective and differential medium used for the isolation of *Pseudomonas* spp from clinical and nonclinical materials. This medium allows to differentiate *Pseudomonas aeruginosa* from other pseudomonads on the basis of pigment formation.

PRINCIPLE

Peptone provide nitrogen, carbon, vitamins and minerals for microbial growth. Magnesium chloride and potassium sulfate promote production of pyocyanin. Irgasan is the selective agent that inhibits both gram-positive and gram negative bacteria other than *Pseudomonas* spp. Glycerol serves as an energy source and also helps to promote pyocyanin production. Agar is the solidifying agent.

TECHNIQUE

Inoculate the plates by streaking the sample to be examined onto the entire surface of the agar in order to obtain isolated colonies. Incubate aerobically at $35 \pm 2^{\circ}$ C for 18-48 hours.

INTERPRETATION OF RESULTS

Pseudomonas aeruginosa colonies may be greenish after incubation for 18 hours and turn blue-green as incubation continues up to 24-48 hours, with diffusion of the pigment into the medium.

STORAGE AND TRANSPORT CONDITIONS

10-25°C away from light, until the expiry date on the label. Eliminate if signs of deterioration or contamination are evident.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. 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 the national and local regulations in force.

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).

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- 3. Bacteriological Analytical Manual. 8th ed. (1995). AOAC International, Gaithersburg, MID.
- 4. Gilligan, P.H. (1995). Pseudomonas and Burkholderia, p.509-519. In Manual of Clinical Microbiology, 6th ed. American Society for microbiology, Washington, D.C.
- 5. ISO 8360-1:1998. Water Quality Detection and enumeration of Pseudomonas aeruginosa Part 1: Method by enrichment in liquid medium.







NAME

PSEUDOMONAS ISOLATION AGAR

PRESENTATION

Ready to use plates (90 mm) containing 22+/-1 ml of medium

STORAGE

10-25°C

PACKAGING

Ref.	Content	Packaging	
11033	20 plates	 10 plates in thermally soldered film 	
		 2 x 10 plates in cardboard box 	
11033	100 plates	 10 plates in thermally soldered film 	
		10 piles (10 x 10 plates) in cardboard box	

pH OF THE MEDIUM

7.0 ± 0.2

USE

PSEUDOMONAS ISOLATION AGAR is a selective and differential medium used for the isolation of *Pseudomonas* spp from clinical and nonclinical materials. This medium allow to differentiate *Pseudomonas aeruginosa* from other pseudomonads on the basis of pigment formation

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Light amber medium, slightly opalescent

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SHELFLIFE

6 months

QUALITY CONTROL

- 1. Control of general characteristics, label and print
- Sterility control
 7 days at 22 ± 1°C, in aerobiosis
 7 days at 36 ± 1°C, in aerobiosis
- Microbiological control Inoculum for productivity: 10-100 CFU/ml Inoculum for selectivity: 10⁴-10⁵ CFU/ml Inoculum for specificity: ≤10⁴ CFU/ml Incubation Conditions: aerobically at 35 ± 2°C for 18-48 hours

Microorganism		Growth	Colour
Pseudomonas aeruginosa	ATCC® 27853	Good	Green to blue-green colonies
Pseudomonas aeruginosa	ATCC® 10145	Good	Green to blue-green colonies
Proteus mirabilis	ATCC® 12453	Inhibited	
Escherichia coli	ATCC® 25922	Inhibited	

TABLE OF SYMBOLS





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