

## Human anti-herpes zoster virus gE antibody test kit (ELISA)

### For In Vitro Research Only

**[Product Information]**

Product name: Human anti-herpes zoster virus gE antibody test kit (ELISA)

**Cat#: PDC117-0011**

**Specifications:** 96 Tests

**[Intended use]**

This kit is designed for the in vitro semi-quantitative determination of the concentration of antibodies against Herpes zoster virus gE in human plasma or serum, evaluate the immune response to herpes zoster vaccination in subjects in clinical studies.

**Not to be used for any other purpose, including diagnosis of disease.**

**[Test Principle]**

The ELISA was performed using a plate coated with recombinant expressed herpes zoster virus gE-His6X protein (Cat# PDC20-0021). Human serum specimens to be examined were added successively, in which the VZV gE antibody would bind to the VZV gE-His protein on the plate, the unbound material was washed to remove, and goat anti-human IgG (H +L) labelled horseradish peroxide enzyme conjugate, forming an VZV gE/human anti-gE antibody/HRP-goat anti-human antibody complex, which indicates the gE antibody titre in the sample by the degree of TMB colour development. The OD value is positively correlated with the concentration of anti-herpes zoster virus gE antibody in the sample.

**[Main Ingredients]**

norm	Componets	Sizes
96T	Coated plate	12 x 8 wells
	HRP-goat anti-human IgG (H+L) enzyme conjugate (1× conjugate)	1 bottle
	Diluent Buffer	1 bottle
	20X Wash Buffer	1 bottle
	Substrate A	1 bottle
	Substrate B	1 bottle
	Stop Solution	1 bottle

**[Storage conditions and expiry date]**

1. Store the kit in a sealed container at 2°C - 8°C, protected from light, and use before the expiry date. Please use up within one week after opening.

**[Instrument Requirements]**

1. Pipetting systems and/or pipettes (single or multi-channel), disposable pipette tips.
2. Microplate Washer
3. Single or dual wavelength microplate reader with 450 nm and 630nm filter.
4. Microplate oscillator (highly recommended).

**[Requirements for reagents and consumables]**

Not included in the kit, you need to prepare the following reagents and consumables by yourself.

1. Purified water: ultrapure or deionised water.
2. Pipettes, timers, etc.
3. Negative serum: as a quality control, mix at least 10 portions of normal human serum in equal proportions.

#### **[Sample Request]**

1. Sample type: plasma, serum.
2. Samples that interfere with absorbance, such as haemolysis and turbidity, may affect the results.
3. Sample collection and handling: Separated serum/plasma samples should not be stored at 2-8°C for more than 1 week after blood collection. If it is not possible to perform the assay within 1 week after blood collection, the plasma/serum samples need to be sealed and placed below -20°C for not more than 6 months to avoid repeated freezing and thawing.

#### **[Test Method]**

1. Move the required reagents to room temperature (10°C-30°C) for 30 minutes. To ensure the accuracy of the results, use duplicate wells when testing.
2. Solution preparation: 1) Wash Buffer: take 1 bottle of 20X wash buffer, dilute it 20 times with purified water, mix thoroughly and prepare for use; 2) Wash buffer: take 1 bottle of 20X wash buffer, dilute it 20 times with purified water, mix thoroughly and prepare for use.
3. Sample dilution: Dilute the sample to be tested and the QC 50 times with diluent buffer (e.g., 5 µl of sample diluted with 245 µl of diluent) and mix well.
4. Add Samples: Remove the coated plate from the sealed bag, add the diluted QC and samples 100µL/ wells (it is recommended to use duplicate wells for the assay), and gently tap the plate to mix well. Incubate at room temperature for 30 minutes, gently tapping the plate every 5 minutes to mix, or place in a thermostatic shaker (200~300rpm) to ensure the effectiveness of the assay.
5. Wash: Use an automatic plate washer to operate, after discarding the liquid in each well, wash the microwells with washing solution (250 µL/well), repeat the washing 3 times in total, and then discard all the liquid in the plate (it is recommended to pat dry on paper).
6. Addition of enzyme conjugate working solution: add 100 µL of enzyme conjugate working solution to each well and incubate at room temperature for 15 minutes (gently tap the plate every 5 minutes to mix, or place in a thermostatic shaker to ensure the effectiveness of the assay).
6. Washing: same as step 4.
7. Substrate Reaction: Add 50µL of substrate A and 50µL of substrate B to each well (substrate solution should be protected from light), mix with slight vibration and set at 25°C for 5-10 minutes to develop the colour (the time of colour development can be decided according to the effect of the colour development, if the colour develops rapidly after adding the substrate solution and the colour is deeper, then the termination of the reaction can be carried out immediately in the next step).
8. Termination: Add 50µL of stop solution to each well and mix lightly.
9. Data measurement: Select the microplate reader, the main wavelength 450nm, within 30 minutes after adding the stop solution to determine the OD value of each well and record the data, and at the same time, take pictures to record the results of colour development.
10. Data processing: If the reference wavelength (620nm or 630nm) is selected, the main wavelength minus the reference wavelength is used to calculate the average value of the compound hole as the final data; if only the main wavelength is available, the data of the main wavelength is used to calculate the average value of the compound hole as the final data.
11. DATA DETERMINATION: This kit may only be used to evaluate GMT titres of anti-herpes zoster gE protein antibodies in human subjects vaccinated with herpes zoster vaccine in clinical studies.

#### **[Limitations of test methods]**

1. Severe haemolytic samples can lead to abnormal test results.
2. The results of the kit are intended for quantitative analysis of antibodies against Herpes zoster virus gE in human blood samples (plasma, serum) from subjects vaccinated with varicella or herpes zoster virus vaccine in clinical studies only and are not to be used for any other purpose, including the diagnosis of disease.

#### **[Notes]**

1. This reagent is intended for in vitro research use only.
2. Please read the instructions carefully before use.
3. Reagents of different batches and varieties shall not be mixed.
4. Please strictly follow the instructions for reasonable storage and use of reagents.
5. Avoid direct sunlight.
6. Testing must be carried out in accordance with the provisions of the biosafety code, with strict prevention of cross-contamination.

7. All samples, washing buffer and waste solutions should be treated as potentially hazardous substances.

8. It is strongly recommended that the same operator conducts the experiment throughout the test.

**Please contact if any questions:**

Email: anygotech@163.com

In order to facilitate after-sales service, please provide the batch number of the kit (on the outer package of the kit) when you make an enquiry.