

7th Edition, revised in April, 2017

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

## **RAC (Ractopamine) Rapid Test Kit**

Catalog No: E-FS-C008

50T

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)240-252-7376(USA)

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 competitive-inhibition-GICA. It can detect RAC (Ractopamine) in samples, such as urine, feed, etc. After adding the sample solution into the sample well of detect card, RAC of the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with RAC conjugate on the cellulose membrane. When the concentration of RAC 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 RAC in the sample solution is less than the detection limit, the detect line shows purple and the result is negative.

## Technical indicator

**Sensitivity:** 3 ppb (ng/mL)

**Note:** The final detection limit of sample equal to the result of sensitivity multiply by dilution ratio of sample pretreatment.

**Detection limit:** Urine---3 ppb, Feed---30 ppb

## Kits components

Item	Specifications
Detect card	50T/kit
Manual	1 copy

## Other supplies required

**Instruments:** Homogenizer, Nitrogen blow-dry device, Oscillators, Centrifuge, Graduated pipette, Balance (sensitivity 0.01g).

**High-precision transfer pipette:** Single channel (20-200  $\mu$ L, 100-1000  $\mu$ L).

**Reagents:** Anhydrous sodium sulfate, N-hexane, Methanol.

## Sample pretreatment

1. **Sample pretreatment Notice:** Experimental apparatus should be clean, and the pipette should be disposable to avoid the experiment result be interfered by the contamination.

2. **Sample pretreatment procedure:**

### Pretreatment of urine:

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

**Dilution factor: 1 Detection limit: 3ppb**

### Pretreatment of feed:

- (1) Weigh  $1.0 \pm 0.05$  g of homogenized sample, add 1g of anhydrous sodium sulfate and 10mL of methyl alcohol, oscillate for 3 min, Centrifuge at 4000r/min at room temperature for 10 min.
- (2) Remove 1mL supernatant to blow-dry in nitrogen or air at 50-60°C. Dissolve the residual with 1mL

deionized water, add 1mL of n-hexane and oscillate for 30s. Centrifuge at 4000r/min at 15°C for 5 min.

- (3) Take 80  $\mu$ L lower liquid for analysis.

**Note: Sample Dilution factor: 10, minimum detection dose: 30 ppb**

### Experiment procedure

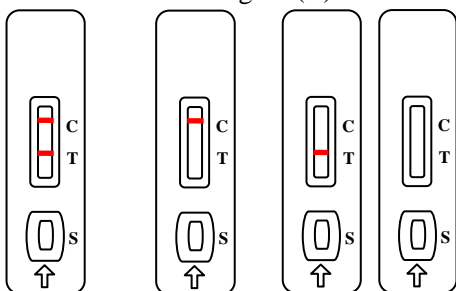
1. Tear the aluminum foil bag of the detect card and take out the detect card, and put it on a smooth, clean table.
2. Take the prepared clear sample supernatant with the matching straw, add 2-3 drops (about 60 $\mu$ L) of sample to the sample well (S) vertically and slowly.
3. Keep the detect card at room temperature for 8-10min, then judge the result. The result can only be considered as a reference if lasts for more than 10 min.

### Judgment of result

**Negative:** the control line region (C) and the test line region (T) both show purple. .

**Positive:** the control line region (C) shows purple, the test line region (T) shows no color.

**Invalid:** the control line region (C) shows no color.



Negative Positive Invalid

### Notes

1. Do not use product out of date or in a broken aluminum foil.
2. The detect card should be adjusted to room temperature after removed from the refrigerator before opening. The opening detect card should be used as soon as possible so as not to be invalid because of moisture.
3. Avoid of contacting the whitemembrane at the middle of the sample well.
4. The droplets 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.

### Storage and valid period

**Storage:** Store at 2-30°C with dry condition.

**Valid Period:** 1 year, production date is on the packing box.

