



LAB167

Aeromonas Agar

Bile Salt Irgasan Brilliant Green Agar

Description

Aeromonas Agar is a highly selective medium for the isolation of *Aeromonas* spp. from food, clinical and environmental samples. Based on the selective agents brilliant green and irgasan, this medium will not inhibit those strains of *Aeromonas* spp. sensitive to ampicillin used in other media.

Typical Formulation

	g/litre
Beef extract	5.0
Meat peptone	5.0
Xylose	10.0
Bile salts No.3	8.5
Sodium thiosulphate	5.44
Irgasan	0.005
Brilliant green	0.005
Neutral red	0.025
Agar	11.5
Grams per litre	45.5

Appearance

Powder: fine, free-flowing, homogeneous, buff
Finished medium: clear, purple gel

pH: 7.0 ± 0.2

Hazard classification

NR – Not regulated

Method for reconstitution

Weigh 45.5 grams of powder and disperse in 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix and sterilise by bringing to the boil. Cool to 47°C and mix well before dispensing into Petri dishes. Dry the agar surface prior to use.

Storage

Dehydrated culture media: 10-25°C away from direct sunlight.

Prepared media: 7 days at 2-8°C in the dark (may be extended if moisture tight packaging used).

Minimum Q.C. organisms

Aeromonas hydrophila WDCM 00063

Escherichia coli WDCM 00013

(inhibited)

Inoculation

Faecal specimens: Inoculate surface of medium directly, spreading for single colonies.

Samples requiring enrichment: Inoculate alkaline peptone water and incubate at 37°C for 18-24 hr.

Subculture onto Aeromonas Agar, surface spreading for single colonies.



Incubation

Incubate plates aerobically at 37°C for 18-24 hr. Examine for typical colonies and confirm as *Aeromonas* spp.



Interpretation

After incubation the plate should be assessed for typical colonies.

Organism	Colony size (mm)	Shape & surface	Colour
<i>Aeromonas</i> spp.*	0.5-3.0mm	Convex, entire, glossy	Translucent, pale green
<i>Pseudomonas</i> spp.	0.5-1.0mm	Convex, entire, glossy	Translucent, pale green
<i>Staphylococcus aureus</i>	No growth		
<i>Escherichia coli</i>	No growth		

*The selective nature of the medium may mean occasional strains do not grow, or grow poorly.

Confirmation

Typical colonies (translucent, pale green colonies 0.5-3.0mm diameter) should be confirmed as presumptive *Aeromonas* spp. by performing an oxidase test and inoculating into Hugh & Leifsons O/F medium.

- *Aeromonas* spp. will give a positive oxidase reaction and demonstrate both oxidative and fermentative metabolism.
- *Pseudomonas* spp. will also be oxidase positive, but do not possess fermentative metabolism.

An alternative method is to inoculate triple sugar iron tubes.

- *Aeromonas* will typically produce an acid butt (yellow) and an alkaline or unchanged slant (red).
- *Pseudomonas* spp. will remain unchanged in both the butt and slant.

To fully identify colonies as *Aeromonas* spp. the above tests should be supported using a proprietary kit such as API 20NE or Microbact 24E (other products may be available).