

Aeromonas Agar

Selective medium for the isolation of *Aeromonas hydrophila* from environmental samples.

DESCRIPTION

Aeromonas Agar is a selective medium used for the detection and enumeration of *Aeromonas* spp in food, water and other materials of sanitary importance.

TYPICAL FORMULA	(g/l)
Proteose Peptone	5.0
Yeast Extract	3.0
Lactose	1.5
Inositol	2.5
Sorbitol	3.0
Xylose	3.75
Lysine monohydrochloride	3.5
Argine monohydrocloride	2.0
Sodium Chloride	5.0
Bile Salts No.3	3.0
Sodium Thiosulphate	10.67
Ferric Ammonium Citrate	0.8
Bromothymol Blue	0.04
Thymol Blue	0.04
Ampicillin	0.005
Agar	15.0
Final pH 8.0 ± 0.1 at 25°C	

METHOD PRINCIPLE

Proteose peptone provides amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Lactose, inositol, sorbitol and xylose are fermentable carbohydrates. Sodium chloride maintains the osmotic balance of the medium. Bile salts and sodium thiosulphate are selective against Gram-positive bacteria. Sodium thiosulphate and ferric ammonium citrate permit detection of hydrogen sulfide production. Bromothymol blue is the pH indicator. Ampicillin is included into the medium to inhibit non-*Aeromonas* species. Agar is the solidifying agent.

TEST PROCEDURE

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).

INTERPRETING RESULTS

Examine the plates for the presence of dark green, opaque colonies with darker centre (colony size 0.5 to 1.5 mm in diameter).

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.

APPEARANCE

Slightly opalescent, green-blue.

STORAGE

Store prepared plates at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

6 months.

QUALITY CONTROL

Plates are inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU. Inoculum for selectivity: 10⁴-10⁶ CFU. Incubation conditions: 18-24 h at 30-35°C.

QC Table.

Microorganism		Specification	
Aeromonas hydrophila	ATCC® 7966	Good growth, opaque green colonies with a dark centre	
Escherichia coli	ATCC® 25922	Inhibition	
Enterococcus faecalis	ATCC® 19433	Inhibition	

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

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

BIBLIOGRAPHY

- 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.
- 2. Handfield, M., P. Simard, and R. Letarte (1996) Differential media for quantitative recovery of waterborne Aeromonas hydrophila. Applied Environmental Microbiology 62:3544-3547.

PRESENTATION		Contents	Ref.
Aeromonas Agar	90 mm ready-to-use plates	20 plates	10406
Aeromonas Agar	60 mm ready-to-use plates	20 plates	163622

TABLE OF SYMBOLS						
LOT Batch code	Keep away from sunlight	Manufacturer	Use by	Fragile, handle with care		
REF Catalogue number	Temperature limitation	Contains sufficient for <n> tests</n>	Caution, consult Instruction For Use	Do not reuse		