Pseudomonas Isolation Agar

Medium used for the isolation and identification of *Pseudomonas aeruginosa* from other psedomonads based on pyocyanin formation.

• CONTENTS (Liter)

Peptone	20.0 g
Magnesium Chloride	1.4 g
Potassium Sulfate	10.0 g
Irgasan	0.025 g
Agar	13.6 g

Final pH = 7.0 ± 0.2 at 25˚C.

• PROCEDURE

Suspend 45.0 G of powder to 1 L of distilled or deionized water. Add 20 mL of Glycerol supplement (MB-G1821). Heat to boiling until completely dissolved. Sterilize by autoclave at 121˚C for 15 minutes. Cool to 45-50˚C in water bath. Mix well. Dispense in petri dishes.

Glycerol supplement

1 vial contents (each vial is sufficient for 500mL of medium)

Glycerol	50.0 mL

• INTERPRETATION

Pseudomonas Isolation Agar is a selective medium used for the isolation and identification of *Pseudomonas aeruginosa*. Peptone provides nitrogen, amino acids, vitamins and minerals necessary to support bacterial growth. Magnesium chloride and potassium sulfate promote production of pigment. Irgasan is selective agent to inhibit the growth of gram-positive and gram-negative bacteria other than *Pseudomonas* spp. Agar is the solidifying agent. Glycerol serves as a carbon source and helps to promote pyocyanin production.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35 ± 2˚C for 18 - 48 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: light amber.
Incubation conditions: 35 ± 2˚C / 18 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
Pseudomonas aeruginosa	27853	50-100	good	green to blue -green
Escherichia coli	25922	≥10^3	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 or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Koneman E. W., Allen S. D., Janda W. M., Schreckenberger P. C., Winn W. C. Jr., 1992, Colour Atlas and Textbook of Diagnostic Microbiology, 4th Ed., J. B. Lippinccott Company
2. King F. O., Ward M. K. and Raney D. E., 1954, J. Lab. Clin. Med., 44 :301.
3. Collee J. G., Fraser A. G., Marmion B. P., Simmons A., (Eds.), Mackie and McCartney, Practical Medical Microbiology, 1996, 14th Edition, Churchill Livingstone
4. Finegold S. M. and Baron E. J., 1986, Bailey and Scotts Diagnostic Microbiology, 7th Ed., The C. V. Mosby Co., St. Louis.
5. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

• PACKAGE

Cat. No : MB-P0613 Pseudomonas Isolation Agar	500 G