

**CLE (Clenbuterol) Lateral Flow Assay Kit**

Catalog No: E-FS-C006

20T/50T/80T

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: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Website: [www.elabscience.com](http://www.elabscience.com)

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

## Test principle

This kit uses the principle of Immunochromatography assay for the qualitative detection. It can detect Clenbuterol (CLE) in samples, such as muscle, etc. After adding the sample solution into the sample well of detection card, CLE of the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with CLE conjugate on the cellulose membrane. When the concentration of CLE in the sample solution is more than the detection limit, the detect line do not show color and the result is positive. When the concentration of CLE in the sample solution is less than the detection limit, the detect line show color and the result is negative.

## Technical indicator

**Detection limit:** Urine, Muscle ---3 ppb; Feed---30 ppb.

## Kits components

Item	Specifications
Detection card (with disposable dropper)	50 T/kit
Manual	1 copy

## Other materials required but not supplied

**Instruments:** Homogenizer, Water bath, Nitrogen evaporators, Oscillators, Centrifuge, Graduated pipette, Balance (sensitivity 0.01 g).

**High-precision transferpettor:** Single channel (20-200  $\mu\text{L}$ , 100-1000  $\mu\text{L}$ ).

**Reagents:** Sodium sulfate ( $\text{Na}_2\text{SO}_4$ ), Methanol, N- hexane.

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## Notes

1. FOR RESEARCH USE ONLY. Do not use product out of date or in a broken aluminum foil.
2. The detection card should be adjusted to room temperature after removed from the refrigerator before opening. The opening detection card should be used as soon as possible so as not to be invalid because of moisture.
3. Avoid contact and contamination of the sample well and observation well of the test card
4. The disposable dropper cannot be mixing to avoid the cross-contaminant.
5. The tested sample should be clear, no turbidity particle and no bacterial pollution, otherwise it is easy to result in abnormal phenomena such as obstruction, unobvious color, etc., which affect the judgment of the experiment result.
6. **For mentioned sample fast and efficient extraction methods are included in the kit description. Please consult technical support for the applicability if other sample need to be tested.**
7. The kit is used for rapid screening of actual samples. If the test result is positive, the instrument method such as HPLC, LC/MS, etc. can be used for quantitative confirmation.
8. **Each reagent is optimized for use in the E-FS-C006. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C006 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 pretreatment

Restore all reagents and samples to room temperature before use.

### 1. Sample pretreatment Notice:

Experimental apparatus should be clean, and the disposable dropper should be disposable to avoid the experiment result be interfered by the contamination.

### 2. Sample pretreatment procedure:

#### 2.1 Pretreatment of urine (swine) sample:

- (1) Take clear upper urine sample to detect, the sample needs to be centrifuged at 4000 rpm for 10 min if turbid.
- (2) Take supernatant for analysis.

**2.2 Pretreatment of muscle (livestock) sample:**

- (1) Remove fat from sample, homogenize the sample with homogenizer.
- (2) Weigh  $3 \pm 0.05$  g of homogenate fresh sample into a 50 mL centrifuge tube, add 3 mL of deionized water and oscillate for 5 min.
- (3) Incubate the tube in boiling water bath for 5-10 min. Centrifuge at 4000 rpm at room temperature for 5 min. Stand the tube for 5 min to make it cool.
- (4) Take the supernatant for detection.

**2.3 Pretreatment of animal feed sample:**

- (1) Homogenize the representative sample with a homogenizer and mix fully.
- (2) Weigh  $1 \pm 0.05$  g of homogenized fresh sample into a 50 mL centrifuge tube, add 1 g of  $\text{Na}_2\text{SO}_4$  and 10 mL of **Methanol**, oscillate for 3 min.
- (3) Centrifuge at 4000 rpm at room temperature for 10 min.
- (4) Then take 1 mL of the upper liquid and dry with nitrogen evaporators/water bath at 50-60°C.
- (5) Dissolve the residue with 1 mL of deionized water and 1 mL of **N-hexane**, vortex for 30 s and centrifuge at 4000 rpm at room temperature for 5 min.
- (6) Take 80  $\mu\text{L}$  of lower liquid for analysis.

**Experiment procedure**

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 prepared clear sample liquid with the matching disposable dropper, add 2-3 drops (about 60  $\mu\text{L}$ ) of sample to the sample well (S) vertically and slowly (Avoid foaming).
3. Incubate for 8 to 10 minutes and then judge the results immediately.

**Judgment of result**

1. **Negative:** The control line region (C) and the test line region (T) both show a line in the observation well. It indicates the content of CLE in the sample is lower than detection limit or the sample doesn't contain CLE.
2. **Positive:** Only the control line region (C) show a line in the observation well. It indicates the content of CLE in the sample is higher than detection limit.
3. **Invalid:** The control line region (C) does not show a line in the observation well. It indicates operation process is wrong or the test card is invalid.

