ISOLATER 10 BLOOD CULTURE SYSTEM FOR DIMORPHIC FUNGI

I. Introduction

The Isolator 10 blood culture system should be used for the isolation and detection of Cryptococcus and dimorphic fungi such as Histoplasma and Blastomyces.

If BacT/Alert bottles are received with a request for dimorphic fungi, notify the ward / ordering physician that they must use the Isolator 10 collection tubes. The BacT/Alert bottles should only be processed as per routine blood cultures.

II. Collection and Transport

See Pre-analytical Procedure - Specimen Collection QPCMI02001

III. Reagents / Materials / Media

Isostat cap, Isostat concentration pipette, Isostat supernatant pipette, 10% PVP iodine, Dupont Isostat, Vortex.

IV. Procedure

A. Processing of Isolator 10 Microbial Tubes:

1. Centrifuge specimen at 4700 rpm for 30 minutes.

   NB: The use of a safety hood is mandatory for steps 2 to 9.

2. Disinfect the stopper using 10% PVP iodine or tincture of iodine. Leave for a few minutes. Remove excess iodine with alcohol gauze. Allow to dry completely.

3. Place cap over stopper. Grasp only the sides of the cap.
4. Position cap under press and pull down handle and release.

5. Collapse bulb of supernatant pipette completely before inserting stem into the tube.

6. Insert stem into tube and release bulb to withdraw supernatant fluid. Discard the supernatant.

7. Vortex the tube for at least 10 seconds at the highest setting.

8. Collapse bulb of concentrate pipette completely and then insert stem into tube. Slowly withdraw all concentrate.

9. Dispense concentrate in a straight line along the surface of the agar. Keep inoculum away from the edge of the plate.

<table>
<thead>
<tr>
<th>Media</th>
<th>Incubation</th>
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<tbody>
<tr>
<td>Inhibitory Mold Agar (IMA)</td>
<td>O₂, 28°C x 4 weeks</td>
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<tr>
<td>Esculin Base Medium (EBM)</td>
<td>O₂, 28°C x 4 weeks</td>
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<tr>
<td>Blood Egg Albumin Agar (BEAA) x 2 plates</td>
<td>O₂, 28°C x 4 weeks</td>
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10. Using the tip of the pipette, streak the plates. Use 15-20 passes perpendicular to the original inoculum line.

11. Dry plates, seal with parafilm and forward plates to Mycology for incubation and processing.

B. Interpretation of Fungal Culture Plates:

Refer to Mycology Manual.

V. Reporting Results

Refer to Mycology Manual.

VI. Reference

1. Isolator 10 Product Insert.