

AEROMONAS STARCH DNA AGAR BASE AEROMONAS SELECTIVE SUPPLEMENT

Base medium and selective supplement for the isolation of *Aeromonas*

TYPICAL FORMULAS

Aeromonas Starch DNA Agar Base (g/l)

Tryptone	15
Soy Peptone	5
Sodium Chloride	5
DNA	2
Maize Starch	10
Agar	15

Aeromonas Selective Supplement (vial contents for 500 ml of medium)

Ampicillin	5 mg
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DIRECTIONS

Suspend 26 g of Aeromonas Starch DNA Agar Base in 500 ml of cold distilled water. Heat to boiling with frequent agitation and sterilise by autoclaving at 121°C for 15 minutes. Cool to approximately 50°C and, under aseptic conditions, add the contents of one vial of Aeromonas Selective Supplement-Ampicillin (cat. N° 4240012) reconstituted with 5ml of sterile distilled water. Mix well and distribute into 90 mm Petri dishes.

Final pH: 8.0 ± 0.2

DESCRIPTION

The significance of *Aeromonas* species as human pathogens is getting increasing attention (Holmberg and Farmer); many investigators have reported that the aquatic environment can be considered the biggest source of infection, Buchanan and Palumbo implicated *Aeromonas* as potential food-poisoning agent.

Aeromonas Starch DNA Agar is a modification of Palumbo's et al. formulation and consists of Tryptic Soy Agar, starch, DNA and ampicillin. The complete medium allows the selective growth of *Aeromonas* spp. and the presumptive differentiation of *A. hydrophila* by means of DNA and starch hydrolysis. Aeromonas Starch DNA Agar is useful for the isolation and enumeration of *Aeromonas* spp. from food and clinical samples.

TECHNIQUE

The undiluted or diluted sample is surface plated and incubated at 30°C for 24 hours in aerobic conditions. After incubation, check for a clearing halo around the colonies (starch hydrolysis).

Pick some suspected colonies up for further biochemical tests. Flood the plates with HCl 1 N solution. If the colonies are DNase positive, a new clearing halo occurs on an opaque background. Amylase positive and DNase positive cultures must be subjected to biochemical characterisation for a complete identification.

USER QUALITY ASSURANCE (30°C-24 H)

Productivity control

A. hydrophila ATCC 7965: good growth

Selectivity control

E. coli ATCC 25922: inhibited

STORAGE

Dehydrated media: 10-30°C

Selective Supplement: 2-8°C

User prepared plates: up to 7 days at 2-8°C

REFERENCES

- Buchanan, R.L., Palumbo, S.A. (1985) J. Food Saf. 7, 15-29

- Holmberg, S.C., Farmer, J.J. (1984) Rev. Inf. Dis. **6**, 633-639
- Palumbo, S.A. et al. (1985) App. Environ. Microbiol. **50**, 1027- 1030
- United States Environmental Protection Agency (USEPA), Method 1605: Aeromonas in Finished Water by Membrane Filtration. September 2000- Draft

PACKAGING**4010202 Aeromonas Starch DNA Agar Base,****500 g (9.5 l)****4240012 Aeromonas Selective Supplement (Ampicillin),
medium****10 vials, each for 500 ml of**