Sabouraud Dextrose Broth

**Intended use**

For the enrichment of *Candida albicans* in accordance with harmonized methods of USP, EP, BP & JP.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture of Peptone and Tryptone (1:1)##</td>
<td>10.000</td>
</tr>
<tr>
<td>Dextrose (Glucose)</td>
<td>20.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>5.6 ± 0.2</td>
</tr>
</tbody>
</table>

**Directions**

Label the ready to use LQ120D bottle. Inoculate the sample and Incubate at specified temperature and time.

**Principle And Interpretation**

Fungi were among the first microorganisms recognized because some of the fruiting structures, such as the mushrooms, are large enough to be seen without a microscope. Fungi can be grouped simply on the basis of morphology as either yeasts or moulds (6). Fungal diseases that occur on the skin, hair and mucous membrane are called superficial mycoses, and the organism that cause them, the dermatophytes (7). Where fungi are to be isolated, it is good practice to use a medium that favors their growth but is not optimal for the growth of bacteria.

Sabouraud Dextrose Broth is a modification of Dextrose Agar described by Sabouraud (8). It is useful for the cultivation of fungi. This medium is in accordance with the harmonized method of USP/EP/BP/JP (9,2,1,4) and is recommended for microbiological examination of non-sterile products.

Peptone and Tryptone provides nitrogenous, carbonaceous compounds, long chain amino acids and other essential for the growth of fungi. Dextrose (Glucose) acts as the energy source.

**Type of specimen**

Pharmaceutical samples

**Specimen Collection and Handling**

For pharmaceutical samples, follow appropriate techniques for sample collection, processing as per pharmaceutical guidelines (9,2,1,4). 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, precautions as per established

**Limitations**

1. Some wild type fungi may show poor growth due to nutritional variations.
2. Further biochemical and serological tests should be carried out for complete 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
Sterile clear Sabouraud Dextrose Broth in bottle.

Colour
Light amber coloured clear solution

Quantity of Medium
500 ml of medium in glass bottle.

pH: 5.40-5.80

Sterility test
Passes release criteria

Growth Promotion Test

Growth Promotion was observed in accordance with the harmonized method of USP/EP/BP/JP after an incubation at 30-35°C for 3-5 days.

Growth promoting properties
Clearly visible growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at the specified temperature for not more than the shortest period of time specified inoculating 100 cfu (at 30-35°C for 3-5 days).

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Incubation temperature</th>
<th>Incubation period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candida albicans ATCC 10231</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>30 -35 °C</td>
<td>&lt;=3 d</td>
</tr>
<tr>
<td>Growth Promotion + Total Yeast and Mould count</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candida albicans ATCC 10231</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>20 -25 °C</td>
<td>&lt;=5 d</td>
</tr>
<tr>
<td># Aspergillus brasiliensis ATCC 16404</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>20 -25 °C</td>
<td>&lt;=5 d</td>
</tr>
</tbody>
</table>

Additional Microbiological Testing

Saccharomyces cerevisiae ATCC 9763
50 -100 luxuriant 20 -25 °C 3 -5 d

Saccharomyces cerevisiae ATCC 2601
50 -100 good-luxuriant 20 -25 °C 3 -5 d

Candida albicans ATCC 2091
50 -100 luxuriant 20 -25 °C 3 -5 d

Key: (*) Corresponding WDCM numbers (#) Formerly known as Aspergillus niger.

Storage and Shelf Life

Store between 15-25°C. Use before expiry date on the label.

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 (3,5).

Please refer disclaimer Overleaf.
Reference


Disclaimer:

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