

# Foot and Mouth Disease Virus Type Asia I Antibodies Lateral Flow Assay kit

Catalog No: E-AD-C057

40T

This manual must be read attentively and completely before using this product.

If you have any problems, please contact our Technical Service Center for help.

Phone: 240-252-7368(USA) Fax: 240-252-7376(USA)

Email: <a href="mailto:techsupport@elabscience.com">techsupport@elabscience.com</a>
Website: <a href="mailto:www.vetassay-elab.com">www.vetassay-elab.com</a>

Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.

### **Test principle**

This kit applies the principle of Immunochromatography assay. The sample will move together with the colloidal gold marker along the chromatography membrane. If Foot and Mouth Disease Virus Asia1 (FMD-Asia1) antibody exist in the samples, it will combine with the colloidal gold marker and the antigen in the detection line, and then it will show a purple color. Otherwise, it will not show the color reaction.

#### Kit components

Item	Specification
Detection Card (with a straw)	40T
Antibody titer color card	1
Manual	1 copy

#### **Notes**

- 1. FOR RESEARCH USE ONLY. Please read the manual carefully before use, changes of operation may result in unreliable results.
- 2. Do not use product out of date or in a broken aluminum foil, it is disposable and cannot be used repeatedly.
- 3. The detection card should be brought to room temperature before opening after take it out from the refrigerator. The opening detection card should be used as soon as possible.
- 4. Please do not use but not limited to the following liquids for negative control: water, PBS.
- 5. The tested sample should be fresh and clear. Avoid of using samples of turbidity, polluted, high hemolysis or abnormal viscous.
- 6. Avoid of touching the chromatography membrane of the sample well and test well.
- 7. The waste of experiment should be considered as contaminant, and must be properly handled according to the local regulations.
- Each reagent is optimized for use in the E-AD-C057. Do not substitute reagents from any other
  manufacturer into the test kit. Do not combine reagents from other E-AD-C057 with different lot
  numbers.

## Storage and expiry date

**Storage:** Store at 2-30°C. With cool and dry environment, avoid freeze.

**Expiry date:** expiration date is on the packing box.

#### Sample preparation

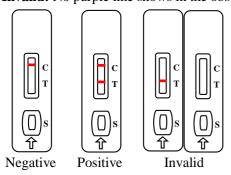
- 1. **Serum:** Take 2~3 mL of blood to a clean and dry test tube, allow samples to clot for 1 hour at room temperature, then centrifuge the sample at 4000 rpm for 10 min (or you can have the blood clot for about 2 hours and the serum will separate out naturally after the blood coagulate) to separate the serum. The serum must be clear, no hemolysis and no pollution. Serum samples can be stored at in 2~8°C in 1 week and 20°C for a long term storage.
- 2. This kit is only for serum/whole blood samples of cattle, goat and sheep.

### Assay procedure

- 1. Take out the detection card and put it on a clean table.
- 2. Take the sample with the straw, add  $2\sim3$  drops (about  $60~\mu$ L) of sample to the sample well vertically and slowly (make sure that there is no liquid outflowing from the well).
- 3. Keep the detection card stand at room temperature for 10~20 min, judge the result. The result is invalid if the time is above 20 min

## Judgment of result

- 1. **Negative:** Only the control line region (C) shows a purple line in the observation well.
- 2. **Positive:** Both the test line region (T) and the control line region (C) show a purple line in the observation well. The higher the titer of FMD-Asia1 antibody is, the deeper the color of the test line region (T) will be.
- 3. **Invalid:** No purple line shows in the observation well of the control line region (C).



#### **Interpretation of the results**

- 1. If this tested porcine has not been immunized with FMD-Asia1 vaccine:
  - (1) The negative result reveals that there is no FMD-Asia1 antibody in the tested sample. If the drove are healthy, then they should be immunized with FMD-Asia1 vaccine in time. If there is a corresponding acute symptom, then FMD-Asia1 infection cannot be excluded.
  - (2) The positive result reveals that this animal might be infected with FMD-Asia1 and the result should be combined with clinical and other methods to analyze.
- 2. If this tested animal has been immunized with FMD-Asia1 vaccine:
  - (1) If the color of the test line (T)  $\geq 1.32$  titer of the color card, which indicates that the level of antibody is up to the protective level of it.
  - (2) If the color of the test line (T) < 1:32 titer of the color card, which indicates that the level of antibody is not enough to reach to the protective level of it, a second time of vaccination is suggested.

#### Limitations

This kit can only be used for qualitative detection of FMD-Asia1 antibodies. A rough estimate (high, general, low) of the antibody concentration can be calculated according to the color shade of the detection line.