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**Lab Dept:** Serology

**Test Name:** COCCIDIOIDES ANTIBODY, CSF

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***General Information***

**Lab Order Codes:** CABS

**Synonyms:** Cocci CF and ID, CSF; Coccidioides Antibody, Spinal Fluid; San Joaquin Valley Fever

**CPT Codes:** 86635 x3 – Antibody; Coccidioides

**Test Includes:** Complement fixation and immunodiffusion coccidioides testing

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***Logistics***

**Test Indications:** Serologic testing for coccidioidomycosis should be considered when patients exhibit symptoms of meningeal infection and have lived or traveled in areas where *Coccidioides immitis* is endemic. Any history of exposure to the organism or travel cannot be overemphasized when coccidioidomycosis serologic tests are being considered.

**Lab Testing Sections:** Serology - Sendouts

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

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

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 3 – 6 days; test set up on Monday - Friday

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** CSF

**Container:** Screw capped, plastic vial

**Draw Volume:** 2 mL (Minimum: 1.2 mL) spinal fluid

**Processed Volume:** Same as Draw Volume

<b>Collection:</b>	Routine CSF collection
<b>Special Processing:</b>	Lab Staff: Store specimen in a screw-capped, round-bottom, plastic vial refrigerated. Send specimen refrigerated. Forward promptly.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Specimens other than CSF, mislabeled or unlabeled specimens

**Interpretive**

**Reference Range:**

<b>Complement Fixation (CF):</b>	Negative If positive, results are titered
Any CF titer in CSF should be considered significant. A positive complement fixation test in unconcentrated cerebrospinal fluid is diagnostic of meningitis.	
<b>Immunodiffusion:</b>	Negative Results are reported as positive, negative or equivocal.
<p>IgM and IgG precipitins are rarely found in CSF. However, when present, they are diagnostic of meningitis (100% specific). Since the immunodiffusion test is 100% specific, it is helpful in interpreting Complement Fixation results.</p> <p>Early primary antibody (IgM) found in coccidioidomycosis can be detected by the IgM-specific Immunodiffusion test. IgM precipitins may be detectable within 1-4 weeks after the onset of symptoms. The presence of IgG antibody parallels the Complement Fixation antibody and indicates an active of a recent asymptomatic infection with <i>Coccidioides immitis</i>. Both IgG and IgM antibodies are rarely detected 6 months after infection. However, in some patients having disseminated infection both IgG and IgM antibodies may be present for several years. IgM and IgG precipitins are not prognostic.</p> <p>An equivocal result (a band of non-identity) cannot be interpreted as significant for a specific diagnosis. However, this may be an indication that a patient should be followed serologically.</p> <p>The sensitivity of serologic testing (Complement Fixation and Immunodiffusion combined) for coccidioidomycosis is &gt;90% for primary symptomatic cases.</p>	

**Critical Values:** N/A

**Limitations:**

While Complement fixation (CF) titers may be present in serum months after the infection has resolved, any CF titer in CSF should be considered significant.

**Methodology:**

Complement Fixation (CF) using Coccidioidin  
Immunodiffusion for IgG/IgM

**References:**

[Mayo Medical Laboratories Web Page](#) August 2015