Abvigen Inc
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Human Anti-HDV-IgM ELISA Kit

Order details

CatNo: AHY-29

Size: **96T/48T**

Product description

Hepatitis D is a liver diseases caused by Hepatitis D virus (Delta agent) - a defective (36 nm-43 nm) enveloped RNA virus, which requires co-infection with Hepatitis B virus (HBV) for its replication. Transmitted percutaneously or sexually through contact with infected blood or blood products, HDV is associated with the most severe forms of chronic and acute hepatitis in many Hepatitis B-HBsAg positive patients. The Human HDV IgM ELISA Kit is an enzyme-linked immunosorbent assay for qualitative determination of IgM-class antibodies to hepatitis D virus in human serum or plasma.

Chronic HBV carrier patients superinfected with HDV are at risk to develop chronic HDV disease, which can lead to cirrhosis in 70%-80% of the patients. The serological diagnosis of HDV is based on detection of specific HDV antibodies (anti-HDV) or antigens. The anti-HDV IgG antibodies are indicator of past or current delta infection. High titers of the antibodies may be indicative of chronic or active infection. During HBV-HDV, co-infection detectable concentrations of anti-HDV IgG appear after the tenth week of exposure to the viruses and clearance during convalescence indicates recovery. During HDV superinfection, detectable levels of antibodies appear four to six weeks after exposure and failure to clear indicates possible progression to long, chronic carrier stage.

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Product description

Microplate	8x12/12x8-well strips per plate. Each well contains anti-IgM antibodies
Negative Control	0.4ml,1 vial
Positive Control	0.4ml,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	2 sheets
Plastic Sealable Bag	1 unit

Storage method: it can be stored at 2-8 ℃ 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. After the end of the incubation, remove and discard the plate cover. Wash each well 5 times with diluted Washing buffer. Each time allow the microwells to soak. After the final washing cycle, turn down the plate onto blotting paper or clean towel and tap it to remove any remainders.

6. Add Chromogen A and Chromogen B solution into each well, cover the plate with plate cover and mix gently. Incubate at 37°C avoiding light. The enzymatic reaction between Chromogen solutions and the HRP-Conjugate produces blue color in Positive control and HDV-IgM positive sample wells.

7. Remove and discard the plate cover. Using a multichannel pipette or manually add Stop solution into each well and mix gently. Intensive yellow color develops in Positive control and HDV IgM positive sample wells.

8. 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℃) 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.