### Lab Dept: **Serology**  

**Test Name:** HEPATITIS Bc ANTIBODY (ANTI-HBc)

#### General Information

**Lab Order Codes:** HBC  

**Synonyms:** Hepatitis B Core Viral Antibody; Hepatitis B Core IgG/IgM Antibody; Anti-HBC; HBcAb  

**CPT Codes:** 86704 – Hepatitis B core antibody (HbcAb); total  

**Test Includes:** Hepatitis Bc Total (IgG and IgM combined) Antibody level.

#### Logistics

**Test Indications:** Differentiation between acute and chronic hepatitis B infection. Diagnosis of acute hepatitis B infection in the “core window” when HbsAg and anti HBs are negative. Discriminating between HbsAg-positive patients (carriers) whose acute hepatitis is due to HBV infection and those whose acute hepatitis is due to other causes. Because low titer of IgM anti-Hbc can be either absent or present in chronic HBV carriers, IgM anti-HBc assessment is not usually considered useful in diagnosing chronic active or chronic persistent hepatitis B. Not useful for demonstration of immunity to or recovery from hepatitis B viral infection.

**Lab Testing Sections:** Serology - Sendouts  

**Referred to:** Mayo Medical Laboratories (Test: HBC)  

**Phone Numbers:**  
- MIN Lab: 612-813-6280  
- STP Lab: 651-220-6550  

**Test Availability:** Daily, 24 hours  

**Turnaround Time:** 1 - 2 days, test performed daily.  

**Special Instructions:** This test is not offered as a screening or confirmatory test for blood donor specimens.

#### Specimen

**Specimen Type:** Blood  

**Container:** SST (Gold or Marble)
<table>
<thead>
<tr>
<th><strong>Draw Volume:</strong></th>
<th>3 mL (Minimum: 1.2 mL) blood</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processed Volume:</strong></td>
<td>1 mL (Minimum: 0.4 mL) serum</td>
</tr>
<tr>
<td><strong>Collection:</strong></td>
<td>Routine venipuncture</td>
</tr>
<tr>
<td><strong>Special Processing:</strong></td>
<td>Lab Staff: Centrifuge specimen, remove serum/plasma from clot within 24 hours. Place serum aliquot into a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.</td>
</tr>
<tr>
<td><strong>Patient Preparation:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Sample Rejection:</strong></td>
<td>Specimens other than serum, hemolysis, lipemia</td>
</tr>
</tbody>
</table>

**Interpretive**

<table>
<thead>
<tr>
<th><strong>Reference Range:</strong></th>
<th>Negative (reported as positive, negative or inconclusive)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interpretation:</strong></td>
<td>A positive result indicates acute, chronic, past or resolved hepatitis B. An inconclusive results suggests the presence of interfering substance in the patient’s serum specimen.</td>
</tr>
<tr>
<td><strong>Positive anti-hepatitis B core (anti-HBc) total test results should be correlated with the presence of other hepatitis B virus serologic markers, elevated liver enzymes, clinical signs and symptoms, and a history of risk factors.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>If clinically indicated, testing for HBIM/Hepatitis B Core Antibody, IgM, serum is necessary to confirm an acute or recent infection.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Neonates (&lt;1 month old) with positive anti-HBc total results from this assay should be tested for anti-HBc IgM (HBIM/Hepatitis B Core Antibody, IgM, Serum) to rule out possible maternal anti-HBc causing false-positive results. Repeat testing using this assay for anti-HBc total within 1 month is also recommended in these neonates.</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Critical Values:** N/A
Limitations: This test is not offered as a screening or confirmatory test for blood donor specimens.

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

- Grossly icteric (total bilirubin level of >20 mg/dL)
- Grossly lipemic (triolein level of >3,000 mg/dL)
- Grossly hemolyzed (hemoglobin level of >500 mg/dL)
- Containing particulate matter
- Cadaveric specimens
- Heat inactivated specimens

Methodology: Chemiluminescence Immunoassay (CIA)

References: Mayo Medical Laboratories July 2015

Updates:

4/6/2004: Test moved from Memorial Blood Center of Minneapolis to Mayo Medical Laboratories. Test is now an automatic reflex to the IgM specific Anti-HBc.


8/10/2005: Test no longer reflexes to Hepatitis B Core IgM Specific test when Hepatitis Bc Ab is positive. The IgM specific test must be ordered separately if desired. Note: Change in methodology previously listed as Enzyme Immunoassay (EIA).

8/26/2015: EDTA specimens no longer acceptable.

1/16/2017: Update to SST.