

# Pseudomonas Isolation Broth



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

## • CONTENTS (Liter)

Peptone	20.0 g
Magnesium Chloride	1.4 g
Potassium Sulfate	10.0 g
Irgasan	0.025 g
Final pH = 7.0 ± 0.2 at 25°C.	

## • PROCEDURE

Suspend 31.4 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 tubes.

### Glycerol supplement

1 vial contents (each vial is sufficient for 500mL of medium)  
Glycerol 50.0 mL

## • INTERPRETATION

*Pseudomonas* Isolation Broth 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. Glycerol serves as a carbon source and helps to promote pyocyanin production.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. 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
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	greenish
<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 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. Lippincott 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-P0633 Pseudomonas Isolation Broth	500 G
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