Test Definition: SAFB
Acid Fast Smear For Mycobacterium

Overview

Useful For
Detection of acid-fast bacilli in clinical specimens

Reflex Tests

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Reporting Name</th>
<th>Available Separately</th>
<th>Always Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBT</td>
<td>Concentration, Mycobacteria</td>
<td>No, (Bill Only)</td>
<td>No</td>
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<tr>
<td>TISSR</td>
<td>Tissue Processing</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
</tbody>
</table>

Testing Algorithm

When this test is ordered, the reflex tests may be performed and charged.

See Meningitis/Encephalitis Panel Algorithm in Special Instructions.

Special Instructions

- Meningitis/Encephalitis Panel Algorithm

Method Name

Auramine-Rhodamine Stain

NY State Available

Yes

Specimen

Specimen Type

Varies

Ordering Guidance

MTBRP / Mycobacterium tuberculosis Complex, Molecular Detection, PCR is the preferred test for rapid, direct detection of Mycobacterium tuberculosis from clinical specimens.

Necessary Information

Specimen source is required.

Specimen Required

Submit only 1 of the following specimens:

Specimen Type: Body fluid

Container/Tube: Sterile container
Specimen Volume: 1 mL
Specimen Type: Bone marrow
Container/Tube: SPS/Isolator System or green top (lithium heparin)

Specimen Volume: Entire collection
Specimen Type: Gastric washing
Container/Tube: Sterile container
Specimen Volume: 10 mL

Collection Instructions: Neutralize specimen within 4 hours of collection with 100 mg of sodium carbonate per 5 to 10 mL of gastric wash.

Specimen Type: Respiratory
Sources: Bronchoalveolar lavage fluid, bronchial washing, sputum
Container/Tube: Sterile container
Specimen Volume: 4 mL

Collection Instructions: Collect 3 respiratory specimens for acid-fast smears and culture in patients with clinical and chest X-ray findings compatible with tuberculosis. These 3 specimens should be collected at 8- to 24-hour intervals (24 hours when possible) and should include at least 1 first-morning specimen.

Specimen Type: Stool
Supplies: Stool Collection Kit, Random (T635)
Container/Tube: Sterile container
Specimen Volume: 5-10 g

Specimen Type: Tissue
Container/Tube: Sterile container
Specimen Volume: 5-10 mm
Collection Instructions: Collect a fresh tissue specimen.

Specimen Type: Urine
Container/Tube: Sterile container
Specimen Volume: 2 mL
**Test Definition: SAFB**

Acid Fast Smear For Mycobacterium

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**Collection Instructions:** Collect a random urine specimen.

**Specimen Type:** Swab

Additional Information: Fresh tissue or body fluid is the preferred specimen type instead of a swab specimen. Recovery of mycobacteria and aerobic actinomycetes from swabs is variable.

**Sources:** Wound, tissue, or body fluid

**Container/Tube:** Culture transport swab (noncharcoal) Culturette

**Specimen Volume:** Adequate specimen

**Collection Instructions:**

1. Before collecting specimen, wipe away any excessive amount of secretion and discharge, if appropriate.

2. Obtain secretions or fluid from source with sterile swab.

3. If smear and culture are requested or both a bacterial culture and mycobacterial culture are requested, collect a second swab to maximize test sensitivity.

**Forms**

If not ordering electronically, complete, print, and send a [Microbiology Test Request](T244) (T244) with the specimen.

**Specimen Minimum Volume**

Varies: If mycobacterial culture is also requested, then 1.5 mL for body fluid, 3 mL for respiratory specimen, or a pea-sized piece of fresh tissue. If smear only is requested, then 0.5 mL for body fluid, 3 mL for respiratory specimen, or a pea-sized piece of fresh tissue.

**Reject Due To**

<table>
<thead>
<tr>
<th>Other</th>
<th>Blood or serum</th>
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**Specimen Stability Information**

<table>
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<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
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<tbody>
<tr>
<td>Varies</td>
<td>Refrigerated (preferred)</td>
<td>7 days</td>
<td></td>
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<tr>
<td></td>
<td>Ambient</td>
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**Clinical and Interpretive**

**Clinical Information**

*Mycobacterium tuberculosis* is a leading infectious disease cause of death worldwide. The Centers for Disease Control and Prevention has reported a rise in the incidence of tuberculosis associated with AIDS, foreign-born cases, and increased transmission in high-risk populations. There has also been a rise in the number of *M tuberculosis* strains that exhibit resistance to one or more antituberculosis drugs. The public health implications of these facts are considerable. Because *M tuberculosis* is readily spread by airborne particles, rapid diagnosis and isolation of infected
persons is important. Nontuberculous mycobacteria infections also cause significant morbidity and mortality in humans, particularly in immunocompromised persons. Detection of acid-fast bacilli in sputum specimens allows rapid identification of individuals who are likely to be infected with mycobacteria while definitive diagnosis and treatment are pursued.

Reference Values
Negative (reported as positive or negative)

Interpretation
Patients whose sputum specimens are identified as acid-fast positive should be considered potentially infected with *Mycobacterium tuberculosis*, pending definitive diagnosis by molecular methods or mycobacterial culture.

Cautions
Artifacts may exhibit nonspecific fluorescence and be confused with organisms.

Clinical Reference


Performance

Method Description

PDF Report
No

Day(s) Performed
Monday through Sunday

Report Available
1 day

Specimen Retention Time
3-7 days

Performing Laboratory Location
Rochester

Fees and Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.
Test Classification
This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information
87206
87176-Tissue processing (if appropriate)
87015-Mycobacteria culture, concentration (if appropriate)

LOINC® Information

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<tr>
<th>Test ID</th>
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<th>Order LOINC Value</th>
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<tr>
<td>SAFB</td>
<td>Acid Fast Smear For Mycobacterium</td>
<td>676-7</td>
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<table>
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<tr>
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