MAYO CLINIC LABORATORIES

Test Definition: MYCOG

M. pneumoniae Ab, IgG, S

Overview

Useful For

Screen for recent or past exposure to *Mycoplasma pneumoniae*

Method Name

Only orderable as part of a profile. For more information see MYCO / *Mycoplasma pneumoniae* Antibodies, IgG and IgM, Serum.

Enzyme Immunoassay (EIA)

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Required

Only orderable as part of a profile. For more information see MYCO / *Mycoplasma pneumoniae* Antibodies, IgG and IgM, Serum.

Collection Container/Tube:

Preferred: Serum gel

Acceptable: Red top

Submission Container/Tube: Plastic vial

Specimen Volume: 1 mL

Reject Due To

Hemolysis	Mild reject; Gross reject
Lipemia	Mild reject; Gross reject
Icterus	NA
Other	NA

Specimen Minimum Volume

0.5 mL

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	14 days	
	Frozen	14 days	

Clinical & Interpretive

Clinical Information

Mycoplasma pneumoniae is an important respiratory tract pathogen. Several syndromes have been associated with the infection including pharyngitis, tracheobronchitis, pneumonia, and inflammation of the tympanic membrane presenting as bullous myringitis.

M pneumoniae accounts for approximately 20% of all cases of pneumonia. Classically, it causes a disease that has been described as primary atypical pneumonia. The disease is of insidious onset with fever, headache, and malaise for 2 to 4 days before the onset of respiratory symptoms. Most cases do not require hospitalization. Symptomatic infections attributable to this organism most commonly occur in children and young adults (ages 2-19 years).

Reference Values

Only orderable as part of a profile. For more information see MYCO / *Mycoplasma pneumoniae* Antibodies, IgG and IgM, Serum.

Negative

Interpretation

A single positive IgG result only indicates previous immunologic exposure.

Negative results do not rule out the presence of acute or ongoing *Mycoplasma pneumoniae*-associated disease. The specimen may have been drawn before the appearance of detectable antibodies. If testing is performed too early following primary infection, IgG may not be detectable. If a *Mycoplasma* infection is clinically suspected, a second, convalescent specimen should be submitted in 14 to 21 days.

Cautions

A diagnosis of *Mycoplasma pneumoniae* infection should not be solely based on results of serologic testing for this agent. Test results should be interpreted in conjunction with the clinical evaluation and the results of other diagnostic procedures (eg molecular detection).

The use of hemolytic, lipemic, bacterially contaminated, or heat-inactivated specimens should be avoided as erroneous results may occur.

Assay performance characteristics have not been established for matrices other than serum.

The continued presence or absence of antibodies cannot be used to determine the success or failure of therapy.

Testing should not be performed as a screening procedure for the general population. Testing should only be done when clinical evidence suggests the diagnosis of *M pneumoniae*-associated disease.

The performance of this test has not been established on neonates and immunocompromised patients.

Clinical Reference

Smith T: *Mycoplasma pneumoniae* infections: diagnosis based on immunofluorescence titer of IgG and IgM antibodies. Mayo Clin Proc 1986;61:830-831

Performance

Method Description

Diluted sera are incubated in antigen-coated microwells. Any antigen-specific antibody in the samples will bind to the immobilized antigen. The plate is washed to remove unbound antibody and other serum components. Peroxidase conjugated goat antihuman IgG is added to the wells and incubated. The conjugate will react with the IgG antibody/antigen on the solid phase. The wells are washed to remove unreacted conjugate. The microwells containing immobilized conjugate are incubated with peroxidase substrate solution. Hydrolysis of the substrate by peroxidase produces a color change. After a period of time the reaction is stopped by the addition of diluted acid, and the color changes are measured photometrically. The color intensity of the solution depends on the antibody concentration in the serum sample.(Package insert: *Mycoplasma* IgG ELISA II. Wampole Laboratories, Princeton, NJ 2004)

PDF Report

No

Performing Laboratory Location

Rochester

Test Definition: MYCOG

M. pneumoniae Ab, IgG, S

Fees & Codes

Test Classification

This test has been modified from the manufacturer's instructions. 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 US Food and Drug Administration.

CPT Code Information

86738

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
MYCOG	M. pneumoniae Ab, IgG, S	45224-3

Result ID	Reporting Name	LOINC®
MYCOG	M. pneumoniae Ab, IgG, S	45224-3