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**Lab Dept:** Serology

**Test Name:** HEPATITIS B CORE IgM ANTIBODY (ANTI-HBc IGM)

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***General Information***

**Lab Order Codes:** HBCM

**Synonyms:** Hepatitis B Core IgM Specific; Hepatitis Bc Antibody; Hepatitis B Core Antibody IgM Fraction

**CPT Codes:** 86705 – Hepatitis B core antibody; IgM antibody

**Test Includes:** Hepatitis B Core IgM Specific Antibody reported as positive or negative.

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***Logistics***

**Test Indications:** Diagnosis of acute hepatitis B infection.

Identifying acute hepatitis B virus infection in the “core window” period, when HbsAg and anti-HBs are negative.

Differentiation between acute, chronic, or past HBV infections in the presence of positive hepatitis B virus core total antibodies

**Lab Testing Sections:** Serology - Sendouts

**Referred to:** Mayo Clinic Laboratories (MML Test: HBIM)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 - 2 days; test setup daily

**Special Instructions:** See [Patient Preparation](#)

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***Specimen***

**Specimen Type:** Blood

**Container:** SST (Gold or marble)

<b>Draw Volume:</b>	2 mL (Minimum: 1.8 mL) blood
<b>Processed Volume:</b>	0.6 mL (Minimum: also 0.6 mL) serum
<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	<p>Lab Staff: Allow specimen to clot and centrifuge within 2 hours of collection.</p> <p>Remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.</p> <p>Specimen stable frozen (preferred) for 90 days, refrigerated for 6 days.</p>
<b>Patient Preparation:</b>	For 24 hours before this blood collection, do not take multivitamins or dietary supplements containing biotin or vitamin B7 that are commonly found in hair, skin and nail supplements and multivitamins.
<b>Sample Rejection:</b>	Gross hemolysis; warm specimens; gross lipemia; grossly icteric; mislabeled or unlabeled specimens

***Interpretive***

**Reference Range:**

Negative

**Note:** A positive result indicates recent acute hepatitis B infection. A negative result suggests lack of recent exposure to the virus.

**Critical Values:**

N/A

**Limitations:**

The predictive value of a positive hepatitis B virus core (HBc) IgM antibody test result is low when used to test specimens from patients with low prevalence of acute hepatitis B virus infection.

Serum specimens from individuals taking biotin supplements of 20 mg or more per day may have false-negative anti-HBc IgM test results due to interference of biotin with the assay. Such individuals should stop taking these biotin-containing dietary supplements for a minimum of 12 hours before blood collection for this test.

Performance characteristics have not been established for the following specimen characteristics:

- Patients younger than 21 years, pregnant women, or in populations of immunocompromised or immunosuppressed patients
- Grossly icteric (total bilirubin level of >25 mg/dL)
- Grossly lipemic (Intralipid level of >1000 mg/dL)
- Grossly hemolyzed (hemoglobin level of >2000 mg/dL)
- Containing particulate matter
- Cadaveric specimens

**Methodology:**

Electrochemiluminescence Immunoassay (ECLIA)

**References:**

[Mayo Clinic Laboratories](#) April 2024

**Updates:**

4/6/2004: Test moved from Memorial Blood Center of Minneapolis to Mayo Medical Laboratories.

3/8/2005: Methodology previously listed as Enzyme Immunoassay.

9/27/2010: Specimen volume updates.

1/16/2016: Update to SST.

12/21/2017: Added patient preparation instructions.

4/23/2024: Updated optimal and minimum specimen volumes, changed methodology, updated limitations, added specimen stability.