

Specification

Selective supplement for the isolation of *Aeromonas hydrophila*.

Presentation

10 Freeze dried vials
Vial
with: 3 ± 0.1 g

Packaging Details

22±0.25 x 55±0.5 mm glass vials, tag labelled, White plastic cap - 10 vials per box.

Shelf Life

49 months

Storage

2-25 °C

Composition

Composition (g/vial)

Ampicillin sodium salt..... 0.0025

NOTE : Each vial is sufficient to supplement
500ml of medium Blood Agar Base (Columbia).

Reconstitute the original freeze-dried vial

by adding:

Sterile Distilled Water..... 6 ml

Description /Technique

Description:

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 H₂S production. H₂S 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.

Technique:

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

Physical/Chemical control

Color : White-Gray

pH: at 25°C

Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Distribute the complete medium, cooled at 50°C, in plates

Membrane Filtration /Practical range 100 ± 20 CFU. min. 50 CFU (productivity)./10⁴-10⁶ CFU (selectivity).

Aerobiosis. Incubation at 35 ± 2 °C, reading at 24-48 hours.

Microorganism

Aeromonas hydrophila ATCC® 7966, WDCM 00063

Escherichia coli ATCC® 25922, WDCM 00013

Stph. aureus ATCC® 25923, WDCM 00034

Growth

Good

Partially Inhibited (≤ 30%)

Inhibited

Sterility Control

Add 5ml of the sample to 100 ml of TSB and to 100 ml Thioglycollate.

Incubation 48 hours at 30-35 °C and 48 hours at 20-25 °C: NO GROWTH.

Check at 7 days after incubation in same conditions.

Bibliography

Ryan N. (1985) Personal communication.

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