

## Human Anti-HEV-IgM ELISA Kit

### Order details

**CatNo:** AHY-30

**Size:** 96T/48T

### Product description

Hepatitis E virus (HEV) is a non-enveloped, single- stranded RNA virus identified in 1990. Infection with HEV induces acute or sub-clinical liver diseases similar to hepatitis A. HEV-IgM ELISA is an in vitro enzyme linked immunoassay supplied for the detection of HEV-IgM in human serum or plasma. It is intended to be used as an aid in supplementary diagnosis to acute hepatitis E infection and prevalence studies among the population.

This kit employs solid phase, capture ELISA method for detection of IgM antibodies to HEV (anti-HEV) in serum or plasma with two-step incubation procedure. Polystyrene microwell is pre-coated with purified activated mouse anti human IgM ( $\mu$  chain) monoclonal antibody. The HRP conjugated recombinant HEV antigen serves as tracer. TMB is substrate for HRP. The enzyme reaction with substrate TMB produces a color change, and the intensity of the absorbance at 450 nm indicates the presence or absence of Anti-HEV antibodies IgM in the sample. The test is specific, sensitive, reproducible and easy to operate. It is for diagnosis of early infection and epidemic survey.

### Product description

Microplate	1 block (96wells)
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Negative Control	1ml,1 vial
Positive Control	1ml,1 vial
HRP-Conjugate	12ml,1 vial
Sample Diluent	12ml,1 vial
Substrate Solution A	6ml, 1 vial
Substrate Solution B	6ml, 1 vial
Stop Solution	6ml, 1 vial
Wash Buffer (20×)	50ml, 1 vial
Microtiterplate sealers	3 sheets
Plastic Sealable Bag	1 unit

Storage method: it can be stored at 2-8 °C for more than 6 months. Do not freeze it.

## Steps

1. Check the Wash buffer concentrate for the presence of salt crystals. If crystals have formed in the solution, resolubilize by warming at 37°C until crystals dissolve.
2. Set the strips needed in strip-holder and number sufficient number of wells including three Negative control (e.g. B1, C1, D1), two Positive control (e.g. E1, F1) and one Blank (e.g. A1, neither samples nor HRP-Conjugate should be added into the Blank well). If the results will be determined by using dual wavelength plate reader, the requirement for use of Blank well could be omitted. Use only number of strips required for the test.

3. Add Positive and Negative controls into their respective wells, add Sample Diluent into other reaction wells, then add sample, mix well.

Note: Use a separate disposable pipette tip for each specimen, Negative and Positive Control as to avoid cross-contamination.

4. Cover the plate with the plate cover and incubate at 37°C.

5. Discard the liquid in all wells and fill the wells with wash solution. Discard the liquid in all wells and fill the wells with wash solution. Repeat 5 times and dry wells after last wash.

6. Add Enzyme Conjugant in each well except the blank. Cover wells with seal paper, and then incubate at 37°C.
7. Repeat step 5.
8. Add substrate A and B respectively to each well including the blank well. Mix gently, protected from light and incubates at 37°C.
9. Add stop solution into each well to stop the reaction, including blank well.
10. Calibrate the plate reader with the Blank well and read the absorbance at 450 nm. If a dual filter instrument is used, set the reference wavelength at 630 nm. Calculate the Cutoff value and evaluate the results. (Note: read the absorbance within 5 minutes after stopping the reaction.)

## Note

1. The kit should be equilibrated to room temperature (20-23°C) before opening any vials and starting the assay. It is highly recommended that the solutions be used as soon as possible after rehydration.
2. When mixing or reconstituting protein solutions, always avoid foaming.
3. Do not mix or substitute reagents with those from other lots or sources.
4. To avoid cross-contamination, change pipette tips between additions of each standard level, between sample additions, and between reagent additions.
5. Crystals could appear in the 20X wash solution due to high salt concentration in the stock solutions. Crystals are readily dissolved at room temperature or at 37°C before dilution of the buffer solutions.
6. Keep TMB Substrate protected from light.
7. The Stop Solution provided with this kit is an acid solution. Wear eye, hand, face, and clothing protection when using this material.