
Lab Dept: Serology

Test Name: BARTONELLA ANTIBODY

General Information

Lab Order Codes: CATS

Synonyms: Cat Scratch Disease Antibody; Bartonella Antibody Panel, IgG and IgM, serum; Rochalimaea; Bartonella henselae Antibody; Bartonella quintana Antibody

CPT Codes: 86611 x4 – Antibody; Bartonella

Test Includes: *Bartonella henselae* IgG and IgM antibody levels and *Bartonella quintana* IgG and IgM antibody levels reported as titers.

Logistics

Test Indications: Useful for rapid diagnosis of bartonella infection, especially in the context of a cat scratch or histopathology showing typical features of stellate microabscesses and/or a positive Warthin-Starry stain.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: BART)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 3 days, test set up Monday - Saturday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Marble, gold or red top tube)

Draw Volume: 1.5 mL (Minimum: 0.45 mL) blood

Processed Volume: 0.5 mL (Minimum: 0.15 mL) serum

Note: Submission of the minimum volume does not allow for repeat analysis and may result in a QNS (quantity not sufficient) test result.

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen, remove serum aliquot and refrigerate in screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Specimens other than serum, hemolyzed specimens, lipemic specimens will be evaluated, mislabeled or unlabeled specimens

Interpretive

Reference Range:

<i>Bartonella henselae</i>	
IgG:	<1:128
IgM:	<1:20
<i>Bartonella quintana</i>	
IgG:	<1:128
IgM:	<1:20
<p>A positive immunofluorescence assay (IFA) IgM (titer >1:20) suggests a current infection with either <i>Bartonella henselae</i> or <i>Bartonella quintana</i>. A positive IgG (titer >1:128) suggest a current or previous infection. Increases in IgG titers in serial specimens would indicate an active infection.</p> <p>Normal serum specimens usually have an IgG titer of <1:128. However, 5-10% of healthy controls exhibit a <i>Bartonella henselae</i> and <i>Bartonella quintana</i> titer of 1:128. No healthy controls showed titers of 1:256 or greater. IgM titers from normal serum were found to be <1:20. IgM titers of 1:20 or greater have not been seen in a normal population. Culture should also be considered, but this may not be an optimal method due to slow growth and fastidious nature of the organism.</p> <p>Note: Assay performed using analyte-specific reagent. This test was developed and its performance characteristics determined by Laboratory Medicine and Pathology, Mayo Clinic Rochester. It has not been cleared or approved by the U.S. Food and Drug Administration.</p>	

Critical Values:	N/A
Limitations:	<p>IgG cross-reactivity between <i>Bartonella henselae</i> and <i>Bartonella quintana</i> has been reported. However, the infecting species will usually have the higher titer.</p> <p>IgM cross-reactivity is usually not seen. Significant cross-reactions have been reported between <i>Bartonella spp.</i> And <i>Chlamydia spp.</i></p>
Methodology:	Immunofluorescence assay (IFA)
References:	Mayo Medical Laboratories Web Page August 2016
Updates:	<p>1/4/2012: Specimen shipping and storage updated from refrigerated to frozen.</p> <p>8/23/2012: Specimen shipping and storage updated from frozen to refrigerated.</p> <p>8/3/2016: Container update</p>