

IgG/IgM anti-HEV EIA

IgG/IgM anti-HEV antibody determination kit by EIA

Hepatitis E, a zoonotic disease, is caused by the hepatitis E virus (HEV). It mainly presents with acute hepatitis symptoms and is designated as a Category 4 infectious disease under the Infectious Diseases Law, requiring notification. Antibodies against HEV are produced when infected with HEV during the acute phase of hepatitis E. IgM anti-HEV antibody appears in the patient's serum and persist for 2 to 5 months after onset. IgG anti-HEV antibody appears somewhat later and persist for a longer period, and are an indicator of current or past infection.

This kit is a reagent for measuring IgG/IgM class anti-HEV antibodies based on the EIA method using recombinant HEV antigen protein as a solid-phase antigen and peroxidase-labeled anti-human IgG or anti-human IgM mouse monoclonal antibodies as secondary antibodies.

Application

Detection of IgG anti-HEV antibody or IgM anti-HEV antibody in human serum

Features

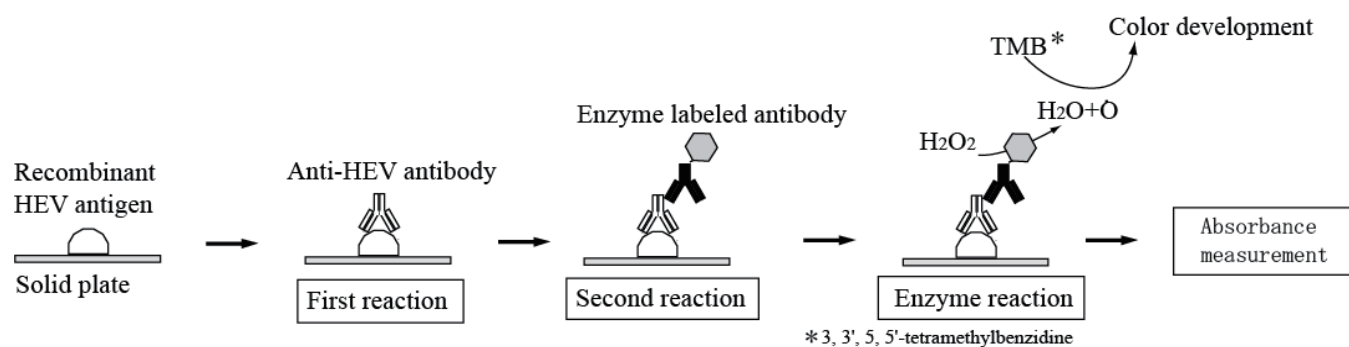
1. It is possible to detect IgG class anti-HEV antibodies, which indicate past HEV infection, and IgM class anti-HEV antibodies, which increase during the early stages of HEV infection.
2. This kit has high specificity and sensitivity, using recombinant HEV antigen as a solid-phase antigen.

Kit components

1. Microplate coated with HEV antigen (8 wells/strip x 12) 1 plate
2. Negative control 0.5 mL x 1 vial
3. IgG positive control 0.5 mL x 1 vial
4. IgM positive control 0.5 mL x 1 vial
5. Sample diluent 50 mL x 1 vial
6. Anti-IgG enzyme labeled monoclonal antibody..... 5 mL x 1 vial
7. Anti-IgM enzyme labeled monoclonal antibody..... 5 mL x 1 vial
8. Enzyme substrate 5 mL x 1 vial
9. Reaction stopper..... 5 mL x 1 vial
10. 20x concentrated washing solution 50 mL x 1 vial
11. Plate seal 3 sheets



Assay Principle



Assay Procedure and Well Arrangement

Well Arrangement		Blank	Negative control Positive control	Samples
	Wells	1A, (1B)	1C - 1F	1G - 12H
1	Dilution of samples	–	No dilution needed	101 times dilution
2	Addition of sample or controls			
	Negative control	–	50 μ L	–
	Positive control	–	50 μ L	–
	Diluted sample	–	–	50 μ L
3	1st reaction	1 hr at 15 - 30°C		
4	Washing	5 times		
5	Addition of the enzyme labeled monoclonal antibody	–	50 μ L	50 μ L
6	2nd reaction	1 hr at 15 - 30°C		
7	Washing	5 times		
8	Addition of Enzyme substrate	50 μ L		
9	Enzyme reaction	30 min in the dark at 15 - 30°C		
10	Addition of Reaction stopper	50 μ L		
11	Absorbance measurement	Main wavelength 450 nm, sub wavelength 630 nm		
12	Interpretation of results			

References

- 1) Mikhail S, Balayan MD: Int J Infect Dis **2** (2): 113-120, 1997.
- 2) Mizuo H, Suzuki K, Takikawa Y, et al: J Clin Microbiol **40**: 3209-3218, 2002.
- 3) Takahashi M, Nishizawa T, Miyajima H, et al: J Gen Virol **84** : 851-862, 2003.
- 4) Takahashi M, Kusakai S, Mizuo H, et al: J Clin Microbiol **43**: 49-56, 2005.

Product information

Product code	Product name	Package	Storage	Shelf life
1Z23	IgG/IgM anti-HEV EIA	96 tests	2-10°C	1 year



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