Lab Dept: Serology

Test Name: HISTOPLASMA CAPSULATUM ANTIBODY

**General Information** 

**Lab Order Codes:** HAB – Complement Fixation

**Synonyms:** Histoplasma Antibody, Serum; Histoplasma Ab; Histoplasma

Complement Fixation; Immunodiffusion for Fungi

**CPT Codes:** 86698 X3 - Antibody; histoplasma

**Test Includes:** Histoplasma Antibody by Complement Fixation

Logistics

**Test Indications:** Useful as an aid in the diagnosis of respiratory disease when

Histoplasma infection is suspected.

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.

**Lab Testing Sections:** Serology - Sendouts

**Referred to:** Mayo Medical Laboratories (Mayo Test: SHSTO)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1-2 days, test is set up Sunday - Friday

Special Instructions: N/A

Specimen

Specimen Type: Blood

**Container:** SST (Gold, marble or red)

**Draw Volume:** 6 mL (Minimum: 1.5 mL) blood

**Processed Volume:** 2 mL (Minimum: 0.5 mL) serum

**Collection:** Routine blood collection

**Special Processing:** Lab Staff: Centrifuge specimen and remove serum aliquot into a screw-

capped round bottom plastic tube. Store and send serum refrigerated.

Forward promptly.

Patient Preparation: None

**Sample Rejection:** Specimen collected in incorrect container; specimen other than serum;

gross hemolysis; mislabeled or unlabeled specimens

## Interpretive

**Reference Range:** Complement Fixation/Immunodiffusion test:

Mycelial by complement fixation: negative (positives reported as titer)

Yeast by complement fixation: negative (positives reported as titer)

Antibody by immunodiffusion: negative (positives reported as band

present)

Complement fixation (CF) titers ≥1:32 indicate active disease. A rising

CF titer is associated with progressive infection.

Positive immunodiffusion test results supplement CF test result.

Patients infected with *H. 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.

Critical Values: N/A

**Limitations:** The use of this assay has not been established for screening the

general population or for monitoring therapy.

The performance of this assay has not been established for ruling out diseases with similar symptoms eg, diseases caused by *Mycobacterium tuberculosis*, *Coccidioides immitis*, *Aspergillus fumigatus*, *Blastomyces dermatitidis*, *Streptococcus pneumoniae*, *Mycoplasma pneumoniae*, *Chlamydia pneumoniae*, *Legionella pneumophila* or other pathogens.

The performance of this assay has not been established for matrices other than serum.

All results from this and other serologies must be correlated with clinical history, epidemiological data, and other data available to the attending

physician in evaluating the patient.

The prevalence of infection will affect the assay's predictive value.

The test can be positive with persons that are not currently infected with histoplasma. Antibodies may be present because of a past infection.

The test can be negative with persons that are currently infected with Histoplasma. Samples obtained very early in the infection may not have detectable antibodies.

**Methodology:** Complement Fixation (CF)/Immunodiffusion

**References:** <u>Mayo Medical Laboratories</u> January 2018

**Update:** 1/28/16: CPT update, screening test no longer offered.

1/17/2018: Collection container update.