
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)

Draw Volume:	3 mL (Minimum: 1.2 mL) blood
Processed Volume:	1 mL (Minimum: 0.4 mL) serum
Collection:	Routine venipuncture
Special Processing:	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.
Patient Preparation:	None
Sample Rejection:	Specimens other than serum, hemolysis, lipemia

Interpretive

Reference Range: Negative (reported as positive, negative or inconclusive)

Interpretation:

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.

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.

If clinically indicated, testing for HBIM/Hepatitis B Core Antibody, IgM, serum is necessary to confirm an acute or recent infection.

Neonates (<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.

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.

3/15/2005: Updated test method for Hepatitis Bc IgM antibody. Previously listed as Microparticle Enzyme Immunoassay (MEIA).

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.

1/8/2018: Updated Reference Range and Limitations per Mayo.