Casitose Broth

Intended Use:
Recommended for production of staphylococcal enterotoxin for use in Cat test and in serological studies.

Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acicase™</td>
<td>20.000</td>
</tr>
<tr>
<td>Ferric citrate</td>
<td>0.025</td>
</tr>
<tr>
<td>Potassium dihydrogen phosphate</td>
<td>2.000</td>
</tr>
<tr>
<td>Magnesium sulphate</td>
<td>0.200</td>
</tr>
<tr>
<td>L-Cystine</td>
<td>0.025</td>
</tr>
<tr>
<td>Sodium acetate</td>
<td>7.000</td>
</tr>
<tr>
<td>L-Tryptophan</td>
<td>0.075</td>
</tr>
<tr>
<td>Calcium pantothenate</td>
<td>0.0005</td>
</tr>
<tr>
<td>Thiamine</td>
<td>0.00004</td>
</tr>
<tr>
<td>Nicotinic acid (Niacin)</td>
<td>0.0012</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
Suspend 29.33 grams in 1000 ml purified/distilled water. Mix thoroughly. Heat with frequent agitation and boil for one minute. Dispense as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation
Casitose Broth (Casein Hydrolysate Broth) was developed by Casman (1) and is used for production of Staphylococcal enterotoxin for use in the cat test and in serological studies.

As described in APHA (5), Staphylococci to be tested for enterotoxigenicity should be subcultured into the tubes of Casitose Broth (Casein Hydrolysate Broth) (5) and incubated in an atmosphere containing 30% Carbon-dioxide for 18 - 24 hours at 35°C. Growth obtained by this method is then transferred from each tube in three ml amounts to duplicate flasks containing 100 ml Casitose Broth and the flasks should be incubated as mentioned above for three days. The broth cultures are then centrifuged and supernatant fluid is sterilized by Seitz filtration. The filtrates are then tested for alpha and beta haemolysins and if present then the toxins are denatured by heat or by neutralization with antiserum. After denaturation, filtrates can be injected in the cats to observe if vomiting is induced. Casitose Broth can be solidified with the addition of agar and the cultures grown are used for tests on other animals and in analysis of antigen-antibody systems by agar diffusion technique (2).

Type of specimen
Clinical samples : skin and mucous membranes

Specimen Collection and Handling
For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4). 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. Further biochemical and serological tests must be carried out for further identification.

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
Cream to yellow coloured homogeneous free flowing powder

Colour and Clarity of prepared medium
Light to medium amber coloured clear to slightly opalescent solution with slight precipitate

Reaction
Reaction of 2.93% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH
7.10-7.50

Cultural Response
Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterococcus faecalis ATCC 29212 (00087*)</td>
<td>50-100</td>
<td>luxuriant</td>
</tr>
<tr>
<td>Staphylococcus aureus subsp. aureus ATCC 25923 (00034*)</td>
<td>50-100</td>
<td>luxuriant</td>
</tr>
</tbody>
</table>

Key : *Corresponding WDCM numbers.

Storage and Shelf Life
Store below 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label.
On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Use before expiry date on the label. Product performance is 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 (3,4).

Reference

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Please refer disclaimer Overleaf.
Disclaimer:

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