

**SM<sub>2</sub> (Sulfamethazine) Lateral Flow Assay Kit**

Catalog No: E-FS-C136

20T/40T/80T

<b>Version Number:</b>	V1.2
<b>Replace version:</b>	V1.1
<b>Revision Date:</b>	2025.06.13

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](mailto:techsupport@elabscience.com)

Website: [www.elabscience.com](http://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 SM<sub>2</sub> (Sulfamethazine) in muscle. After adding the sample solution into the sample well of detection card, SM<sub>2</sub> in the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with SM<sub>2</sub> conjugate on the cellulose membrane. When the concentration of SM<sub>2</sub> 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 SM<sub>2</sub> 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 of sample:** Muscle (Pork, beef, mutton, chicken, duck, fish, shrimp) ---100ppb.

## Kits components

Item	Specifications
Detection Card	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, Centrifuge, Oscillators, Nitrogen evaporators, Graduated pipette, Balance (sensitivity 0.01).

**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 Do not use product out of date or in a broken aluminum foil.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. 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 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-C136. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C136 with different lot number**
7. The kit is used for rapid screening of actual samples. If the test result is positive, the instrument

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method such as HPLC, LC/MS, etc. can be used for quantitative confirmation.

### 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:

##### 3.1 Pretreatment of muscle (Pork, beef, mutton, chicken, duck, fish, shrimp) sample:

- (1) Remove the skin and fat of sample, homogenize with homogenizer.
- (2) Weigh  $1 \pm 0.05$  g of homogenate sample into 10 mL centrifuge tube.
- (3) Add 2 mL of **Sample Diluent**, shake vigorously for 3 min, centrifuge at 4000 g at room temperature for 5 min.
- (4) Take the liquid for analysis.

**Note: Detection limit: 100 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 100  $\mu$ L (about 3 drops) of the prepared clear sample to the sample well (S) vertically and slowly (Avoid foaming).
3. Incubate for 5-8 min 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 SM<sub>2</sub> in the sample is lower than detection limit or the sample doesn't contain SM<sub>2</sub>.
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 SM<sub>2</sub> 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.

