SAs (Sulfonamides) Lateral Flow Assay Kit

Catalog No: E-FS-C033

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.

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017
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.

Test principle

This kit uses the principle of Immunochromatography assay for the qualitative detection. It can detect SAs (Sulfonamides) in muscle. After adding the sample solution into the sample well of detection card, SAs of 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 (or shows lighter color than control line) and the result is positive. When the concentration of SAs in the sample solution is less than the detection limit, the detect line shows color (the color is equal or darker than the control line) and the result is negative.

Technical indicator

Detection limit of sample (based on SDZ concentration): Muscle---2 ppb.

Detection limit of sulfonamides:

Name	Sensitivity (ppb)
Sulfadiazine(SD/SDZ)	2
Sulfamerazine(SM1)	2
Sulfamethazine (SM2)	6
Sulfamethoxydiazine(SMD)	1
Sulfamonomethoxine(SMM)	1
Sulfadimethoxine(SDM)	4
Sulfadimoxine(SDM')	2
Sulfisomidine(SM2')	3
Sulfamethythiadiazole(SMT)	4
Sulfaclozine(Esb3)	9
Sulfathiazole(ST)	10
Sulfaquinoxaline (SQX)	15
Sulfasoxazole(SIZ)	35
Sulfapirazinmetossina(SMZ)	35
Sulfamethoxypyridazine(SMP)	10
Sulfachlorpyridazine(SPDZ)	10

Kits components

Item	Specifications
Detection card (with pipette)	50 T/kit
3 ×Reagent A	40 mL × 2 vials
Reagent B	2 mL × 1 vial
Manual	1 copy

Other materials required but not supplied

Instruments: Homogenizer, Oscillators, Centrifuge, Graduated pipette, Balance (sensibility 0.01g)
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 Do not use product out of date or in a broken aluminum foil.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 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-C033. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C033 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. **Reagent preparation:**
   Extracting Solution:
   3×**Reagent A**: deionized water =1:2 (V/V), mix fully. Store the prepared extracting solution with sealed lid.

3. Sample pretreatment of muscle(fish, shrimp and livestock) samples:

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

(2) Weigh 5 g of homogenize sample into 50 mL centrifuge tube. Add 5 mL of **Extracting Solution**, oscillate for 3 min to make the mixture (the sample becomes a dilute paste) reacting fully.

(3) Centrifuge at 4000 rpm for 5 min at room temperature.

(4) Take 1 mL of supernatant (the liquid is turbid) into a 1.5 mL centrifuge tube. Add 40 μL of **Reagent B**, mix fully. Centrifuge at 4000 rpm for 5 min at room temperature.

(5) Take the supernatant for analysis (the liquid is clear).

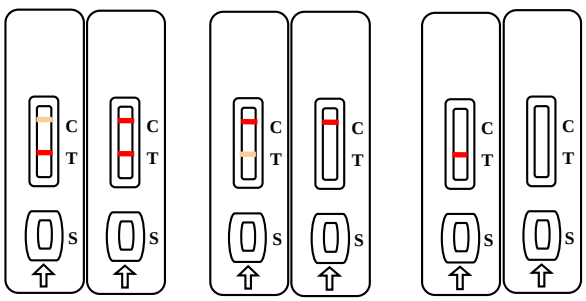
Note: Detection limit: 2ppb

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 supernatant with the matching pipette, add 2-3 drops (about 60 μL) of sample to the sample well (S) vertically and slowly.
3. Incubate for 8 to 10 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.



Negative Positive Invalid