MQCA (Olaquindox Metabolites) Lateral Flow Assay Kit

Catalog No: E-FS-C039

40T

Version Number:	V1.2
Replace version:	V1.1
Revision Date:	2026.05.29

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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Email: techsupport@elabscience.com
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Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.

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Test principle

This kit uses the principle of Immunochromatography assay for the qualitative detection. It can detect 3-methyl quinoxaline-2- carboxylic acid (MQCA) in samples, such as tissue, etc. After adding the sample solution into the sample well of detection card, MQCA of the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with MQCA conjugate on the cellulose membrane. When the concentration of MQCA 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 MQCA in the sample solution is less than the detection limit, the detect line show color (shows equal or darker color than control line) and the result is negative.

Technical indicator

Detection limit: Tissue ---2 ppb.

Kits components

Item	Specifications
Detection card (contains gold-labelled micro well)	40 T/kit
Reconstitution Buffer	2 vials
Extractant	2 vials
Manual	1 copy

Other materials required but not supplied

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

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

Reagent: Ethyl acetate.

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 Do not use product out of date or in a broken aluminum foil.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 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, 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-C039. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C039 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 procedure:

2.1 Pretreatment of tissue (fish, shrimp and livestock) sample:

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

(2) Weigh 3±0.05 g of homogenize sample into 50 mL centrifuge tube. Add 4 mL of **Ethyl acetate** and add 1 mL of deionized water, oscillate for 3 min to make the mixture. Then add 1 mL **Extractant**, oscillate for 30s. Centrifuge at 4000 r/min for 5 min at room temperature.

(3) Take 2 mL of upper liquid to 5mL tube, dry in nitrogen evaporators/water bath at 60℃ (It is considered as a normal phenomenon if grease at the bottom).

(4) Add 0.5 mL of **Reconstitution Buffer** into 5mL tube, oscillate for 30s to make the mixture, Centrifuge at 4000 r/min for 3 min at room temperature.

(5) Take 150 µL of lower liquid to analysis.

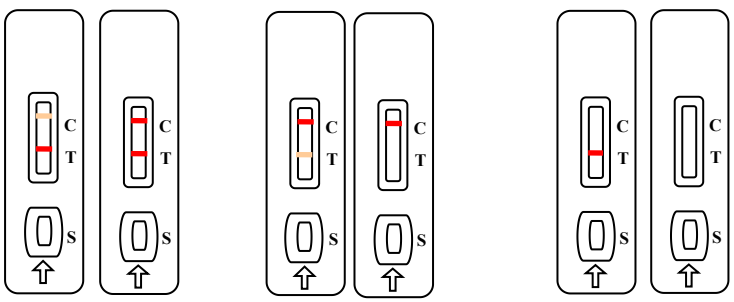
Note: Detection limit: 2 ppb

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 clear sample liquid with the matching pipette, add 150 μL of sample to the gold-labelled micro well, whip the purple residual with a burette about 30 s until it is completely dissolved wait (Avoid foaming), wait for 2 min, remove all the liquid of the gold-labelled micro well into the sample well(s), count down at the same time.
3. Incubate for 5 to 8 minutes and then judge the results immediately. Test results are invalid after 30 minutes.

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 MQCA in the sample is lower than detection limit or the sample doesn't contain MQCA.
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 MQCA in the sample is higher than detection limit.
3. **Invalid:** The control line region (C) shows no color. It indicates operation process is wrong or the test card is invalid.



Negative Positive Invalid

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