

## Aeromonas Agar Base

Basal medium for detection of *Aeromonas* spp. in food, water and environmental samples.

TYPICAL FORMULA	(g/l)
Proteose Peptone	5.0
Yeast Extract	3.0
L-Lysine Monohydrochloride	3.5
L-Arginine Monohydrochloride	2.0
Sodium Chloride	5.0
Inositol	2.5
Lactose	1.5
Sorbitol	3.0
Xylose	3.75
Bile Salt No. 3	3.0
Sodium Thiosulphate	10.67
Ferric Ammonium Citrate	0.8
Bromothymol Blue	0.04
Thymol Blue	0.04
Agar	15.0
Final pH 8.0 ± 0.1 at 25°C	

### DESCRIPTION

Aeromonas Agar Base is used with Ampicillin for the selective isolation and presumptive identification of *Aeromonas* species from different type of samples, i.e. tap water, bottled water and foods including meat, poultry, fish, seafood, raw food and raw milk etc. This medium is not intended for use in the diagnosis of diseases or other conditions in humans.

### PRINCIPLE

Proteose Peptone and yeast extract provide amino acids, nitrogen, carbon, sulfur, vitamin B complex, and other nutrients which are essential for growth of *Aeromonas*. Sodium chloride maintains the osmotic balance of the medium. Inositol, lactose, sorbitol and xylose are fermentable carbohydrates. Sodium thiosulfate is important for the neutralisation of chlorinated water. Complex sodium thiosulfate-ferric ammonium citrate produces black-centered colonies when ferric ammonium citrate precipitates (H<sub>2</sub>S production). The mixed indicator bromothymol blue and thymol blue changes its colour to yellow, when acid is formed. Bile salts inhibits growth of Gram-positive bacteria. Agar is the solidifying agent. Ampicillin is added to the medium to suppress contaminating flora without affecting recovery of *Aeromonas*.

### PREPARATION

Suspend 58.8 g of powder in 1 liter of deionized or distilled water. Bring to boil and shake until completely dissolved. DO NOT AUTOCLAVE. Cool up to 45-50°C. Aseptically add rehydrated content of 2 vials of Ampicillin Supplement (Ref. 81001), each vial containing 2.5 mg of Ampicillin. Mix well. Pour in Petri dishes.

### TECHNIQUE

Inoculate the medium by either spread plating or membrane filtration technique. Incubate aerobically at 30-35°C for 18-24 hours. If further incubation is required hold at room temperature (22-25°C).

### INTERPRETATION OF RESULTS

Examine the plate for growth of dark green opaque colonies with a darker centre.

Confirm by subculturing to a non selective agar medium looking for oxidase reaction (ref. 88029) and trehalose fermentation (ref. 88219). Any presumptive colony that is oxidase-positive and ferments trehalose is considered to be *Aeromonas* spp.

### STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, 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 plates at 2-8°C away from light.

### WARNING AND PRECAUTIONS

**For professional use only.** Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

### DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

### REFERENCES

- Standard Methods for the Examination of Water and Wastewater (1998) 20th Edition. Eds. A.D. Eaton, L.S. Clesceri, and A. Greenberg. American Public Health Association, American Water Works Association, and Water Environment Federation. American Public Health Association, Washington, D.C., publisher.
- Handfield, M., P. Simard, and R. Letarte (1996) Differential media for quantitative recovery of waterborne *Aeromonas hydrophila*. Applied Environmental Microbiology 62:3544-3547.



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## PRODUCT SPECIFICATIONS

### NAME

Aeromonas Agar Base

### PRESENTATION

Dehydrated medium

### STORAGE

10-30°C

### PACKAGING

Ref.	Content	Packaging
610048	500 g	500 g of powder in plastic bottle
620048	100 g	100 g of powder in plastic bottle

### pH OF THE MEDIUM

8.0 ± 0.1

### USE

Aeromonas Agar Base is used with supplements for the selective isolation and presumptive identification of *Aeromonas* species

### TECHNIQUE

Refer to technical sheet of the product

### APPEARANCE OF THE MEDIUM

#### Powder medium

Appearance: free-flowing, homogeneous

Colour: beige

#### Ready-to-use medium

Appearance: slightly opalescent

Colour: green-blue

### SHELF LIFE







4 years

### QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control  
Inoculum for productivity: 50-100 CFU  
Inoculum for selectivity: 10<sup>4</sup>-10<sup>6</sup> CFU  
Incubation Conditions: 18-24 h at 30-35°C, in aerobiosis

Microorganism		Growth	Characteristics
<i>Aeromonas hydrophila</i>	ATCC® 7966	Good	Opaque green colonies with a dark centre
<i>Escherichia coli</i>	ATCC® 25922	Inhibited	---
<i>Enterococcus faecalis</i>	ATCC® 19433	Inhibited	---

### TABLE OF SYMBOLS

<b>LOT</b>	Batch code	 Consult instructions for use	 Manufacturer	 Use by
<b>REF</b>	Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Keep away from sunlight



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