**Immunochromatography** 

# **© EXPLANATION OF THE TEST**

Asan Easy Test® HBeAg is a chromatographic immunoassay for the rapid qualitative determination of hepatitis e virus antigen (HBeAg) in human serum or plasma. For diagnosis of HBeAg, the specific antibodies to HBeAg were used as a capture materials. The test contains the membrane precoated with a monoclonal antibody to HBe on the test band region. During test, the sample is allowed to react with a monoclonal antibody to HBeAgcolloid gold conjugate, which has been pre-dried on the conjugate pad between membrane and sample pad. The mixture then moves upward on the membrane by capillary action. For positive result, a visible line with high sensitivity and specificity as forming antigen-antibody-gold complex appears in the test band region of the membrane. Regardless of the presence of HBeAg, the mixture continuously moves across the membrane to pre-dried control line. Therefore, the control line will always appear and verify proper performance of the test. The Asan Easy Test® HBeAg minimizes the possibility for the false positive and places high confidence in the test result using high quality of antibodies.

## **MATERIALS PROVIDED**

Asan Easy Test® HBeAg contains following items to perform the assay.

- 1. Test device in aluminum pouch with a desiccant.
- 2. Instruction manual for use.

## **© PRECAUTIONS**

- 1. For in vitro diagnostic use only.
- 2. The test kit should remain in the sealed pouch until ready for use.
- 3. The test kit is sensitive to humidity and to heat.
- 4. Do not smoke, eat or drink in areas where specimens or kit component are handled.
- 5. All specimens and reagents should be considered potentially hazardous and handled in the same manner as an infection agent.
- Wear protective gloves while handling samples and wash hands thoroughly after the assay is complete.
- 7. Avoid any contact with the eyes, broken skin or mucous membranes.
- 8. The test device and all materials should be discarded in a proper biohazard container after testing.

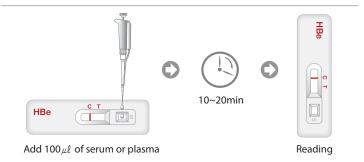
## **© SPECIMEN COLLECTION AND STORAGE**

- 1. The test should be performed using human serum or plasma.
- 2. If specimens are not immediately tested, they should be refrigerated at 2~8 °C . For storage periods more than three days, freezing is recommended.
- 3. Specimens containing precipitate may yield inconsistent test results. Such specimens must be clarified prior to assay.

## **® TEST PROCEDURE**

- All materials should be equilibrated to room temperature before performing test.
- 2. Remove the device from its protective pouch.
- 3. Add  $100\,\mu\ell$  of serum or plasma into the sample well(S).
- 4. Interpret test results within 10~20 minutes. Do not interpret after 20 minutes.

(**CAUTION**: The above interpretation time is based on reading the test results at room temperature of  $15 \sim 30^{\circ}\text{C}$ . If your room temperature is significantly lower than  $15^{\circ}\text{C}$ , then the interpretation time should be properly increased.)



INTERPRETATION OF THE TEST

- 1. A color band will appear in the upper section("C" zone) of the window to show that the test is working properly. This band is the control band.
- 2. The down section("T" zone) of the window indicates the test results, test band. If another color band appears in the down section of the window, this band is the test band.

#### A. NEGATIVE RESULTS:

The presence of only one purple color band("C" band) within the result window indicates a negative result.



#### **B. POSITIVE RESULTS:**

The presence of two color bands ("T" band and "C" band) within the result window regardless of which band appears first indicates a positive result.



#### **C. INVALID RESULTS:**

If no band is visible within the window after performing the test, the result is considered invalid . Some causes of invalid results are: not following the directions correctly or the test may have deteriorated beyond the expiration date. It is recommended that the specimen be re-tested using a new test kit.



## **STORAGE & EXPIRATION**

1. Asan Easy Test® HBeAg should be stored at 2 to 30 °C (35.6 ~86 °F.)



2. Expiration date of this kit is 24 months after its manufacture date.

# <sup>®</sup> PERFORMANCE CHARACTERISTICS

Multi-site studies were performed using a total of 108 specimens. Each specimen was tested with Asan Easy Test® HBe Ag and Commercial ELISA. The results are summarized in the following tables.

	n= 108		Commercial ELISA		Total
-			Positive	Negative	Total
	Asan Easy Test® HBe Ag	Positive	56	0	56
		Negative	2	50	52
	Total		58	50	108

Relative Sensitivity: 96.5%, Relative Specificity: 100 %

Detection limit: 1.0 s/CO

## LIMITATIONS OF THE TEST

Other clinically available tests are required if questionable results are obtained. As all diagnostic tests, a definitive clinical diagnosis should not be based on the results of a single test, but be made by the physician after all clinical and laboratory findings have been evaluated.

Tel: +82-31-376-5990~2 Fax: +82-31-376-5993 http://www.asanpharm.com **REF** Code No.: 22471 Document Code: AHHBEA-SOE00