

M-PA-C Agar

Medium used for the isolation and cultivation of *Pseudomonas aeruginosa* from strongly contaminated samples.

• CONTENTS (Liter)

Yeast Extract	2.0 g
L-Lysine HCl	5.0 g
Xylose	1.25 g
Sucrose	1.25 g
Lactose	1.25 g
Sodium Chloride	5.0 g
Ferric Ammonium Citrate	0.8 g
Sodium Thiosulfate	5.0 g
Magnesium Sulfate	1.5 g
Phenol Red	0.08 g
Kanamycin	0.008 g
Nalidixic Acid	0.037 g
Agar	12.0 g
Final pH = 7.2 ± 0.1 at 25°C	

• PROCEDURE

Suspend 35.18 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 dish.

• INTERPRETATION

M-PA-C Agar is a Medium used for the isolation and cultivation of *Pseudomonas aeruginosa* from strongly contaminated samples. Yeast extract provides nitrogen and vitamins. L-Lysine HCl is the amino acid. Xylose, sucrose and lactose are sources of fermentable carbohydrates. Sodium chloride maintains the osmotic balance. Ferric ammonium citrate, sodium thiosulfate and magnesium sulfate provide ions, essential electrolytes and minerals. Sugar fermentation produces acid and results in color change of phenol red indicator to yellow. Kanamycin are the selective agents to inhibit gram-negative and gram-positive bacteria. Nalidixic acid inhibits growth of gram-negative organisms. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 41 ± 0.5°C for 18 - 24 hours up to 72 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: pink-red

Prepared medium

Appearance: slightly opalescent

Color: orange-red

Incubation conditions: $41 \pm 0.5^{\circ}\text{C}$ / 18 - 24 hours up to 72 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Pseudomonas aeruginosa</i>	27853	50-100	good
<i>Escherichia coli</i>	25922	$\geq 10^3$	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. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Levin M. A. and Cabelli V. J., 1972, Appl. Microbiol., 24:864.
2. Carson, Peterson, Favero, Doto, Collins and Levin. 1975. Appl. Microbiol. 30:935.
3. Dutka B. J. and Kwan K. K., 1977, Appl. Environ. Microbiol., 33:240.

• PACKAGE

Cat. No : MB-M2209 M-PA-C Agar	500 G
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