Lab Dept: Serology

Test Name: BABESIA MICROTI ANTIBODIES, IGG/IGM

General Information

Lab Order Codes: BMGM

Synonyms: Babesia microti IgG and IgM Ab Panel

CPT Codes: 86753 x2 – Protozoa antibody, NOS

Test Includes: Babesia microti Ab IgG and IgM reported as a titer.

Logistics

Test Indications: Useful in the diagnosis of babesiosis infection. Human babesiosis infection is transmitted by the bite of an infected Ixodes tick or less frequently from transfusion with blood from an infected donor. Definitive diagnosis is made by identifying intraerythrocytic organisms in peripheral blood. In patients with low parasitemia, antibody detection by IFA is recommended.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: FBGM), forward to Quest Diagnostics

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 7 days, test performed Monday – Friday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red) tube

Draw Volume: 3 mL (Minimum: 1.5 mL) blood

Processed Volume: 1 mL (Minimum: 0.5 mL) serum
Collection: Routine blood collection

Special Processing: Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Serum gel tube is acceptable, but specimen must be poured off. Store and ship at refrigerated temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Unlabeled or mislabeled specimens; gross lipemia; grossly icteric; gross hemolysis; warm specimens

**Interpretive**

<table>
<thead>
<tr>
<th>Reference Range</th>
<th>Titer: IgG</th>
<th>&lt;1:64</th>
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<tr>
<td></td>
<td>Titer: IgM</td>
<td>&lt;1:20</td>
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**Interpretation:** Elevated antibody levels to B. microti indicate exposure to the organism. Human babesiosis infection is transmitted by the bite of an infected Ixodes tick or less frequently from transfusion wit blood from an infected donor. Definitive diagnosis is made by identifying intraerythrocytic organisms in peripheral blood. In patients with low parasitemia, antibody detection by IFA is recommended. IgG levels greater than or equal to 1:1.024 can be detected in acute phase patients with parasites in blood smears. The IFA assay can be used as a seroepidemiologic tool to study the frequency and distribution of B. microti in endemic areas especially in persons with mixed infections and involving Borreliaburgorferi.

Critical Values: N/A

Limitations: N/A

Methodology: Immunofluorescence Assay (IFA)

References: Mayo Medical Laboratories February 2018

Updates: 7/18/2011: Updated reference range for Babesia microti IgG. Previously listed as <1:16.
8/21/2017: MML previously forwarded to Focus Diagnostics, updated to Quest.