

## **Classical Swine Fever Virus (CSFV) Antibody ELISA Test Kit**

**Product code: E30011**

### **Application:**

This ELISA kit can be used to detect CSFV specific antibody level in serum.

### **Principle:**

This test kit is based on the competitive ELISA. The 96well microtiter plate was precoated with CSFV antigen. During testing, serum samples and specific enzyme-labeled monoclonal antibody against CSFV will be added into the microplate wells in turn. If high titer CSFV antibody exists in the serum sample, which will capture the CSFV antigen in wells and formed antigen-antibody complex, and the specific enzyme-labeled monoclonal antibody against CSFV cannot combine with the CSFV antigen. In other words, If the serum doesn't contain CSFV antibody, the specific enzyme-labeled monoclonal antibody will bind to the CSFV antigen. Therefore, the measured intensity is negatively proportional to the amount of antibody present in the sample.

### **Kit components:**

<b>Item No.</b>	<b>Description</b>	<b>Quantity</b>
<b>1</b>	CSFV antigen microplate	2 piece
<b>2</b>	Positive control	1 X 1 ml
<b>3</b>	Negative control	1 X 1 ml
<b>4</b>	HRP enzyme conjugate	1 X 25 ml
<b>5</b>	Substrate	1 X 25 ml
<b>6</b>	Stop solution	1 X 15 ml
<b>7</b>	25X wash buffer	1 X 30 ml
<b>8</b>	Serum diluent	1 X 25 ml

### **Storage and expiration:**

The kit shall be store at 2-8°C, avoid direct sunlight.

The valid period is 12 months.

### **Reagent preparation:**

- Make sure the kit and all test samples are returned to room temperature (18-26°C) before use. Shake each reagent gently before adding into the well.
- The positive control, negative control, enzyme-labeled antibody, serum diluent, substrate and stop solution can be used directly.
- Wash buffer (25X): dilute the 25X wash buffer provided in the kit with deionized water in the volume ratio of 1:24. For example, 10ml 25X wash buffer + 240ml deionized water. The diluted wash buffer can be stored at 2-8°C for 3 days.

### **Assay procedure:**

- Take the microplate from the zip-bag, and mark the location of the sample.
- Add 50ul serum diluent into all wells (50ul/well).

- Add 50ul negative control into another two wells (50ul/well).
- Add 50ul positive control into two wells (50ul/well).
- Add 50ul serum sample into other wells (50ul/well). The sucker needs to be replaced when different samples are drawn.
- Cover the plate with plate cover and incubate at room temperature for 120min.
- Pour the liquid out from the wells and wash with wash buffer (300ul per well) for 5 times. Tap the residue liquid against absorbent paper to make sure the plate is dry after washing.
- Add 100ul of HRP enzyme conjugate into each well. Cover the plate again and then incubate at room temperature again for 30min.
- Repeat the washing step again.
- Add the substrate into each well, 100ul per well. Cover the plate again and then incubate at room temperature again for 10min. note: avoid direct sunlight.
- Add 50ul stop solution into each well to stop the reaction.
- Using ELISA reader to read the plate at 450nm.

#### **Result determination:**

- The experiment is effective when the average [IN%] of positive control is greater than 50% and the average OD of negative control is not less than 0.5.
- $$IN\% = \frac{\text{average OD of negative control} - \text{average OD of sample}}{\text{average OD of negative control}} \times 100$$
- Positive: IN%  $\geq$  40%, which means the serum sample contains CSFV antibody;
- Negative: IN%  $\leq$  30%, which means CSFV antibody doesn't exist in the serum sample; If the IN% is between 30% and 40%, the measurement should be repeat after 14 days.

#### **Manufacturer Information**

Ring Biotechnology Co., Ltd

E-mail: export@ringbio.com diego@nbgen.com Web: www.ringbio.com

Add: Building 3, Zhongtongtai TechnoPark, No. 11, Kechuang 14th St, Beijing 100176, CHINA

Tel: +86-10-56267496 Technical Support & Service: +86-13811393460