
Lab Dept: Serology

Test Name: COCCIDIOIDES ANTIBODY, CSF

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

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 (MML Test: CCOC)

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

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

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

Interpretive

Reference Range:

Complement Fixation (CF):	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.	
Immunodiffusion:	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 >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](#) December 2017