Overview

Useful For
Aiding in the diagnosis of active histoplasmosis in serum specimens

Testing Algorithm
See Meningitis/Encephalitis Panel Algorithm in Special Instructions.

Special Instructions
- Meningitis/Encephalitis Panel Algorithm

Method Name
Complement Fixation (CF)/Immunodiffusion

NY State Available
Yes

Specimen

Specimen Type
Serum

Specimen Required
Container/Tube:
- Preferred: Serum gel
- Acceptable: Red top

Specimen Volume: 0.5 mL

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

Specimen Minimum Volume
See Specimen Required.

Reject Due To

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>Gross hemolysis</td>
<td>Reject</td>
</tr>
<tr>
<td>Gross lipemia</td>
<td>Reject</td>
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</table>

Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
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<tbody>
<tr>
<td>Serum</td>
<td>Refrigerated (preferred)</td>
<td>14 days</td>
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Clinical and Interpretive

Clinical Information

*Histoplasma capsulatum* is a soil saprophyte that grows well in soil enriched with bird droppings. The usual disease is self-limited, affects the lungs, and is asymptomatic. Chronic cavitary pulmonary disease, disseminated disease, and meningitis may occur and can be fatal, especially in young children and in immunosuppressed patients.

Reference Values

**MYCELIAL BY COMPLEMENT FIXATION (CF)**

Negative (positives reported as titer)

**YEAST BY CF**

Negative (positives reported as titer)

**ANTIBODY BY IMMUNODIFFUSION**

Negative (positives reported as band present)

Interpretation

Complement fixation (CF) titers of 1:32 or higher indicate active disease. A rising CF titer is associated with progressive infection.

Positive immunodiffusion test results supplement findings of the CF test. The simultaneous appearance of both H and M precipitin bands indicates active histoplasmosis. The M precipitin band alone indicates early or chronic disease or a recent histoplasmosis skin test.

Patients infected with *Histoplasma capsulatum* demonstrate a serum antibody with a rising titer within 6 weeks of infection. A rising titer is associated with progressive infection. Specific antibody persists for a few weeks to a year, regardless of clinical improvement.

Cautions

Recent histoplasmosis skin tests must be avoided because the test causes a misleading rise in complement fixation titer, as well as an M precipitin band, in approximately 17% of patients having previous exposure to *Histoplasma capsulatum*.

Cross-reacting antibodies sometimes present interpretive problems in patients having blastomycosis or coccidioidomycosis.

Clinical Reference


Performance
Method Description

Both immunodiffusion and complement fixation (CF) tests are used to detect antibodies to *Histoplasma capsulatum*. For immunodiffusion, the antigen used is a culture filtrate. Histoplasmin H and M precipitins can be identified by the assay. For the CF test, antigens are histoplasmin and a yeast form antigen of *Histoplasma capsulatum*; the latter is more sensitive. (Roberts GD: Fungi. In Laboratory Procedures in Clinical Microbiology. Second edition. Edited by JA Washington II. New York, Springer-Verlag, 1985)

PDF Report

No

Day(s) and Time(s) Test Performed

Monday; 6 a.m.

Tuesday through Friday; 9:30 a.m.

Analytic Time

2 days

Maximum Laboratory Time

7 days

Specimen Retention Time

14 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 uses a standard method. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information

86698 x 3

LOINC® Information

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<th>Order LOINC Value</th>
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<tbody>
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<td>Histoplasma Ab, S</td>
<td>90227-0</td>
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Document generated February 22, 2020 at 6:15pm CST
### Test Definition: SHSTO

Histoplasma Ab, S

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<tbody>
<tr>
<td>15121</td>
<td>Histoplasma Mycelial</td>
<td>20573-2</td>
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<tr>
<td>15122</td>
<td>Histoplasma Yeast</td>
<td>20574-0</td>
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<tr>
<td>15123</td>
<td>Histoplasma Immunodiffusion</td>
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