

7th Edition, revised in April, 2017

#### (FOR RESEARCH USE ONLY. DO NOT USE IT IN CLINICAL DIAGNOSIS !)

#### SAs (Sulfonamides) Rapid Test Kit

Catalog No: E-FS-C033 40T

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.

Phone: 240-252-7368(USA) 240-252-7376(USA) Email: <u>techsupport@elabscience.com</u> Website: <u>www.elabscience.com</u>

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 Competitive-Inhibition-GICA. It can detect SAs (Sulfonamides) in tissue samples (such as fish, prawn, crab, meat of livestock and entrails). After adding the sample solution into the sample well of detect 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 reaction (or the color is lighter than the 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 purple (the color is equal or darker than the control line) and the result is negative.

## **Technical indicator**

#### Sensitivity 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
Detect card	40 T/kit
3×Reagent A	40 mL $\times$ 2 vials
Reagent B	$2 \text{ mL} \times 1 \text{ vial}$
Manual	1 copy

## Other supplies required

**Instruments:** Homogenizer, Nitrogen blow-dry device Oscillators, Centrifuge, Graduated pipette, Balance (sensibility 0.01g)

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

### Sample pretreatment

### 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: Purified water=1:2 (V/V), mix fully. Store the prepared extracting solution with sealed lid.

## 3. Sample pretreatment of tissue samples:

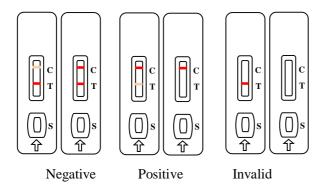
- (1) Weigh 5 g of tissue sample with skin and fat removed into 50 mL EP tube. Add 5 mL of Extracting solution, oscillate with a vortex mixer for 3 min to make the mixture (the sample becomes a dilute paste) reacting fully. Centrifuge at 4000 r/min for 5 min at room temperature.
- (2) Take 1 mL of lower liquid (the liquid is turbid) into a 1.5 mL EP tube. Add 40 μL of Reagent B, mix fully. Centrifuge at 4000 r/min for 5 min at room temperature.
- (3) Take the lower liquid for analysis (the liquid is clear).

# **Experiment procedure**

- 1. Tear the aluminum foil bag of the detect card and take out the detect card, and put it on a smooth, clean table.
- 2. Take the prepared clear sample supernatant with the matching straw, add 2-3 drops (about 60  $\mu$ L) of sample to the sample well (S) vertically and slowly.
- 3. Keep the detect card at room temperature for 8-10 min, then judge the result. The result can only be considered as a reference if lasts for more than 10 min.

## Judgment of result

- 1. **Negative:** The control line region (C) shows a purple line in the observation well. The test line region (T) shows the same or deeper color compared with the C line.
- 2. **Positive:** The control line region (C) shows a purple line in the observation well. The test line region (T) shows the no or lighter color compared with the C line.
- 3. Invalid: The control line region (C) does not show a purple line in the observation well.



#### Notes

- 1. Do not use product out of date or in a broken aluminum foil.
- 2. The detect card should be adjusted to room temperature after removed from the refrigerator before opening. The opening detect 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 droplets 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.

#### Storage and valid period

**Storage:** Store at 2-30°C with dry condition. **Valid Period:** 1 year, production date is on the packing box.