Technological Data

Sheep Blood Agar Plate

Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tryptone</td>
<td>14.000</td>
</tr>
<tr>
<td>Peptone</td>
<td>4.500</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>4.500</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Defibrinated sheep blood</td>
<td>70.000</td>
</tr>
<tr>
<td>Agar</td>
<td>12.500</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.3±0.2</td>
</tr>
</tbody>
</table>

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

Directions

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

Principle And Interpretation

Haemolysins are exotoxins produced by bacteria that lyse red blood cells. The haemolytic reaction can be visualized on blood agar plates. On blood agar plates colonies of haemolytic bacteria may be surrounded by clear, colourless zone where the red blood cells have been lysed and the haemoglobin destroyed to a colourless compound. This is beta haemolysis. Other types of bacteria can reduce haemoglobin to methaemoglobin which produces a greenish zone around the colonies and is called alpha haemolysis (4). Gamma haemolysis is no haemolysis where no change in the medium is observed (3). Blood Agar Base No. 2 (M834), supplemented with sheep blood is used to study haemolytic reactions (patterns) of organisms. But this gave mixed haemolytic (a and b) reactions due to the physiological differences between sheep blood and horse blood (5).

Sheep Blood Agar Base with added sheep blood was developed to allow maximum recovery of organisms without interfering with their haemolytic reactions. Sheep Blood Agar Base was formulated to be compatible with sheep blood and give improved haemolytic reactions of organisms.

Tryptone, peptone and yeast extract provide nitrogen, carbon, amino acids and vitamins. Sodium chloride maintains the osmotic balance.

Sheep Blood Agar Base showed considerable improvement and the expected beta haemolytic reactions with S.pyogenes in comparison to other blood agar bases supplemented with blood.

Type of specimen

Clinical samples: blood

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In vitro diagnostic 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.

Please refer disclaimer Overleaf.
Limitations
1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user’s unique requirement.

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

Quality Control
Appearance
Sterile Sheep blood agar with 7% defibrinated sheep blood in 90 mm disposable plate.

Colour
Cherry red coloured opaque medium.

Quantity of Medium
25ml of medium in 90 mm plate.

Reaction
7.10 - 7.50...

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Recovery</th>
<th>Haemolysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Streptococcus pneumoniae</em></td>
<td>50-100</td>
<td>luxuriant</td>
<td>&gt;=70%</td>
<td>alpha</td>
</tr>
<tr>
<td>ATCC 6303</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em></td>
<td>50-100</td>
<td>luxuriant</td>
<td>&gt;=70%</td>
<td>beta</td>
</tr>
<tr>
<td>ATCC 19615</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Storage and Shelf Life
Store between 2-8°C Use before expiry date on the label. Use before expiry date on the performance is label. Product 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 techniques (1,2).

Reference
1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition

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In vitro diagnostic medical device

CE Marking

Storage temperature

2°C - 8°C

Do not use if package is damaged

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Disclaimer:

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