

**SAs (Sulfonamides) Lateral Flow Assay Kit**

Catalog No: E-FS-C129

40T

**Version Number:** V1.3  
**Replace version:** V1.2  
**Revision Date:** 2026.04.28

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 Immunochromatography assay for the qualitative detection. It can detect SAs (Sulfonamides) in tissue, aquatic products sample. After adding the sample solution into the sample well of detection card, SAs in the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with SAs conjugate on the cellulose membrane. When the concentration of SAs in the sample solution is more than the detection limit, the detect line do not show color and the result is positive. When the concentration of SAs in the sample solution is less than the detection limit, the detect line show color and the result is negative.

## Technical indicator

### Detection limit of sulfonamides:

Name	Detection limit (Method 1) (ppb)	Detection limit (Method 2) (ppb)	Detection limit (Method 3) (ppb)
Sulfamethoxyipyridazine	3	40	100
Sulfameter	3	40	100
Sulfadiazine	3	40	100
Sulfadimidine	5	40	100
Sulfamerazine	5	40	100
Sulfachloropyridazine	5	40	100
Sulfachloropyridazine	10	80	200
Sulfadimethoxine	10	80	200
Sulfachloropyrazine	10	80	200
Sulfamethizole	15	100	200
Sulfaquinoxaline	15	100	200

## Kits components

Item	Specifications
Detection card (with disposable dropper)	40 T/kit
Sample Diluent	4 vials
Manual	1 copy

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

## Other materials required but not supplied

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

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

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**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 Do not use product out of date or in a broken aluminum foil.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 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 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-C129. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C129 with different lot numbers.

**Storage and expiry date**

**Storage:** Store at 2-30°C. 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 be interfered by the contamination.

**2. Sample pretreatment procedure:**

Restore all reagents and samples to room temperature before use.

**3.1 Pretreatment of tissues (chicken, duck, pork, beef, mutton, pork fat, etc.) and aquatic products (fish meat, shrimp meat, bullfrog, etc.) sample:**

- (1) Remove skin and fat from tissue and aquatic products samples, then homogenize the test samples using a homogenizer.
- (2) Weigh  $1.00 \pm 0.05$  g of the homogenized sample into a 10 mL centrifuge tube.
- (3) Add 5 mL of **Sample Diluent** to the above centrifuge tube, vortex vigorously for 3 minutes, then centrifuge at 4000 g for 5 minutes at room temperature.

(4) **Method 1:** The supernatant is the test solution.

**Method 2:** Transfer 100  $\mu\text{L}$  of the supernatant into a 1.5 mL centrifuge tube, add 500  $\mu\text{L}$  of **Sample Diluent**, mix well, and set aside for testing.

**Method 3:** Transfer 50  $\mu\text{L}$  of the supernatant into a 1.5 mL centrifuge tube, add 650  $\mu\text{L}$  of **Sample Diluent**, mix well, and set aside for testing.

### 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 disposable dropper, add 100  $\mu\text{L}$  of sample to the sample well (S) vertically and slowly (Avoid foaming).
3. Incubate for 5-8 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 SAs in the sample is lower than detection limit or the sample doesn't contain SAs.
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 SAs 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.

