



Anti-HBs Fast Test Kit

(Immunofluorescence Assay)

IF1063 for Getein1100 IF3063 for Getein1180 IF2063 for Getein1600 IF5063 for Getein1160 IF4063 for Getein1200

User Manual

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INTENDED USE

Anti-HBs Fast Test Kit (Immunofluorescence Assay) is intended for in vitro quantitative determination of hepatitis B surface antibody (Anti-HBs) in human serum, plasma and whole blood samples. The test can aid to monitor the recovery of patients with hepatitis B virus (HBV) and evaluate the efficacy of hepatitis B vaccine.

SUMMARY

Anti-HBs is a protective antibody produced by the human immune system after being stimulated by hepatitis B virus surface antigen (HBsAg). It can neutralize the infection of HBV and protect the human body from another attack. The appearance of Anti-HBs and the disappearance of HBsAg indicate that hepatitis B is cured. Therefore, the concentration of Anti-HBs in blood can be used to monitor the recovery of HBV patients. In addition, a large number of studies show that hepatitis B vaccine stimulates the immune system to produce Anti-HBs, which can effectively prevent infection of HBV. Therefore, the monitor of Anti-HBs can also be used to evaluate the efficacy of hepatitis B vaccine.

PRINCIPLE

The test kit adopts a double-antigen sandwich method to quantitatively detect the concentration of Anti-HBs in human serum, plasma and whole blood samples. After the sample has been applied to the test card, the fluorescence latex-labelled HBsAg antigen I binds with Anti-HBs in sample and forms a marked antigen-antibody complex. The complex moves to the detection area by capillary action, then it is captured by HBsAg antigen II coated on

the detection area of nitrocellulose membrane, forming a double-antigen complex. The complex generates a fluorescent signal and the intensity increases in proportion to the amount of Anti-HBs in sample.

Then insert test card into Getein1100/Getein1160/Getein1180 Immunofluorescence Quantitative Analyzer/Automatically inserted by Getein1200/Getein1600 Immunofluorescence Quantitative Analyzer (hereafter referred to as Getein1100, Getein1160, Getein1180, Getein1200 and Getein1600), the concentration of Anti-HBs in sample will be measured and displayed on the screen. The value will be stored in Getein1100/Getein1160/Getein1180/Getein1200/Getein1600 and available for downloading. The result can be easily transmitted to the laboratory or hospital information system.

CONTENTS

- 1. A kit for Getein1100/Getein1160/ Getein1180 contains: Package specifications: 25 tests/box. 10 tests/box
- 1) Getein Anti-HBs test card in a sealed pouch with desiccant
- Disposable pipet
- Sample diluent
- 4) User manual: 1 piece/box
- 5) SD card: 1 piece/box
- 2. A kit for Getein1200/Getein1600 contains:

Package specifications: 2×24 tests/kit, 2×48 tests/kit Sealed cartridge with 24/48 Getein Anti-HBs test cards

User manual: 1 piece/box

Materials required for Getein1200/Getein1600:

- 1) Sample diluent: 1 bottle/box
- 2) Box with pipette tips: 96 tips/box
- 3) Mixing plate: 1 piece/box
- 3. Sample diluent composition:

Phosphate buffered saline, proteins, detergent, preservative, stabilizer.

4. A test card consists of:

A plastic shell and a reagent strip which is composed of a sample pad (coated with fluorescence latex-labeled HBsAg antigen I), nitrocellulose membrane (the test line is coated with another HBsAg antigen II), absorbent paper and liner.

Note: Do not mix or interchange different batches of kits.

APPLICABLE DEVICE

Getein1100 Immunofluorescence Quantitative Analyzer Getein1160 Immunofluorescence Quantitative Analyzer Getein1180 Immunofluorescence Quantitative Analyzer Getein1200 Immunofluorescence Quantitative Analyzer Getein1600 Immunofluorescence Quantitative Analyzer

STORAGE AND STABILITY

Store the test card at 4~30°C with a valid period of 24 months

Use the test card for Getein1100/Getein1160/Getein1180 within 1 hour once the foil pouch is opened.

For test card of Getein1200/Getein1600: If the cartridge is opened, it could be stable within 24 hours once exposure to air. Please put the cartridge back to the foil pouch and reseal along the entire edge of zip-seal. The remaining test cards should be used up within 7 days.

PRECAUTIONS

- 1. For in vitro diagnostic use only.
- 2. For professional use only.
- 3. Do not use the kit beyond the expiration date.
- 4. Do not use the test card if the foil pouch or the cartridge is damaged.
- 5. Do not open pouches or the cartridge until ready to perform the test.
- 6. Do not reuse the test card.
- 7. Do not reuse the pipet.
- Handle all specimens as potentially infectious. Proper handling and disposal methods should be followed in accordance with local regulations.
- Carefully read and follow user manual to ensure proper test performance.

SPECIMEN COLLECTION AND PREPARATION

- Serum, plasma or whole blood samples can be used for the test. Other body fluids and samples may not give accurate results. Samples should be free of hemolysis.
- Venous blood should be collected under aseptic conditions; serum or plasma is preferred for testing.
- Heparin, sodium citrate or EDTA can be used as the anticoagulant for plasma and whole blood samples.

- 4. The test should be performed at room temperature within 4 hours after sample collection.
- 5. If testing is delayed, serum and plasma samples may be stored up to 5 days at 2~8°C and 6 months at -20°C before testing. Whole blood samples should not be frozen and can be stored at 2~8°C for 3 days. Do not heat inactivated samples or use hemolyzed blood samples
- Refrigerated or frozen sample should be reached to room temperature before testing. Frozen samples must be completely thawed, rewarmed and evenly mixed. Avoid multiple freeze-thaw cycles.
- 7. Sample volume (for Getein1100/Getein1160/Getein1180): 100 µL

TEST PROCEDURE

- 1. Collect specimens according to user manual.
- 2. Test card, sample and reagent should reach to room temperature before test.

For Getein1100:

- Confirm SD card lot No. in accordance with test kit lot
 No. Perform "SD card" calibration when necessary.
- Remove the test card from the sealed pouch immediately before use. Label the test card with patient or control identification.
- 5. Put the test card on a clean table, horizontally placed.
- 6. Using sample transfer pipette, deliver **100** μ L of sample into one tube of sample diluent and mix thoroughly. Then drop **100** μ L of sample mixture into sample port on the test card
- 7. Reaction time: 15 minutes. Insert the test card into Getein1100 and click on "Start" icon (for Android Getein1100) after reaction time is elapsed. The result will be shown on the screen and printed automatically.

For Getein1160/Getein1180:

- Confirm SD card lot No. in accordance with test kit lot No. Perform "SD card" calibration when necessary.
 Enter testing interface of Getein1160/Getein1180.
- 10.Remove the test card from the sealed pouch immediately before use. Label the test card with patient or control identification.
- 11.Put the test card on a clean table, horizontally placed.
 12.Using sample transfer pipette, deliver **100µL** of sample

into one tube of sample diluent and mix thoroughly. Then drop **100**µL of sample mixture into sample port on the test card

13. Reaction time: 15minutes. Insert the test card into Getein1160/Getein1180 immediately after sample loading. The analyzer will count down the reaction time and automatically test the card after reaction time is elapsed. The result will be shown on the screen and printed automatically.

For Getein1200/Getein1600:

14.Each cartridge for Getein1200/Getein1600 contains a specific RFID card which can calibrate automatically.

- 15.Put the sample diluent at the correct position in Getein1200/Getein1600.
- 16.Place samples in the designed area of the sample holder, insert the holder and select the right test item, Getein1200/Getein1600 will do the testing and print the result automatically.

Notes:

- It is required to perform "SD card" calibration when using a new batch of kits.
- It is suggested to calibrate once for one batch of kits for Getein1100/ Getein1160/Getein1180.
- Make sure the test card and he sample insertion are correct and complete.

TEST RESULTS

Getein1100/Getein1160/Getein1180/Getein1200/Getein1 600 can scan the test card automatically and display the result on the screen. For additional information, please refer to the user manual of Getein1100/Getein1160/Getein1180/Getein1200/Getein1600.

Others: Measuring range of the Anti-HBs test kit is 10.00 ~ 1000.00 mIU/mL. Dilute the sample which concentration is higher than the upper limit (1000.00 mIU/mL) with sample diluent, and the dilution ration should be less than 10 times.

EXPECTED VALUE

The expected normal value is determined by testing samples from 614 apparently healthy individuals. The upper 99th percentile value is 10.00 mIU/mL.

Due to different methodologies or antibody specificity, there may be deviations in the test results of different manufacturers' reagents, so they should not be directly compared with each other to avoid false medical interpretations.

PERFORMANCE CHARACTERISTICS

- 1. Measuring Range 10.00-1000.00 mIU/mL
- 2. Limit of Detection ≤10.00 mIU/mL
- 3. Within-Run Precision ≤10% 4. Between-Run Precision ≤15%

LIMITATIONS

- Triglyceride and bilirubin in the sample may interfere with the test results, and the maximum allowable concentrations are 18 g/L and 0.1 g/L respectively.
- 2. The test results of this kit are for clinical reference only, and should not be used as the sole criteria for clinical diagnosis. It is recommended to conduct a comprehensive analysis on the condition in combination with symptoms/signs, history and other laboratory tests.

REFERENCES

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- Colson P, Borentain P, Motte A, et al. Clinical and virological significance of the co-existence of HBsAg and anti-HBs antibodies in hepatitis B chronic carriers. Virology 2007, 367(1): 30-40

DESCRIPTION OF SYMBOLS USED

The following graphical symbols used in or found on the test kit are the most common ones appearing on medical devices and their packaging. They are explained in more

details in the European Standard EN ISO 15223-1:2021.

Key to symbols used				
	٠,١	Manufacturer	X	Use-by date
C	2)	Do not re-use	2	Date of manufacture
	i	Consult instructions for use or consult electronic instructions for use	LOT	Batch code
_	ľ	Temperature limit	IVD	In vitro diagnostic medical device
7	Σ/	Contains sufficient for <n> tests</n>	(39)	Do not use if package is damaged and consult instructions for use
R	EF	Catalogue number		

Thank you for purchasing Anti-HBs Fast Test Kit (Immuno-fluorescence Assav).

Please read this user manual carefully before operating to ensure proper use.

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