SEM(Nitrofurazone) Lateral Flow Assay Kit

Catalog No: E-FS-C122

20T/40T/80T

Version Number:	V1.5
Replace version:	V1.4
Revision Date:	2026.06.01

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
Website: www.elabscience.com

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 Nitrofurazone (SEM) in samples, such as fish and shrimp. After adding the sample solution into the sample well of detection card, SEM in the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with SEM conjugate on the cellulose membrane. When the concentration of SEM 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 SEM 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, aquatic products, eggs---0.5 μg/kg (ppb).

Kits components

Item	Specifications
Detection Card (with disposable dropper)	20/40 T/kit
Reagent A	2/4 vials
Reagent B	2/4 vials
Reagent C	2/4 vials
Reagent D	2/4 vials
Reconstitution Buffer	2/4 vials
Manual	1 copy

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

Othermaterials required but not supplied

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

Micropipette: 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 Do not use product out of date or in a broken aluminum foil.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. 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 whitemembrane 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. **Each reagent is optimized for use in the E-FS-C122. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C122 with different lot numbers.**
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.

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 beinterfered by the contamination.

2. Sample pretreatment procedure:

2.1 Pretreatment of tissue, aquatic products, eggs sample:

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

(2) Weigh 2±0.05 g of homogenate sample into 15 mL centrifuge tube, add 3 mL of **Reagent A**, oscillate for 30 seconds. Incubate for 8 minutes in water bath at 80°C.

(3) Add 1 mL of **Reagent B** and 3 mL of **Reagent C**, shake vigorously for 2 minutes to mix well. Centrifuge at 4000 r/minute at room temperature for 2 minutes.

(4) Take 1 mL of upper liquid to another tube, dry innitrogen evaporators or water bathat 60℃. (Please do it in a ventilated environment.)

(5) Add 1 mL of **Reagent D** to the dried centrifuge tube, completely dissolve any residual substances on the tube wall by vortexing. Then, add 0.5 mL of **Reconstitution Buffer** and mix thoroughly for 30 seconds. Centrifuge at 4000 r/min at room temperature for 5 minutes (or allow standing until obvious layer separation occurs).

Note: High-fat tissues are prone to emulsification. Increase the dosage of n-hexane as needed. If emulsification persists after centrifugation (or standing), heat in an 80°C water bath for 5 minutes, followed by another round of centrifugation (or standing)

(6) Discard the upper n-hexane layer and intermediate impurity layer, take 80 μL of the lower layer liquid to analysis.

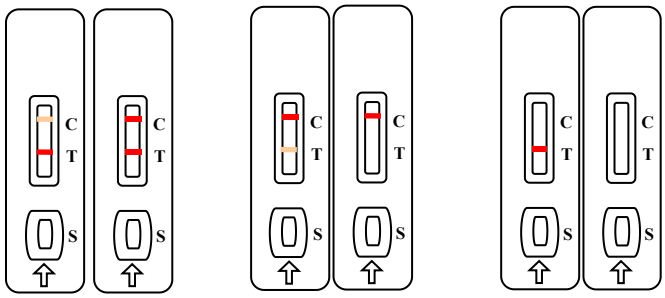
Note: Detection limit: 0.5 ppb

Experiment procedure

1. Tear the aluminum foil bag of the detection card and dropper, put it on a smooth, clean table (Before use, restore the card to be tested and the sample to be tested to room temperature).
2. Take the prepared sample, add 80 μL of sample to the sample well (S) vertically and slowly (Avoid foaming).
3. Incubate for 5 minutes and then judge the results immediately.

Judgment of result

1. **Negative:**The control line region (C) show a line, the test line region (T) shows equal or darker than line C. It indicates the content of SEM in the sample is lower than detection limit or the sample doesn't contain SEM.
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 SEM 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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