

# HEPALISA

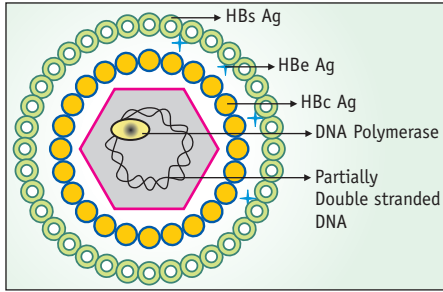
Microwell ELISA Test for the Detection of Hepatitis B Surface Antigen (HBsAg)  
in Human Serum or Plasma

- Based on "Direct Sandwich Principle"
- Detects all known **11 sub-types** of hepatitis B virus
- Breakaway wells for minimal wastage
- Short Protocol: Based on **Single Washing Step**
- Analytical Sensitivity: **0.1 ng/ml**
- Long Shelf Life: **15 months at 2-8°C**
- Convenient pack size: 96 Tests
- Excellent Specificity: Increased power of discrimination between Negative & Positive samples



**SENSITIVITY: 100%\***  
**SPECIFICITY: 100%\***

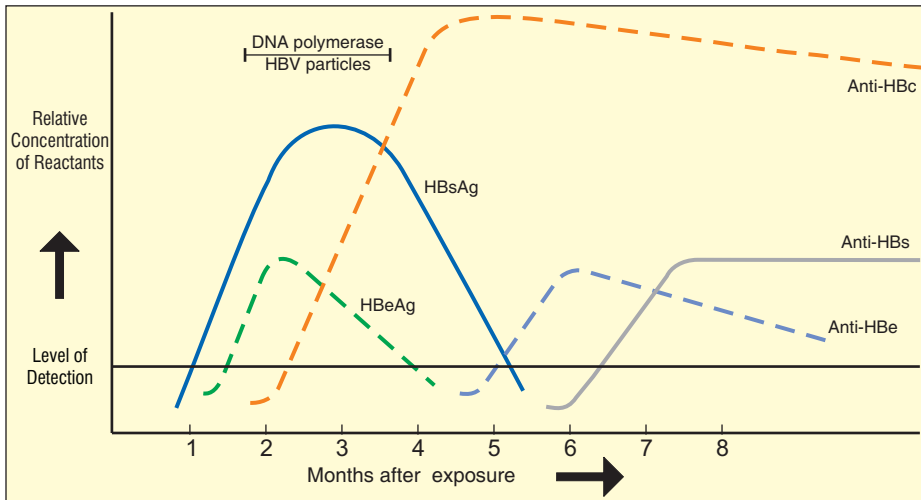
# HBV: The Silent Killer



Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus. Originally known as “serum hepatitis.”

It is a major global health problem and the most serious type of viral hepatitis which can cause chronic liver disease causing a high risk of death from cirrhosis of the liver and liver cancer. Hepatitis B virus (HBV) is a member of the Hepadnavirus family which consists of an outer lipid envelope, core and partially double stranded DNA as the genetic material. The outer surface of the virus is composed of lipid and protein, which is called the surface antigen (HBsAg), and is produced in excess during the life cycle of the virus.

## Serological & Clinical Pattern: During acute HBV infection



HBsAg can be detected in high levels in serum during acute HBV or in chronic HBV whereas Anti-HBs presence usually indicates recovery and immunity from HBV infection.

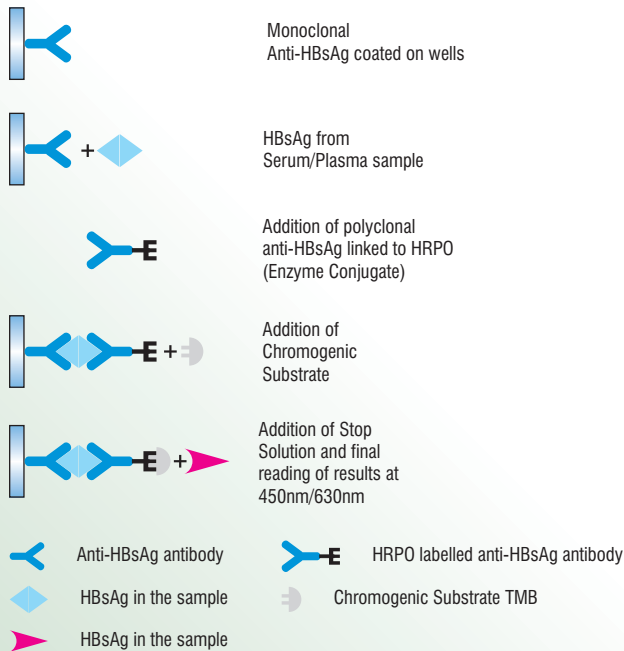
IgM Anti-HBc presence indicates recent acute infection only.

The diagnosis of Hepatitis B virus (HBV) infection was revolutionized by the discovery of Australia antigen, now called Hepatitis B Surface Antigen (HBsAg).

It is the first detected during HBV infection before appearance of symptoms within 2 weeks & disappears within 3-4 months of exposure.

It is also produced in large quantities & persists for more than 6 months in carrier & chronic state with a highly antigenic determinant.

### PRINCIPLE



### TEST PROCEDURE

Add 100 µl NC to A1 & B1, PC to C1 & D1 and sample from E1	
Prepare working conjugate solution (50x)	No. of strip 1 2 3 4 5 6 7 8 9 10 11 12 Enzyme conjugate (µl) 10 20 30 40 50 60 70 80 90 100 110 120 Conjugate (µl) 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 Diluent (ml)
Add 50 µl working conjugate in each well	
Cover the plate and incubate for 60 min. at 37°C	
Wash (6 cycles)	
Prepare working substrate solution (1:1)	No. of strip 1 2 3 4 5 6 7 8 9 10 11 12 TMB Substrate (ml) 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 TMB Diluent (ml) 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0
Add 100 µl working substrate in each well	
Incubate in dark for 30 min at room temperature	
Add 100 µl Stop Solution and read result at 450 nm/630 nm	

Also Connect with us on:



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# HBsAg: Most Reliable & Universal Marker