



Aeromonas Starch DNA Agar Base

Intended use

Aeromonas Starch DNA Agar Base is recommended for selective isolation and enumeration of *Aeromonas* species from food and clinical samples.

Composition**

Ingredients	g/ L
Peptone	15.000
Soya peptone	5.000
Sodium chloride	5.000
Corn starch	10.000
Deoxyribonucleic acid (DNA)	2.000
Agar	15.000
Final pH (at 25°C)	7.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 52.0 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add rehydrated contents of 1 vial of Amp Selective Supplement (FD082). Mix well and pour into sterile Petri plates.

Principle And Interpretation

Aeromonas species occur widely in soil and water where these species cause disease in fish and amphibians. Also found in untreated and chlorinated drinking water, raw food and raw milk (1,2). It is observed that the major cause of gastrointestinal infections by *Aeromonas* species (1,3) is because of ingesting infected water (4,5).

It was noted that the recoveries of the *Aeromonas* species was very low from fresh foods of animal origin when cultivated on clinical media and difficulties were encountered in distinguishing the *A. hydrophila* group from the background microflora. Polumbo et al had formulated Starch Ampicillin (SA) Agar with starch hydrolysis as the differential trait and ampicillin to suppress the background microflora (6). Aeromonas Starch DNA Agar Base allows additional selective isolation of *Aeromonas* based on DNA hydrolysis (7).

Peptone and Soya Peptone provide essential nitrogen and carbon source, long chain amino acid, vitamins and other essential nutrients. Sodium chloride maintains osmotic equilibrium.

Type of specimen

Clinical samples - faeces; foods; water samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (8,9).

For food , follow appropriate techniques for sample collection and processing as per guidelines (10,11).

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards(12).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Addition of Ampicillin is required for selective isolation of *Aeromonas* and to eliminate contaminating flora.
2. It is advised to incubate for recommended period and temperature to avoid misinterpretation of results.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within expiry period when stored at the recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light yellow coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 5.20% w/v aqueous solution at 25°C. pH : 7.5±0.2

pH

7.30-7.70

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24 hours with added Amp Selective Supplement (FD082).

Organism	Inoculum (CFU)	Growth	Recovery
<i>Aeromonas hydrophila</i> ATCC 7966 (00063*)	50-100	luxuriant	≥50%
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 ⁴	inhibited	0%
<i>Staphylococcus aureus</i> subsp.aureus ATCC 25923 (00034*)	≥10 ⁴	inhibited	0%

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory technique (8,9).

Reference

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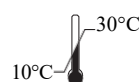
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