CLE-RAC-SAL (Clenbuterol-Ractopamine-Salbutamol) Lateral Flow Assay Kit

Catalog No: E-FS-C016

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

Website: 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. It can detect Clenbuterol--Ractopamine-Salbutamol (CLE-RAC-SAL) in samples, such as muscle, feed, etc. After adding the sample solution into the sample well of detection card, CLE-RAC-SAL in the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with CLE-RAC-SAL conjugate on the cellulose membrane. When the concentration of CLE-RAC-SAL in the sample solution is more than the detection limit, the detect line do not show color reaction and the result is positive. When the concentration of CLE-RAC-SAL in the sample solution is less than the detection limit, the detect line show color and the result is negative.

Technical indicator

Sensitivity: CLE 3ppb-RAC 3ppb-SAL 5ppb

Detection limit: (CLE /RAC /SAL)

Urine ---3 ppb/3 ppb/5 ppb; Muscle---3 ppb/8 ppb/10 ppb;

Feed---30 ppb/30 ppb/50 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, Oscillators, Centrifuge, Nitrogen evaporators, Graduated pipette, Balance (sensibility 0.01g)

High-precision transferpettor: Single channel (20-200 μL, 100-1000 μL)

Reagents: Sodium Sulfate (Na_2SO_4), Methanol, N-hexane.

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 Do not use product out of date or in a broken aluminum foil.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 of contacting the white membrane at the middle of the sample well.
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. If the samples are not indicated in the manual, a preliminary experiment to determine the validity of the kit is necessary.
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-C016. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C016 with different lot numbers.**

Storage and expiry date

Storage: Store at 2-30℃. With cool and dry environment.

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:

Take clear upper urine sample to determine, the sample needs to be centrifuged at 4000 r/min for 10 min if turbid.

2.2 Pretreatment of muscle (livestock) sample:

(1) Remove fat from sample, homogenize the sample with homogenizer.

(2) Weigh 3±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 r/min for 5 min at room temperature. Stand the tube to make it cool, then take the supernatant for analysis.

2.3 Pretreatment of feed sample:

(1) Homogenize the sample with homogenizer.

(2) Weigh 1±0.05 g of homogenate sample into a centrifuge tube, add 1 g of **Na_2SO_4** and 10 mL of **Methanol**, oscillate for 3 min. Centrifuge at 4000 r/min for 10 min at room temperature.

(3) Take 1 mL of supernatant to another centrifuge tube, dry at 50-60℃ with nitrogen evaporators or water bath. (Please do it in a ventilated environment.)

(4) Dissolve the residual with 1 mL of deionized water, add 1 mL of **N-hexane** and vortex for 1 min. Centrifuge at 4000 r/min at room temperature for 5 min.

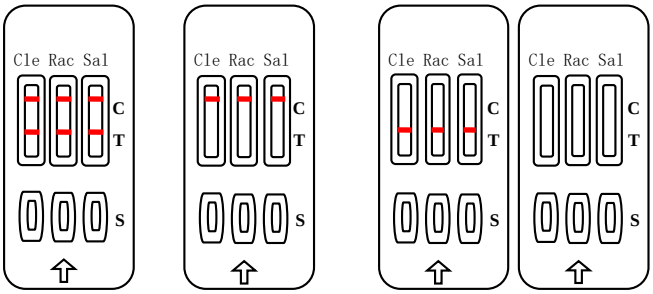
(5) Discard the upper liquid, take 80 μL lower liquid for analysis.

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 supernatant with the matching disposable dropper, add 2-3 drops (about 60 μL) 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. It indicates the content of CLE-RAC-SAL in the sample is lower than detection limit or the sample doesn't contain CLE-RAC-SAL.
2. **Positive:** Only the control line region (C) show a line. It indicates the content of CLE-RAC-SAL in the sample is higher than detection limit.
3. **Invalid:** The control line region (C) does not show a line. It indicates operation process is wrong or the test card is invalid.



Negative Positive Invalid