

# Foot and Mouth Disease Virus Antigen Lateral Flow Assay kit

Catalog No: E-AD-C040

40T

Version Number: V1.2
Replace version: V1.1

**Revision Date:** 2024.03.14

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.

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Email: <u>techsupport@elabscience.com</u>
Website: <u>www.vetassay-elab.com</u>

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 (FMD) antigen exist in the samples, it will combine with the colloidal gold marker and the antibody in the detection line, then it will show a purple color. Otherwise, it will not show the color reaction.

#### Kit components

Item	Specification
Detection card (with disposable dropper)	40T
Sample Diluent	1 vials
Manual	1 copy

Note: All reagent bottle caps must be tightened to prevent evaporation and microbial pollution.

#### **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 Do not use product out of date or in a broken aluminum foil, it is disposable and cannot be used repeatedly.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-C040. Do not substitute reagents from any other
  manufacturer into the test kit. Do not combine reagents from other E-AD-C040 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. **Blister fluid:** Use a syringe to collect the blister fluid of a suspected infected animal with Foot and Mouth Disease.

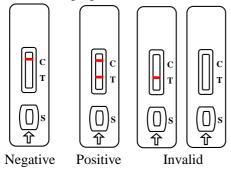
#### **Assay procedure**

Allow all kit components and sample to reach room temperature (25  $^{\circ}$ C) prior to testing.

- 1. Tear the aluminum foil bag of the detection card and take out the detection card, and put it on a smooth, clean table.
- 2. Take the sample with the disposable dropper, add 1 drop (about 25  $\mu$ L) of **Blister fluid** to the sample well (S) vertically and slowly, then add 4 drops of **Sample Diluent** to the sample well (S).
- 3. Incubate for 10 to 15 minutes and then judge the results immediately.

## 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 antigen 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. The negative result reveals that there is no FMD antigen in the tested sample. If the drove are healthy, then they should be immunized with FMD vaccine in time. If there is a corresponding acute symptom, then FMD infection cannot be excluded.
- 2. The positive result reveals that this animal might be infected with FMD, and the result should be combined with other methods to analyze.

#### Limitations

- 1. This kit can only be used for qualitative detection of FMD antigen in swine, cattle, goat and sheep.
- The detection results of this kit are only for reference. For confirmation of the result, please combine the symptoms and other methods of detection, this detection cannot be used as the only criteria for result.