**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 – 8 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 venipuncture

**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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<tbody>
<tr>
<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 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. 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 Borrelia burgdorferi.

**Critical Values:** N/A

**Limitations:** N/A

**Methodology:** Immunofluorescence Assay (IFA)

**References:** Mayo Medical Laboratories November 2017

**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.