Lab Dept:	**Serology**
Test Name:	**CHLAMYDIA IGM AND IGG PANEL, IMMUNOFLUORESCENCE, SERUM**

General Information

Lab Order Codes:	CHLAP
Synonyms:	Chlamydia IFA; Chlamydia differentiation antibody panel; *Chlamydia pneumoniae* and *Chlamydia psittaci* serology
CPT Codes:	86631 x2 – Antibody; Chlamydia 86632 x2 – Antibody; Chlamydia, IgM
Test Includes:	Semiquantitative titers for IgM and IgG antibodies to *Chlamydia pneumoniae* and *Chlamydia psittaci*

Logistics

Test indications:	Aids in the clinical diagnosis of *Chlamydia pneumoniae* or *Chlamydia psittaci* infection
Lab Testing Sections:	Serology - Sendouts
Referred to:	Mayo Medical Laboratories (MML Test: CHLAP)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	1 – 4 days, test set up Monday – Friday
Special Instructions:	N/A

Specimen

Specimen Type:	Blood
Container:	SST (Gold, marble or red) tube
Draw Volume:	1.8 mL (minimum: 0.9 mL) blood
Processed Volume:	0.6 mL (minimum: 0.3 mL) serum

Collection:	Routine blood collection
Special Processing:	Lab Staff: Centrifuge specimen, separate serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly. Specimen stable refrigerated (preferred) or frozen for 30 days.
Patient Preparation:	None
Sample Rejection:	Gross hemolysis; heat-inactivated specimen; gross lipemia; gross icterus; mislabeled or unlabeled specimens.

Interpretive

Reference Range:

Chlamydia pneumoniae
IgM: <1:10
IgG: <1:64

Chlamydia psittaci
IgM: <1:10
IgG: <1:64

INTERPRETATION:

IgM
Chlamydia pneumoniae and *Chlamydia psittaci*

> or =1:10
IgM endpoint titers of 1:10 or more are considered presumptive evidence of infection.

<1:10
IgM endpoint titers below 1:10 suggest that the patient does not have a current infection. These antibody levels may be found in patients with either no history of chlamydial infection or those with past infection whose antibody levels have dropped below detectable levels.

IgG:
C pneumoniae

> or =1:512
IgG endpoint titers of 1:512 or more are considered presumptive evidence of current infection.

> or =1:64 and <1:512
A single specimen endpoint titer of 1:64 to 1:512 should be considered evidence of infection at an undetermined time. A second specimen collected 10 to 21 days after the original collection should be tested in parallel with the first. If the second specimen exhibits a titer 1:512 or more or a 4-fold increase over that of the initial specimen, current (acute) infection is indicated. Unchanging titers from 1:64 to 1:512 suggest past infection.

<1:64
IgG endpoint titers below 1:64 suggest that the patient does not have a current infection. These antibody levels may be found in patients with either no history of chlamydial infection or those with past infection whose antibody levels have dropped below detectable levels.

C pneumoniae antibody is detectable in 25% to 45% of adults tested.

C psittaci
> or =1:64
IgG endpoint titers of 1:64 or more are considered presumptive evidence of current infection.

<1:64

IgG endpoint titers below 1:64 suggest that the patient does not have a current infection. These antibody levels may be found in patients with either no history of chlamydial infection or those with past infection whose antibody levels have dropped below detectable levels.

Critical Values: N/A

Limitations: Antichlamydial IgG can persist for years. All results from chlamydial serologies must correlate with clinical history and other data available to the physician.

Specimens collected too early during primary infection may not contain detectable antibodies. If chlamydial infection is suspected, a second specimen should be collected 10 to 21 days later and tested in parallel with the original specimen.

During a primary chlamydia infection, the early antibody response may be cross-reactive with multiple *Chlamydia* species.

This assay does not report antibodies detected against *Chlamydia trachomatis*. Sera from suspected cases of lymphogranuloma venereum (LGV) should be tested by a Lymphogranuloma Venereum Differentiation Antibody Panel. LGV testing is not performed by Mayo Clinic Laboratories; call 800-533-1710 for assistance. Due to the limited sensitivity and specificity of chlamydia serologic tests, patients with suspected *C trachomatis* infection should be tested by a molecular method (eg, CTRNA / *Chlamydia trachomatis*, Nucleic Acid Amplification, Varies) when clinical manifestations are present.

Methodology: Micro-Immunofluorescent Antibody (MIF) Assay

References: Test Catalog - Mayo Clinic Laboratories (mayocliniclabs.com) April 2023

Updates: 4/18/2023: Initial entry