Antibiotic Assay Medium H

Intended use
Antibiotic Assay Medium H is used for the microbiological assay of Teicoplanin using *Bacillus subtilis* ATCC 6633 as per British Pharmacopoeia.

Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peptone</td>
<td>5.000</td>
</tr>
<tr>
<td>HM Peptone B#</td>
<td>3.000</td>
</tr>
<tr>
<td>Agar</td>
<td>15.000</td>
</tr>
<tr>
<td>pH after sterilization</td>
<td>7.9±0.1</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters

# -Equivalent to Beef extract powder

Directions
Suspend 23 grams in 1000 ml R-water/distilled/purified water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Advice: Recommended for the microbiological assay of Teicoplanin.

Principle And Interpretation
Antibiotic Assay Medium H is used for the microbiological assay of Teicoplanin using *Bacillus subtilis* ATCC 6633 as per British Pharmacopoeia (1). Essential nutrients, vitamins, mineral, trace elements and growth factors are supplied by peptone and HM Peptone B. Agar provides excellent medium for antibiotic diffusion and gives well defined zones of inhibition.

Freshly prepared plates should be preferably used for assaying antibiotics.

Test organisms is inoculated in sterile seed agar pre-cooled to 40-45°C and spread evenly over the surface of solidified base agar. All conditions in the microbiological assay must be controlled carefully. One of the critical and important step for obtaining good results is use of appropriate standard culture media.

Type of specimen
Pharmaceutical samples

Specimen Collection and Handling
For pharmaceutical samples, follow appropriate techniques for sample collection, processing as per guidelines (1).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions:
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 specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations
1. Freshly prepared medium must be used.

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

Gelling
Firm, comparable with 1.5% Agar gel

Please refer disclaimer Overleaf.
Colour and Clarity of prepared medium
Light yellow coloured clear to slightly opalescent gel forms in Petri plates.

Reaction
Reaction of 2.30% w/v aqueous solution (after sterilization). pH : 7.9±0.1
pH
7.80-8.00

Growth Promotion Test
As per British Pharmacopoeia

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>
<th>Recovery</th>
<th>Antibiotics assayed</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bacillus subtilis</em></td>
<td>50-100</td>
<td>luxuriant</td>
<td>&gt;=70%</td>
<td>Teicoplanin</td>
</tr>
</tbody>
</table>

Storage and Shelf Life
Store below 30°C in a tightly closed container and use freshly prepared medium. 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 (2,3).

Reference