Brain Heart Infusion with PABA

Brain Heart Infusion with PABA is used for culturing blood from patients under Sulphonamide therapy.

**Composition**

**Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calf brain, infusion from</td>
<td>200.000</td>
</tr>
<tr>
<td>Beef heart, infusion from</td>
<td>250.000</td>
</tr>
<tr>
<td>Peptic digest of animal tissue</td>
<td>10.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Dextrose</td>
<td>2.000</td>
</tr>
<tr>
<td>Disodium phosphate</td>
<td>2.500</td>
</tr>
<tr>
<td>p-Amino benzoic acid (PABA)</td>
<td>0.050</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.4±0.2</td>
</tr>
</tbody>
</table>

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

**Directions**

Suspend 37.05 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

**Principle And Interpretation**

Brain Heart Infusion w/ PABA is a highly nutritious medium which can support luxuriant growth of wide variety of microorganisms including bacteria, yeasts and moulds (1) and is often used for isolation of pathogens from clinical specimens especially blood (2).

Para amino benzoic acid is an active inhibitor of the bacteriostasis produced by the sulfonamide drugs; also it serves as an accessory growth factor for several species of bacteria (3). Therefore para amino benzoic acid incorporated in the medium helps to neutralize the effect of antimicrobials present in the blood of patients under sulphonamide therapy making isolation of organisms from blood easier.

Peptic digest of animal tissue and calf brain and beef heart infusion provides carbon, nitrogen, amino acids and vitamins. Dextrose serves as a source of energy. Sodium chloride helps in maintaining the osmotic equilibrium.

**Quality Control**

**Appearance**
Cream to yellow homogeneous free flowing powder

**Colour and Clarity of prepared medium**
Light amber coloured, clear to very slightly opalescent solution without any precipitate

**Reaction**
Reaction of 3.7% w/v aqueous solution at 25°C. pH : 7.4±0.2

**pH**
7.20-7.60

**Cultural Response**
M212: Cultural characteristics observed with added 0.5 grams of sulphadiazine per litre after an incubation i) Bacteria at 35-37°C for 18-24 hours ii)Fungal at 25-30°C for 24-48 hours. iii)Bacteroides species anaerobically for 24-48 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteroides fragilis ATCC 25285</td>
<td>50-100</td>
<td>good-luxuriant</td>
</tr>
<tr>
<td>Candida albicans ATCC 10231</td>
<td>50-100</td>
<td>good-luxuriant</td>
</tr>
</tbody>
</table>
**Neisseria meningitidis ATCC 13090**

50-100 good-luxuriant

**Streptococcus pneumoniae ATCC 6303**

50-100 good-luxuriant

**Streptococcus pyogenes ATCC 19615**

50-100 good-luxuriant

**Storage and Shelf Life**

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

**Reference**

1. MacFaddin J. F., 1985, Media for the Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore


Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.