# SBio HBsAb Test

REF 90505010 <u>Σ</u> 10 T

Rapid Test for detection of HBsAb in human serum

30°C 4°C Store at 4 to 30 °C	Manufacturer	LOT Batch Number	CARD Test device	Do not reuse	Xn Nath, B22 S23-46-61 Harmful if swallowed. Do not breather vapour. If swallowed, seek medical advice immediately and show this container or label. Avoid release to the environment. Refer to special instructions.
Use by (Last day of stated month)	Consult Instructions for use	IVD In vitro Diagnostic Medical Device	PIPETTE Disposable plastic dropper	HBsAb	
Date of Manufacture	REF Catalogue Number	Contains sufficient for <n> tests</n>	This side up	Rapid test for detection of HBsAb in human serum	

### INTENDED USE

SBio HBsAb Test is a rapid, immunochromatograhic assay for the detection of HBsAb in human serum.

### SUMMARY

Following an HBV infection, HBsAb is generally the last antibodies to appear. Its presence indicates clinical recovery of the patient and subsequent immunity to HBV infection. It is also associated with immunity produced post immunisation. SBio HBsAb Test detects the presence of HBsAb in human serum and is useful to (a) monitor success of therapy from an acute HBV infection (b) determine past exposure to Hepatitis B surface antigen and (c) testing for immunity to Hepatitis B.

### PRINCIPLE

SBio HBsAb Test is based on the principle of agglutinating sera on membrane and utilizes the technique of immunochromatography. The conjugate pad is impregnated with two components - HBsAg conjugated to colloidal gold and mouse IgG conjugated to colloidal gold. As the test specimen flows through the membrane assembly of the device, the HBsAg colloidal gold conjugate complexes with the HBsAb in the test specimen and travels on the membrane due to capillary action along with the mouse IgG colloidal gold conjugate. This complex moves Hundra in the membrane to the test region (T) where it is immobilized by HBsAg antigen coated on the membrane, leading to formation of a pink/purple coloured band. The absence of this band in the test region (T) indicates a negative result.

The mouse IgG colloidal gold conjugate and unbound complex if any move further on the membrane and are subsequently immobilized by the goat anti mouse IgG antibodies coated on the membrane at the control region (C) forming a pink / purple coloured band. This control band acts as a procedural control and serves to validate the test results.

## REAGENTS AND MATERIALS SUPPLIED

Each SBio HBsAb Test kit contains individual pouches each Α. containing a

- Device: Membrane test assembly impregnated with colloidal 1. gold conjugated to HBsAg and mouse IgG antibodies, HBsAg antigen and goat anti mouse IgG at the respective regions.
- 2 Desiccant pouch
- Sample dropper.
- Package insert.

Β.

**OPTIONAL MATERIAL REQUIRED** Stopwatch

## STORAGE AND STABILITY

The sealed pouches in the test kit and the kit components may be stored between 4-30° C till the duration of the shelf life as indicated on the

### pouch/carton, DO NOT FREEZE.

#### NOTE

(1) For in vitro diagnostic and professional use only. NOT FOR MEDICINAL USE. (2) Do not use beyond expiry date. (3) Do not reuse the test device. (4) Read the instructions carefully before performing the test. (5) Handle all specimen as if potentially infectious. (6) Follow standard biosafety guidelines for handling and disposal of potentially infectious material. (7) If desiccant colour at the point of opening the pouch has turned from blue to pink or colourless, another test device must be run

## SPECIMEN COLLECTION AND PREPARATION

- SBio HBsAb Test uses human serum as specimen.
- 2 No special preparation of the patient is necessary prior to specimen collection by approved techniques.
- 3. Though fresh specimen is preferable, in case of delay in testing, it may be stored at 2-8°C for maximum up to 24 hours.
- 4. Refrigerated specimens must be brought to room temperature prior to testing. 5
- If serum is to be used as specimen, allow blood to clot completely. Centrifuge to obtain clear serum. Repeated freezing and thawing of the specimen should be 6.
- avoided.
- Do not use viscous/turbid, lipaemic, hemolysed, clotted and 7 contaminated serum specimens. 8
- Specimen containing precipitates or particulate matter must be centrifuged and the clear supernatant only used for testing

## **TESTING PROCEDURE**

- Bring the kit components of SBio HBsAb Test device to room temperature before testing.
- Open a foil pouch by tearing along the "notch". 2.
- 3.
- Remove the testing device and the sample dropper. Check the colour of the desiccant pouch. It should be blue. If the 4. desiccant has turned colourless or pink, discard the test device and use another device. Once opened, the device must be used immediately.
- Label the device with specimen identity. 5
- Place the testing device on a flat horizontal surface. 6
- Holding the sample dropper vertically, carefully dispense exactly 3 7.
- drops of the serum specimen into the specimen port (S). 8. Start the stopwatch. Read the results within 10 minutes. Do not interpret the results beyond 15 minutes.

### INTERPRETATION OF RESULTS

Negative Result: CDTT OS

Only one pink / purple coloured band appears at the Control Region (C). This

#### indicates absence of HBsAb in the specimen. Positive Result:

CIII T OS



 Presence of anti HBs generally indicates (a) past HBV infection with immunity (b) Hepatitis B immunisation (c) prophylaxis with Hepatitis B immunoglobulin (d) contact with non-infectious HBsAg. In exceptional cases anti HBs and HBsAg may be detectable in serum at the same time.

### WARRANTY

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

## BIBLIOGRAPHY

- Hepatitis B Virus Immunopathology, Chisari F.V., et. al., Springer Semin Immunopathol, 1995; 17(2-3): 261-81.
  Hepatitis B Virus Taxonomy and Hepatitis B Virus Genotypes,
- Hepatitis B Virus Taxonomy and Hepatitis B Virus Genotypes, Schaefer S., et. al., World J. Gastroenterol, 2007, Jan 7;13(1): 14-21.
- Relevance of Hepatitis B Virus Genome Variability in Organ Transplantation, Samad Amini-Bavil-Olyaee, et. al., Hepatitis Monthly 2007; 7(1): 35-41.
- Risk Factors in Chronic Hepatitis B Infection: A Case-Control Study, Shahnaz Sali M.D., et. al., Hepatitis Monthly 2005; 5(4): 109-115.
- Hepatitis B e Antigen-Negative Chronic Hepatitis B, Maryam Vaez Jalali, et. al., Hepatitis Monthly 2006, 6(1): 31-35.
  Source and Response of Antibody to Hepatitis B Vaccine in
- Source and Response of Antibody to Hepatitis B Vaccine in Hemodialysis Patients, Zohreh Aminzadeh, et. al., Hepatitis Monthly, 2007; 7(1): 33-34.
- 7. What Level of Hepatitis B Antibody is Protective?, Jack AD, et. al., J. Infect. Dis. 1999 Feb; 179(2): 489-92.

## Manufactured by:

## TULIP DIAGNOSTICS (P) LTD.

Plot Nos. 92/96, Phase II C, Verna Industrial Estate, Verna, Goa - 403 722, INDIA. Regd. Office: Gitanjali, Tulip Block, Dr. Antonio Do Rego Bagh, Alto Santacruz, Bambolim Complex P.O., Goa - 403 202, INDIA.



## \_\_\_\_\_

Invalid Result:



PERFORMANCE CHARACTERISTICS

The sensitivity of SBio HBsAb Test is ~30mIU/ml.

#### REMARKS

 The deliberate slow reaction kinetics of SBio HBsAb Test is designed to maximize and enhance reaction time between sample capture and tracer elements to improve test sensitivity.

of HBsAb.

Two pink / purple coloured bands appear at the Control Region (C) and Test Region (T). This indicates that the

specimen contains detectable amount

The test result is invalid if no band

with a new SBio HBsAb Test device.

- Most positive results develop within 10 minutes. However, certain sera sample may take a longer time to flow. Therefore, negatives should be confirmed only at 15 minutes. Do not interpret the results beyond 15 minutes.
- As with all diagnostic tests, a definitive clinical diagnosis should not be based on the result of a single test, but should only be made by the physician after all clinical and laboratory findings have been evaluated.
- 4. SBio HBsAb Test should be used as a screening test in clinically suspected cases only, and its results should be confirmed by other