



HEPATITIS B VIRUS SEROLOGY

Synonym(s): HBsAg, qHBsAg, Anti-HBc IgM, HBV Core IgM Ab, Anti-HBc Total, HBV Core Total Ab, HBV e Antibody (anti-HBe), HBV Surface Antibody (anti-HBs), Anti-HBs

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Lab Section Category	Virology Click here to find out more about the write-up (/clinical-departments-centers/pathology/pathology-handbook/lab-discipline-special-instructions/pages/virology.aspx).
Description	<p>Hepatitis B Surface Antigen QuaLitative (HBsAg)</p> <p>Hepatitis B Surface Antigen QuaNtitative (qHBsAg)</p> <p>Antibody to Surface Antigen (anti-HBs)</p> <p>IgM Antibody to Core Antigen (anti-HBc IgM)</p> <p>Antibody to Core Antigen (anti-HBc total)</p> <p>Hepatitis B `e` Antigen (HBeAg)</p> <p>Antibody to e Antigen (anti-HBe)</p> <p>Confirmatory Test for HBsAg</p>

Specimen Required	<p>3 mL plain blood for single marker. 6 – 8 mL plain blood for panel of markers.</p> <p>(a) To diagnose acute hepatitis B infection or the carrier state, send blood for HBsAg Qualitative and anti-HBc IgM.</p> <p>(b) To determine immune status following past infection or vaccination, send blood for anti-HBs.</p> <p>(c) In the case of a carrier, send blood for HBeAg and anti-HBe.</p> <p>(d) To monitor response to HBV therapy, send blood for HBsAg Quantitative.</p>																														
Storage and Transport	Refrigerate samples if delay in transporting to laboratory is anticipated. Do not freeze.																														
Method	Chemiluminescent Microparticle Immunoassay (for all above)																														
Test Result	<table border="1"> <thead> <tr> <th>HBsAg</th> <th>Anti-HBs</th> <th>Anti-HBc IgM</th> <th>Anti-HBc total</th> <th>HBeAg</th> <th>Interpretation</th> </tr> </thead> <tbody> <tr> <td>+ or -</td> <td><10 mIU/mL</td> <td>+</td> <td>+</td> <td>+ or -</td> <td>Acute Hepatitis B</td> </tr> <tr> <td>+</td> <td><10 or ≥ 10 mIU/mL</td> <td>-</td> <td>+</td> <td>+ or -</td> <td>Hep B carrier</td> </tr> <tr> <td>-</td> <td>≥ 10 mIU/mL</td> <td>-</td> <td>+</td> <td>-</td> <td>Past Infection*</td> </tr> <tr> <td>-</td> <td>≥ 10 mIU/mL</td> <td>-</td> <td>-</td> <td>-</td> <td>Vaccination*</td> </tr> </tbody> </table> <p>* An anti-HBs antibody level >10 mIU/mL is considered to be protective.</p>	HBsAg	Anti-HBs	Anti-HBc IgM	Anti-HBc total	HBeAg	Interpretation	+ or -	<10 mIU/mL	+	+	+ or -	Acute Hepatitis B	+	<10 or ≥ 10 mIU/mL	-	+	+ or -	Hep B carrier	-	≥ 10 mIU/mL	-	+	-	Past Infection*	-	≥ 10 mIU/mL	-	-	-	Vaccination*
HBsAg	Anti-HBs	Anti-HBc IgM	Anti-HBc total	HBeAg	Interpretation																										
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Turnaround Time	<p>HBsAg, anti-HBs or anti-HBc total : <1 – 2 days</p> <p>Anti-HBc IgM, HBeAg or anti-HBe : <1 – 3 days</p> <p>Confirmatory HBsAg or HBsAg Quantitative : <1 – 7 days</p>																														

Day(s) Test Set up	HBsAg, anti-HBs and anti-HBc total : Monday – Saturday Anti-HBc IgM, HBeAg and anti-HBe : Monday - Friday Confirmatory HBsAg and qHBsAg : Wednesday (except Public Holidays)
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Change History Notes

- **23 Nov 2015 03:03 PM**
Change of Test Setup and TAT for Anti-HBc total (ie., Monday-Friday to Monday-Saturday and <1-3 days to <1-2 days, respectively).

- **02 May 2018 05:33 PM**
Consolidated the TAT and the day test set up.

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