Antibiotic HiVeg Assay Medium No.12 (Nystatin HiVeg Assay Agar)

Antibiotic HiVeg Assay Medium No.12 (Nystatin HiVeg Assay Agar) is used for microbiological assay of Amphotericin B and Nystatin using *Saccharomyces cerevisiae* ATCC 2601.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>HiVeg peptone</td>
<td>10.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>10.000</td>
</tr>
<tr>
<td>Dextrose</td>
<td>10.000</td>
</tr>
<tr>
<td>HiVeg extract</td>
<td>2.500</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>5.000</td>
</tr>
<tr>
<td>Agar</td>
<td>25.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>6.1±0.2</td>
</tr>
</tbody>
</table>

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

**Directions**

Suspend 62.5 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

**Principle And Interpretation**

Antibiotic HiVeg Assay Medium No.12 (Nystatin HiVeg Assay Agar) is prepared incorporating vegetable peptones in place of animal peptones, making the medium BSE-TSE risks free. It can be used for the same purpose of Antibiotic Assay Medium No.12 (Nystatin Assay Agar). This medium is prepared from the Groove and Randall formula (1). Antifungal antibiotics like Amphotericin B and Nystatin can be assayed using this medium. Ingredients like HiVeg peptone, yeast extract and HiVeg extract supplements essential nutrients, minerals and growth factors for the growth of test organism. Dextrose in the medium provides enhanced source of carbon and energy. Osmotic equilibrium in the medium is by sodium chloride which maintain the cell integrity and viability. Freshly prepared plates should be used for antibiotic assays. Test organisms are inoculated in sterilised agar pre-cooled to 40-45°C and spread evenly over the surface of solidified base agar. Prediffusion of antibiotics for 10-20 minutes in the agar by incubating at temperature below the optimal growth temperature for microorganism would facilitate better diffusion of antibiotics followed by incubation of plates for microbial growth.

*Note: For Antibiotic Assay Methods and Selection of Antibiotic HiVeg Assay Medias Refer Section Antibiotic HiVeg Assay Media.*

**Quality Control**

**Appearance**

Cream to yellow homogeneous free flowing powder

**Gelling**

Firm, comparable with 2.5% Agar gel.

**Colour and Clarity of prepared medium**

Yellow clear to slightly opalescent gel forms in Petriplates

**Reaction**

Reaction of 6.25% w/v aqueous solution at 25°C. pH : 6.1±0.2

**pH**

5.90-6.30

**Cultural Response**

MV280: Cultural characteristics observed after an incubation at 25 - 30°C for 18 - 24 hours.
Organism | Inoculum (CFU) | Growth | Recovery | Antibiotics assayed
--- | --- | --- | --- | ---
*Saccharomyces cerevisiae* ATCC 2601 | 50-100 | luxuriant | >70% | Amphotericin B, Nystatin

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

**Reference**

Revision : 1 / 2011