Collection / Transport

Collection Requirements:
Submit a slant or at least 2.0 mL of a broth culture. Specify the type of media used.

Unacceptable Conditions:
Mixed cultures or non-viable organisms.
Organisms submitted on a Petri dish.

Storage Transport Temp:
Room Temperature

Notes:
- MTB1 replaces test code 3a, effective February 1, 2013.
- A direct agar proportion test using 10 drugs in Middlebrook 7H11 will be performed on an AFB smear positive, NAAT positive clinical specimen. An indirect test will be performed on a pure culture of MTB complex. Refer to Interpretive Data section for list of drugs and concentrations.
- There is an additional charge for purification/isolation of cultures containing a non-acid-fast contaminant, or more than one mycobacterial species.

Members of the Mycobacterium tuberculosis (MTB) Complex

<table>
<thead>
<tr>
<th>Frequently Isolated</th>
<th>Rarely Isolated</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. tuberculosis</td>
<td>M. microti</td>
</tr>
<tr>
<td>M. bovis</td>
<td>M. caprae</td>
</tr>
<tr>
<td>M. bovis (BCG)</td>
<td>M. canetti</td>
</tr>
<tr>
<td>M. africanum</td>
<td>M. pinnipedii</td>
</tr>
<tr>
<td></td>
<td>M. mungi</td>
</tr>
</tbody>
</table>

Overview

Performed:
Wednesday & Friday

Methodology:
Antimicrobial susceptibility testing (AST) for MTB complex-10-Drug agar proportion method
Reported:
4 weeks upon identification of MTB complex and a pure culture.

Lab Department:
Mycobacteriology Lab (TB)

Synonyms:
3a;Agar Proportion Testing - Conventional Testing

Related Tests:
AFB1, AFB2, AFB4, MTB2

Result Interpretation

Interpretive Data:
- isoniazid 0.2 mcg/mL and 1.0 mcg/mL
- rifampin 1.0 mcg/mL
- ethambutol 7.5 mcg/mL
- ethionamide 10.0 mcg/mL
- streptomycin 2.0 mcg/mL and 4.0 mcg/mL
- capreomycin 10.0 mcg/mL
- kanamycin 6.0 mcg/mL
- amikacin 6.0 mcg/mL
- cycloserine 60.0 mcg/mL
- Para-amino salicyclic acid (PAS) 8.0 mcg/mL

Detection of organism growth of >1% of growth in control indicates resistance to critical concentration. Result will be listed as “0% RES” if organism is fully susceptible to the tested concentration.

CPT Codes

CPT Code:
10-drug agar proportion, each agent
87190 x 10

Test Name: Antimicrobial Susceptibility Testing (AST) 10-Drug agar proportion method (INH, RIF, EMB, ETH, STR, CAP, KAN, AMK, CS, PAS)

Test Code: MTB1