TCs (Tetracyclines) Lateral Flow Assay Kit

Catalog No: E-FS-C030

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.

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 for the qualitative detection. It can detect TCs (Tetracyclines) in muscle, honey and egg samples. After adding the sample solution into the sample well of detection card, TCs in the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with TCs conjugate on the cellulose membrane. When the concentration of TCs in the sample solution is more than the detection limit, the detect line do not show color (or shows lighter color than control line) and the result is positive. When the concentration of TCs in the sample solution is less than the detection limit, the detect line shows color (shows equal or darker than the control line) and the result is negative.

Technical indicator

Detection limit: Muscle ---20 ppb; Honey---50 ppb; Egg---60 ppb

Kits components

Item	Specifications
Detection Card	50 T/kit
Reconstitution Buffer	1 vial
Manual	1 copy

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

Other supplies required

Instruments: Homogenizer, Centrifuge, Graduated pipette, Balance (sensibility 0.01g), Oscillator, Nitrogen Evaporators, Water bath.

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

Notes

1. FOR RESEARCH USE ONLY. Do not use product out of date or in a broken aluminum foil.
2. Bring detection card to room temperature before opening the aluminum foil. 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 pipette 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 and unobvious color 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-C030. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C030 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 pipette should be disposable to avoid the experiment result be interfered by the contamination.

2. Sample pretreatment

2.1 Pretreatment of muscle (livestock, fish, shrimp) sample:

(1) Remove the skin and fat of sample, homogenize with homogenizer.

(2) Weigh 5±0.05 g of sample into a 15 mL centrifuge tube, add 200 μL of deionized water.

(3) Incubate the tube in boiling water (100℃) for 10 min. Stand the tube for 5-10 min to make it cool, then take the liquid to another centrifuge tube. Centrifuge at 4000 rpm for 10 min at room temperature.

(4) Take the supernatant for analysis.

During the incubation process, the mouth of the test tube must be completely sealed to prevent water from entering the inside of the test tube.

Note: Detection limit: 20 ppb

2.2 Pretreatment of honey sample:

(1) For laboratory samples without crystallization, stir well. For the sample with crystallization phenomenon, place it in a closed water bath not exceeding 60℃, heat it, shake, stir after the sample is all melted, and cool to room temperature.

(2) Weigh 0.2±0.05 g of homogenized honey sample (Crystallized honey must be melted in a water bath at 60-80℃) into a centrifuge tube.

(3) Add 0.8 mL of **Reconstitution Buffer.** Oscillate for 4 min and mix fully.

(4) Take the supernatant for analysis.

Note: Detection limit: 50 ppb

2.3 Pretreatment of egg sample:

(1) Weigh 0.2±0.05 g of homogenized egg sample into a centrifuge tube.

(2) Add 1 mL of **Reconstitution Buffer**. Oscillate for 2 min and mix fully.

(3) Take the supernatant for analysis.

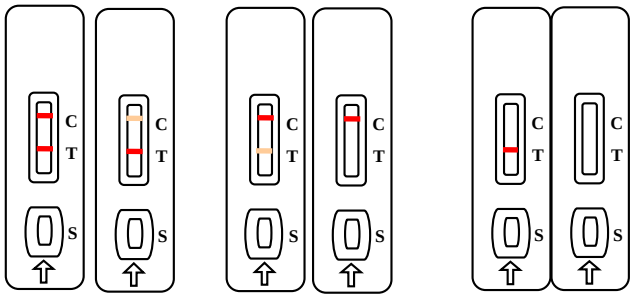
Note: Detection limit: 60 ppb

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 sample with the matching with pipette, add 6 drops (about 150 μL) of sample to the gold-labelled micro well, wait for 2 min, whip the purple residual with a burette until it is completely dissolved (Avoid foaming), wait for 2 min again, remove all the liquid of the gold-labelled micro well into the sample well, count down at the same time.
3. Incubate for 5 to 8 minutes and then judge the results immediately.

Judgment of result

1. **Negative:** The control line region (C) show color, the test line region (T) shows equal or darker than line C. It indicates the content of TCs in the sample is lower than detection limit or the sample doesn't contain TCs.
2. **Positive:** The control line region (C) show color, the test line region (T) shows no color or lighter color than line C. It indicates the content of TCs in the sample is higher than detection limit.
3. **Invalid:** The control line region (C) show no color. It indicates operation process is wrong or the test card is invalid.



Negative Positive Invalid