SABOURAUD BHI AGAR (7235)

Intended Use
Sabouraud BHI Agar is used for the cultivation of fungi.

Product Summary and Explanation
Sabouraud formulated Sabouraud Dextrose Agar as a general purpose medium for the recovery of dermatophytes. Brain Heart Infusion is a highly nutritious medium used for cultivating a variety of fastidious organisms and medically important fungi. Sabouraud BHI Agar, developed by Gorman, combines ingredients of Sabouraud Dextrose Agar and Brain Heart Infusion. This medium is particularly useful for maximum recovery of Blastomyces dermatitidis and Histoplasma capsulatum from body tissues and fluids, and as a primary recovery medium for saprophytic and pathogenic fungi.

Selectivity can be obtained by adding chloramphenicol and cycloheximide.

Principles of the Procedure
Brain Heart Infusion is a source of carbon, protein, and nutrients in Sabouraud BHI Agar. Enzymatic Digest of Casein and Enzymatic Digest of Animal Tissue provide nitrogen, minerals, and vitamins required for organism growth. The high concentration of Dextrose is included as an energy source. Sodium Chloride maintains the osmotic balance of the medium. Disodium Phosphate provides buffering capacity. Agar is the solidifying agent. Chloramphenicol and Cycloheximide are broad spectrum antimicrobials, inhibiting a wide variety of Gram-negative and Gram-positive bacteria when added to this medium.

Formula / Liter
Brain Heart Infusion (dehydrated) ......................... 10 g
Enzymatic Digest of Casein ........................................ 2.5 g
Enzymatic Digest of Animal Tissue ............................... 7 g
Dextrose .................................................................. 21 g
Sodium Chloride ....................................................... 2.5 g
Disodium Phosphate .................................................. 1.25 g
Agar ........................................................................ 15 g
Final pH: 7.0 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

Precautions
1. For Laboratory Use.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions
1. Suspend 59 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

OPTIONAL: To prepare selective medium, aseptically add a sterile solution containing chloramphenicol (0.05 g) and cycloheximide (0.5 g) per liter of sterile medium cooled to 45 - 50°C.

Quality Control Specifications
Dehydrated Appearance: Powder is homogeneous, free flowing, and beige.

Prepared Appearance: Prepared medium is trace to slightly hazy and medium to dark amber.
Expected Cultural Response: Cultural response on Sabouraud BHI Agar at 25 - 30°C after 2 - 7 days incubation (without the addition of antimicrobiotics).

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Response</th>
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<tbody>
<tr>
<td>Aspergillus niger ATCC® 16404</td>
<td>growth</td>
</tr>
<tr>
<td>Candida albicans ATCC® 10231</td>
<td>growth</td>
</tr>
<tr>
<td>Penicillium roquefortii ATCC® 10110</td>
<td>growth</td>
</tr>
<tr>
<td>Trichophyton mentagrophytes ATCC® 9533</td>
<td>growth</td>
</tr>
</tbody>
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The organisms listed are the minimum that should be used for quality control testing.

Test Procedure
1. Inoculate Sabouraud BHI Agar tubes/plates with specimen.
2. Incubate media at 25-30°C for up to 7 days.

Results
Observe Sabouraud BHI Agar tubes or plates for growth and record colony morphology.

Storage
Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

Expiration
Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure
1. Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.
2. Antimicrobial agents incorporated into a medium to inhibit bacteria may also inhibit certain pathogenic fungi. Non-selective fungal media should be used concurrently with selective media when isolating fungi.

Packaging
Sabouraud BHI Agar      Code No.    7235A    500 g
                                      7235B    2 kg
                                      7235C    10 kg

References

Technical Information
Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006.