

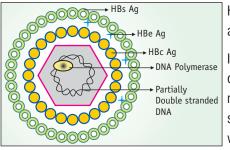
Microwell ELISA Test for the Detection of Hepatitis B Surface Antigen (HBsAg) in Human Serum or Plasma

- 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: 24 months at 2-8°C
- Convenient pack size: 96 Tests
- Excellent Specificity: Increased power of discrimination between Negative & Positive samples



\*As per WHO Evaluation Report 'Hepatitis B Surface Antigen Assays: Operational Characteristics' (Phase-1) Report-2 (2004) This information is provided for the Scientific Community Enquiring for an independent evaluation other than company's in house evaluation. It is not for commercial or promotional purpose

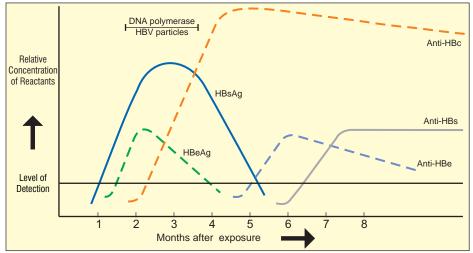
## HBV: The Silent Killer



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 wheras 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 PROCEDURE TEST Add 100 µI NC to A1 & B1 Monoclonal PC to C1 & D1 and Anti-HBsAg coated on wells sample from F1 NC NC PC PC S1 S2 S3 S4 No. of strip 10 11 8 9 12 7 8 70 80 Prepare working conjugate 30 40 50 60 90 Enzume conjugate 10 20 100 110 120 Concentrate (µl). HBsAg from solution (50x) 1.0 1.5 2.0 2.5 3.0 3.5 4.0 Conjugate 0.5 4.5 5.0 5.5 6.0 Serum/Plasma sample Diluent(ml) Add 50 µl working conjugate Addition of polyclonal in each well anti-HBsAg linked to HRPO (Enzyme Conjugate) Cover the plate and incubate for 60 min. at 37°C Addition of Wash (6 cycles) Chromogenic Substrate No. of strip TMB 3 4 5 1.5 2.0 2.5 8 4.0 9 10 11 12 4.5 5.0 5.5 6.0 Prepare working substrate 6 3.0 0.5 1.0 3.5 Addition of Stop solution (1:1) Substrate (ml) Solution and final 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 0.5 1.0 TMB reading of results at Diluent( ml 450nm/630nm Add 100 $\mu$ l working substrate in each well Anti-HBsAg antibody HRPO labelled anti-HBsAg antibody Incubate in dark for 30 min at room temperature HBsAg in the sample Chromogenic Substrate TMB Add 100 µl Stop Solution and HBsAg in the sample read result at 450 nm/630 nm Also Connect with us on: For further enquiries, Please contact:





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