Version 01-06/20

User's Manual

Cytomegalovirus IgG ELISA Kit

REF **DEIA013**

Σ **96T**

RUO

This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

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PRODUCT INFORMATION

Intended Use

The CMV IgG ELISA is intended for use in the detection of Cytomegalovirus Antibody IgG in human serum.

General Description

Human cytomegalovirus is a species of the Cytomegalovirus genus of viruses, which in turn is a member of the viral family known as Herpesviridae or herpesviruses. It is typically abbreviated as HCMV or, commonly but more ambiguously, as CMV. It is also known as human herpesvirus-5 (HHV-5). Within Herpesviridae, HCMV belongs to the Betaherpesvirinae subfamily, which also includes cytomegaloviruses from other mammals.

Principles of Testing

CMV ELISA test system is designed to detect IgG antibody to CMV in human sera. CMV IgG anti-human monoclonal antibody is adsorpted in solid phase to the polystyrene reaction strip. If there is CMV IgG antibody in test sample, it binds to CMV IgG antigen and anti-human monoclonal antibody coated in strip, forms antigen-antibody-antibody complex, and then binds to the enzyme labeled anti-antibody and forms antigen-antibody-antiantibody complex, and finally binds to surface of the microwell, and display blue color in corresponding well by the action of substrate. Therefore, it can detect specifically the CMV IgG in human serum.

Reagents And Materials Provided

Materials provided with the kit:

	Component	96T	
coated Microtiter	CMV antigen	1 bag	12*8
HRP Conjugate	Anti-human IgG	1vial	6.5ml
Wash Buffer Concentrate	Buffer	1vial	20ml
Sample Diluent	Calf serum	1vial	11ml
Substrate A	H2O2	1vial	7ml
Substrate B	TMB	1vial	4ml
Stop Solution	H2SO4	1vial	6ml
Negative Control	Buffer	1vial	2ml
Positive Control	CMV IgG antibody	1vial	2ml

Storage

1. Store at 2-8°C.
2. Its shelf-life is 12 months.
3. Pls use it in the period of validity

Assay Procedure

1. All reagents should be allowed to reach room temperature for 15 minutes before use.
2. Prepare 1: 40 dilution of Wash Buffer Concentrate with distilled water.
3. Add Sample Diluent 100 μL (2 drops) into the appropriate wells except the blank well, negative well (blank and positive well set 1well, negative well set 2 wells).
4. Add 10ul specimen to the well, beating by pipettor repeatedly until liquid turn blue, Dispense 50μL negative and positive control to the negative and positive well separatelydo not dispense liquid to blank control well.
5. Flick the microtiter wells for 30 seconds and mix well. Affix to sealing template, Incubate at 37°C for 20 minutes.
6. Take out, Add Wash Buffer to each well and absorb after 20 seconds. Repeat 5 times until each well is dry.
7. Dispense 1 drop(50μL) of HRP Conjugate to each well except the blank well.Gently vibration mixture, mix well, Affix to sealing template. Incubate at 37°C for 20 minutes.
8. Add Wash Buffer to each well and absorb after 20 seconds. Repeat 5 times until each well is dry.
9. Dispense 1 drop(50μL) of Substrate A and 1 drop(30μL) of Substrate B into every well except blank well. Incubate at 37°C for 10 minutes. Gently vibration mixture, mix well, Incubate at 37°C for 10 minutes.
10. Take out, adding 1 drop(50μL) of Stop Solution except the blank well, mix well. Read result with a microwell reader.

Interpretation Of Results

1. Colorimetry: Read O.D at 450nm with a microwell reader.

Cut-off O.D2.1×Negative Control O.D. (If the O.D value of the Negative Control is lower than 0.09, calculate as per 0.09;if the O.D. value is more than 0.09, calculate as the actual data).

Positive: Sample O.D≥ Cut-off O.D.

Negative: Sample O.DCut-off O.D.

2. Ratio method:

Positive: Sample OD/Cut off (S/Co)≥1

Negative: Sample OD/Cut off (S/Co)1

Precautions

1. Don't will different batches of mixed with reagents, and shall not use more than the validity of kit.
2. Shake well before use should be.
3. Under normal temperature, Wash Buffer Concentrate have crystallization, diluted should pay attention to the dilution completely.
4. Please will not use up once opened the bag was attrib wattle into bag sealed, 2-8°C preservation.
5. Keep the unspent microwells sealed in bag.
6. Sealing template can not be reused.
7. When wash, must have the air filled with each holes.

8. Add 120IU/ml RF, 80mg/dl bilirubin, 3000mg/dl triglycerides, 100U/ml EB antibody The detection results did not have an impact. Second liver is big 3 this world specimens, The detection results no effect. In sample have 2000mg/dl hemoglobin, Lead to a false positive, and are not recommended for hemolysis samples.