

# Aeromonas Agar



Medium used for the isolation and identification of *Aeromonas hydrophila* from clinical and environmental samples.

## • CONTENTS (Liter)

Proteose Peptone	5.0 g
Yeast Extract	3.0 g
L-Lysine Hydrochloride	3.5 g
L-Arginine Hydrochloride	2.0 g
Inositol	2.5 g
Lactose	1.5 g
Sorbitol	3.0 g
Xylose	3.75 g
Bile Salt No.3	3.0 g
Sodium Thiosulfate	10.67 g
Sodium Chloride	5.0 g
Ferric Ammonium Citrate	0.8 g
Bromothymol Blue	0.04 g
Thymol Blue	0.04 g
Agar	12.5 g
Final pH = 8.0 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 56.3 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. Aseptically add 2 vials of Ampicillin supplement (MB-A1801). Mix well. Pour into petri dishes.

### Ampicillin supplement

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

Ampicillin 0.0025 g

## • INTERPRETATION

Aeromonas Agar is a medium used for the isolation and identification of *Aeromonas hydrophila* from clinical and environmental samples. Proteose peptone provides nitrogen, carbon, amino acids and minerals. Yeast extract provides vitamins. L-Lysine hydrochloride and L-Arginine hydrochloride are the amino acids. Inositol, lactose, sorbitol and xylose are the fermentable carbohydrate. Bile salts No.3 is a selective agent to inhibit Gram-positive organisms. Sodium thiosulfate and ferric ammonium citrate detect hydrogen sulfide production. Sodium chloride maintains the osmotic balance. Bromothymol blue and thymol blue serve as the pH indicator. Agar is the solidifying agent. Ampicillin inhibits growth for a number of Gram-negative and Gram-positive bacteria.

## • TECHNIC

Inoculate the specimen using sterile loop to the medium. Incubate at 35 ± 2°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance: clear to slightly opalescent

Color: green

Incubation conditions:  $35 \pm 2^{\circ}\text{C}$  / 18 - 24 hours

Microorganism	ATCC	Inoculate CFU	Growth	Characteristics
<i>Aeromonas hydrophila</i>	7966	50-100	good	dark green colonies with dark center
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	blue green / gray and translucent colonies
<i>Escherichia coli</i>	25922	$\geq 10^3$	inhibited	-
<i>Enterococcus faecalis</i>	29212	$\geq 10^3$	inhibited	-
<i>Staphylococcus aureus</i>	25923	$\geq 10^3$	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  $2 - 8^{\circ}\text{C}$ .

## • REFERENCES

1. Buchanan, R. L., and Palumb S.A. (1985). J. Food Saf. 7: 15-29.
2. Havelaar, A.H., During, M., Versteegh, J.F.M. (1987). J. Appl. Bact.62: 279-287.
3. Ryan, N. (1985). In Handbook of Microbiological Media, 2nd ed.
4. Rogol M., Sechter I., Grinberg L., Gerichter Ch. B. (1992) J. Med. Microbiol. 12. 229-331 Atkinson M. (1986) Culture Vol. 7, No.2.

## • PACKAGE

Cat. No : MB-A1048 Aeromonas Agar	500 G
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