

TCs (Tetracyclines) Rapid Test 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.

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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 TCs (Tetracyclines) in musculature and honey samples. After adding the sample solution into the sample well of detect card, TCs of 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 reaction (or the color is lighter than the 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 purple (the color is equal or darker than the control line) and the result is negative.

Technical indicator

Sensitivity: 10 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: Tissue---60 ppb

Honey---400 ppb

Kits components

Item	Specifications
Detect card	50 T/kit
Sample reconstituted solution	2 vials
Manual	1 copy

Other supplies required

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

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

Reagents: Acetocaustin, 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. Reagent preparation

Solution 1: 1% acetocaustin solution

Dissolve 1 g acetocaustin to 100 mL with deionized water

3. Sample pretreatment

3.1 Pretreatment of tissue sample:

- (1) Remove the skin and sebum of fish, prawn, crab, meat of livestock and entrails, homogenize them with homogenizer (honey doesn't require to). Weigh 2 ± 0.05 g of sample into 50 mL EP tube. Add 6 mL of 1% acetocaustin solution, oscillate for 1 min. Centrifuge at 4000 r/min at room temperature for 10 min.
- (2) Take 1 mL of clear upper phase to another clean tube, add 1 mL methanol, and oscillate for 1 min. Centrifuge at 4000 r/min at room temperature for 10 min.
- (3) Take 1 mL of upper liquid, blow-dry in nitrogen or air. Dissolve the residual with 1 mL reconstituted solution. Oscillate fully for analysis.

Note: Sample dilution factor: 6, Detection limit: 60 ppb

3.2 Pretreatment of honey sample:

- (1) Weigh 2 ± 0.05 g of honey sample into EP tube. Add 2 mL 1% acetocaustin solution. Oscillate for 2 min and centrifuge at 4000 r/min at room temperature for 10 min.
- (2) Take 100 μ L of upper liquid into another EP tube, dilute it with 1900 μ L of reconstituted solution. Oscillate fully for 30 s, then take the final solution for analysis.

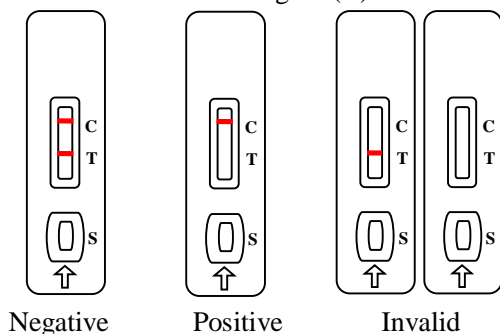
Note: Sample dilution factor: 40, Detection limit: 100 ppb

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 μ L) of sample to the sample well (S) vertically and slowly.
3. Keep the detect card at room temperature for 10-15 min, then judge the result. The result can only be considered as a reference if lasts for more than 10 min.

Judgment of result

1. **Negative:** The test line region (T) and the control line region (C) shows a purple line at the same time in the observation well.
2. **Positive:** Only the control line region (C) shows a purple line in the observation well.
3. **Invalid:** The control line region (C) does not show a purple line in the observation well.



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 white membrane 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.