

# Aeromonas Supplement

Cat. 6052

Selective supplement for the isolation of *Aeromonas hydrophila*.

## Practical information

Applications	Categories
Selective isolation	Aeromonas

Industry: Water

## Principles and uses

*Aeromonas* Agar Base (RYAN)(Cat. 1370) is based on the formulation of Ryan. It is a modification of the XLD Medium that has been designed to improve the count and isolation of *Aeromonas* in clinical and environmental samples. The medium is better than other media in the detection of *Aeromonas* in water, bottled water and food (meat, fish, etc).

Proteose peptone provides nitrogen, vitamins, minerals and amino acids essential for growth. L-Lysine and L-Arginine provide nitrogen, sulfur and trace elements. Yeast extract is a source of vitamins, particularly the B-group. Inositol, lactose, sorbitol, and xylose are the carbohydrate substrates. Sodium thiosulfate provides sulphur, and ferric ammonium citrate is the indicator for H<sub>2</sub>S production. H<sub>2</sub>S positive colonies have a black center. The mixed indicators bromothymol blue and thymol blue change their color to yellow when acid is formed. Sodium chloride supplies essential electrolytes for transport and osmotic balance and Bile Salts are inhibitors of Gram-positive organisms.

*Aeromonas* are aquatic organisms, fresh water bacteria that were identified during the last century as responsible for infectious processes in aquatic animals: amphibians, reptilian, fish, snails, and others. *Aeromonas* also cause intestinal tract diseases. Infections are contracted frequently due to direct exposure to the water in which these microorganisms live. This medium is also used for clinical diagnoses.

## Formula per vial

Sodium ampicillin (mg)	2,5
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## Preparation

Aseptically reconstitute 1 vial with 5 ml of sterile distilled water. Mix gently until complete dissolution and aseptically add to 500 ml of *Aeromonas* Agar Base (RYAN) (Cat. 1370), previously cooled to 50 °C. Mix well and distribute into sterile containers.

## Instructions for use

Membrane filtration method:

- Filter an appropriate volume of the sample through the membrane.
- Place the membrane on the surface of the agar plate, avoiding the formation of air bubbles.
- Invert the plates and incubate at 30-35 °C for 24 hours.

## Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Lyophilized tablet	N/A	Transparent	N/A

## Microbiological test

Incubation conditions: (30-35 °C / 24 h).

Microrganisms	Specification	Characteristic reaction
<i>Escherichia coli</i> ATCC 25922	Inhibition	

Pseudomonas aeruginosa ATCC 27853  
Aeromonas hydrophila ATCC 7966  
Pseudomonas aeruginosa ATCC 9027

Good growth  
Good growth  
Good growth

Blue-green colonies  
Green colonies with a black center  
Blu green colonies

## Storage

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Temp. Min.:2 °C  
Temp. Max.:8 °C

## Bibliography

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Ryan N. (1985) Personal communication.  
Rogol M., Sechter I., Grinberg L., Gerichter Ch. B. (1992) J. Med. Microbiol. 12. 229-231.