Aeromonas Starch DNA Agar Base

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

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peptone</td>
<td>15.000</td>
</tr>
<tr>
<td>Soya peptone</td>
<td>5.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Corn starch</td>
<td>10.000</td>
</tr>
<tr>
<td>Deoxyribonucleic acid (DNA)</td>
<td>2.000</td>
</tr>
<tr>
<td>Agar</td>
<td>15.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.5±0.2</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters**

**Directions**

Suspend 52 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add rehydrated contents of 1 vial of Ampicillin 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 (3, 4). It is observed that the major cause of gastrointestinal infections by *Aeromonas* species (4, 5) is because of ingesting infected water (6, 7).

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 triat and ampicillin to suppress the background microflora (1). Aeromonas Starch DNA Agar Base allows additional selective isolation of *Aeromonas* based on DNA hydrolysis (2).

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

**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**
M1284: Cultural characteristics observed after an incubation at 35-37°C for 24 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Recovery</th>
</tr>
</thead>
</table>

Please refer disclaimer Overleaf.
**Aeromonas hydrophila**
*ATCC 7966*
50-100 luxuriant >=50%

**Escherichia coli**
*ATCC 25922*
>=10³ inhibited 0%

**Staphylococcus aureus**
*ATCC 25923*
>=10³ inhibited 0%

**Storage and Shelf Life**
Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

**Reference**