Immunochromatography

© EXPLANATION OF THE TEST

The Asan Easy Test® HBs is a chromatographic immunoassay for the rapid qualitative determination of the HBs Ag in the serum or plasma. HBs surface antigen in serum or plasma is allowed to react with the colloidal gold-anti-HBs conjugate on the test line, which has been pre-dried on the test strip. The mixture of them moves upward on the membrane by the capillary action. For positive result, a visible line appears in the test line region of the membrane.

MATERIALS PROVIDED

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

- 1. Test device in aluminium 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.
- 6. 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.

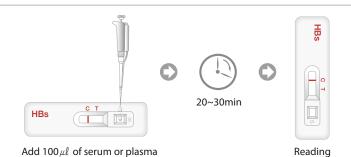
SPECIMEN COLLECTION AND STORAGE

- 1. The test should be performed using human serum or plasma.
- 2. If specimens are not immediately tested, they should be refrigerated at $2\sim 8^\circ$ 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 $20{\sim}30$ minutes. Do not interpret after 30 minutes.

(**CAUTION** : The above interpretation time is based on reading the test results at room temperature of 15~30 $^{\circ}$ C . If your room temperature is significantly lower than 15 $^{\circ}$ 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 a control band.
- 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 a 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 retested using a new test kit.

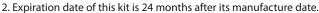


© LIMITATIONS OF THE TEST

A negative result does not preclude the possibility of infection with HBV. 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.

STORAGE & EXPIRATION





© PERFORMANCE CHARACTERISTICS

Multi-site studies were performed using a total of 2270 specimens. Each specimen was tested with Asan Easy Test® HBs and ELISA Test method. The results are summarized in the following tables.

	n= 2270		Commercial HBs Ag		Total
			Positive	Negative	iolai
	Asan	Positive	225	3	228
	Easy Test® HBs	Negative	3	2039	2042
-	Total		228	2042	2270

- * Relative Sensitivity: 98.68%, Relative Specificity: >99.8%
- * Detection limit: 2.0 ng/ml

® REFERENCES

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- 3. Bortolotti F, Calzia R, Cadrobbi P, et al, "Long-Term Evolution of Chronic Hepatitis B in Children With Antibody to Hepatitis B Antigen," J Pediatr, 1990, 116(4):552-5.
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Tel: +82-31-376-5990~2 Fax: +82-31-376-5993 http://www.asanpharm.com REF Code No.: 22105, 22111 Document Code: AHHBS0-SDE00