WANTAI HDV-IgG ELISA

Developing Scientifically

Focusing on the Health

Sensitivity: **100%**
Specificity: **100%**
Incubation time: **30'+30'+15'**
Specimen volume: **10μl**
Shelf-life: **15 months**

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Principle of the Test

WANTAI HDV-IgG ELISA is based on solid phase, two-step incubation indirect ELISA method. Polystyrene microwell strips are pre-coated with recombinant HDV antigens. During the first incubation step, anti-HDV specific antibodies, if present, will be bound to the solid phase pre-coated HDV antigens. The wells are washed to remove unbound serum proteins, and anti-human IgG antibodies (anti-IgG) conjugated to the enzyme horseradish peroxidase (HRP-Conjugate) are added. During the second incubation step, these HRP-conjugated antibodies will be bound to any antigen-antibody (IgG) complexes previously formed and the unbound HRP-conjugate is then removed by washing. Chromogen solutions containing Tetramethylbenzidine (TMB) and urea peroxide are added to the wells and in presence of the antigen-antibody-anti-IgG (HRP) immunocomplex, the colorless Chromogens are hydrolyzed by the bound HRP conjugate to a blue-colored product. The blue color turns yellow after stopping the reaction with sulfuric acid. The amount of color intensity can be measured and it is proportional to the amount of antibody captured in the wells, and to the amount of antibody in the sample respectively. Wells containing samples negative for HDV IgG remain colorless.

Clinical Sensitivity

The clinical sensitivity of this assay has been calculated by a panel of samples obtained from 2500 hepatitis B acute and chronic patients. In this panel, 2400 samples were found HBsAg positive. After testing with HDV RT-PCR, 150 individuals were diagnosed infected with HDV. After testing with this HDV IgG ELISA kit, 48 of the RT-PCR confirmed hepatitis D positive samples were found positive for HDV IgG and 48 samples were confirmed HDV IgG positive when tested with another commercially available HDV antibody ELISA kit. The sensitivity was determinate to be **100%**.

Clinical Specificity

The clinical specificity of this assay has been evaluated by a panel of samples from 500 healthy individuals. No false positive results observed, which indicates **100%** specificity of the test.

Analytical Specificity

No cross reactivity was observed with specimens from patients infected with HAV, HCV, HIV, HBV, HTLV, CMV, and TP.

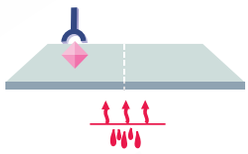
No interferences from elevated levels of rheumatoid factors up to **2000U/ml** were observed during clinical testing.

Principle and Procedures

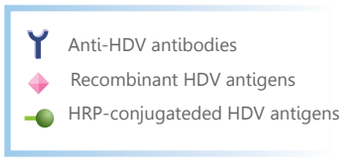
1

- Microwell strips pre-coated with recombinant HDV antigens

2

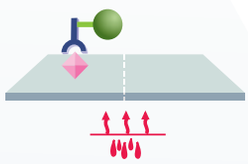


- Add 100μl of diluted specimens
  Add 10μl of Specimens/ Controls
  Incubation at 37℃ for 30 min



3 **5 Wash cycles**

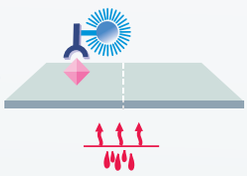
4



- Add 100μl of HRP-Conjugate
  Incubation at 37℃ for 30 min

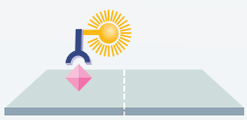
5 **5 Wash cycles**

6



- Add 50μl of Chromogen Solution A and 50μl of Chromogen Solution B
  Incubation at 37℃ for 15 min

7



- Add 50μl of Stop Solution

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- Read by single wavelength 450nm or dual wavelength 450/600~650nm

Ordering Info

Cat.	Product	Detection	Specimen	Pack size
WD-6196	WANTAI HDV-IgG ELISA	Antibody	Serum/Plasma	96T/kit