

## (FOR RESEARCH USE ONLY. DO NOT USE IT IN CLINICAL DIAGNOSIS!)

# Human Coxsackievirus A16 (CV-A16) IgM Lateral Flow Assay Kit

Catalog No: E-HD-C012

20T/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.

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 Capture-GICA (Gold Immunochromatography) method as its principle, and can be used for the detection of Coxsackievirus A16 (CV-A16) IgM in human serum. The quality control (C) line is pre-coated with CV-A16 polyclonal antibody, and the detection (T) line is pre-coated with antihuman IgM antibody. The gold pad is coated with gold-labeled CV-A16 antigen. CV-A16 IgM in sample will combine with gold-labeled CV-A16 antigen and form a gold-labeled antigen-antibody complex. The complex will then move along the detection card and react with the pre-coated anti-human IgM antibody on the detection line (T-line) and form the Anti-human IgM antibody- CV-A16 IgM antibody- CV-A16 antigen immunological complex, then a visible line will appear in the detection area. If there is no CV-A16 IgM antibody or CV-A16 IgM antibody content is lower than the detection limit, there will be no complex or precipitation line appeared. The quality control line is standard reference to determine whether the chromatography is normal and whether the detection system is effective. The CV-A16 IgM antibody- CV-A16 antigen immunological complex and color reaction will occur in the quality control area under all conditions, otherwise the detection result is considered invalid and re-test will be required.

## Kit components

| Item           | Specification |
|----------------|---------------|
| Detection Card | 20T/40T       |
| Sample Diluent | 1 vial        |
| Manual         | 1 copy        |

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

### **Notes**

- 1. 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 Do not use product out of date or in a broken aluminum foil, it is disposable and cannot be used repeatedly.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.
- 8. Each reagent is optimized for use in the E-HD-C012. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-HD-C012 with different lot numbers.

# Storage and expiry date

**Storage:** Store at 4-30°C. With cool and dry environment.

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

# Requirements of sample

- 1. The sample must be serum or whole blood.
- 2. Whole blood samples used immediately after collecting, while serum samples can be stored at 2-8  $^{\circ}$ C temporally for detection, or at -20 $^{\circ}$ C for long-term storage.
- 3. Avoid of samples with hemolysis, turbidity, lipidemia, bacterial or polluted and repeated frozen/thawed samples, which will cause false-positive results.

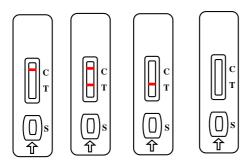
# Assay procedure

Read the manual carefully before detection. The reagent and sample should be adjusted to room temperature ( $15^{\circ}$ C to  $30^{\circ}$ C) before use. The detection card cannot be opened before the experiment condition is ready.

- 1. Take the detection card out and put it on flat and clean table.
- 2. Add 10  $\mu$ L of serum (or 20  $\mu$ L of whole blood) into the sample well, then add 2 drops (or 70  $\mu$ L) of sample diluent into to the sample well.
- 3. Observe the result within 15-20 min. The result is invalid after 20 min.

## Judgment of result

- 1. **Positive:** Red line appears in both test line (T) and control line (C).
- 2. **Negative:** Red line only appears in control line (C).
- 3. **Invalid:** No color line appears in control line (C). It indicates that the operation is wrong or the detection card is invalid, please carry out another detection.



Negative Positive Invalid

#### **Interpretation of results**

- 1. **Positive result:** The sample contains CV-A16 IgM antibody, and clinical information needs to be combined to determine whether the patient has been infected with CV-A16.
- 2. **Negative result:** No CV-A16 IgM was detected in the sample, or the content is too low to the detection limit. The possibility of being infected cannot be completely excluded at this situation.

### Limitations of this test method

This product is for qualitative detection of CV-A16 IgM in human serum or whole blood sample, while the detection effect for plasma samples or samples from other parts is still unclear.