Mycobacterium Tuberculosis, rRNA Detection

**Type of Specimen**

Mycobacterium Tuberculosis Complex

**Detected/Not Detected**

**Interpretation**

<table>
<thead>
<tr>
<th>Mycobacterium tuberculosi s complex</th>
<th>Infection likely with any of the following species - , M. tuberculosis, M. bovis, M. bovis BCG, M. africanum, M. microti and M. canetti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not detected</td>
<td>Mycobacterium tuberculosis complex not detected in the sample provided</td>
</tr>
</tbody>
</table>

**Notes**

1. This test utilizes Transcription-Mediated Amplification (TMA) and the Hybridization Protection Assay (HPA) to qualitatively detect M. tuberculosis complex ribosomal ribonucleic acid (rRNA).
2. The limit of detection of the assay is 1CFU/test.
3. The sensitivity and specificity of the test is >90%.
4. This test does not differentiate between the various species of Mycobacterium tuberculosis complex

**Comments**

Conventional culture methodologies can detect tuberculosis growth as early as 1 week, but may take up to 8 weeks. Comparatively, the MTD test provides detection of M. tuberculosis complex rRNA within hours after beginning the test procedure. Thus, while the MTD test cannot ascertain drug susceptibility, it can result in rapid and reliable detection of M. tuberculosis. This could lead to more appropriate use of isolation facilities, more appropriate initiation of therapy, and earlier detection and containment of infected contacts.