Elabscience®

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

AF(Aflatoxin) Rapid Test Kit

Catalog No: E-TO-C004

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.

Phone: 240-252-7368(USA)240-252-7376(USA)
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 competitive-inhibition-GICA. It can detect Aflatoxin (AF) in samples, such as grain, formula feed, etc. After adding the sample solution into the sample well of detect card, AF of the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with AF conjugate on the cellulose membrane. When the concentration of AF in the sample solution is more than the detection limit, the detect line do not show color reaction and the result is positive. When the concentration of AF in the sample solution is less than the detection limit, the detect line shows purple and the result is negative.

Technical indicator

Sensitivity:1ppb (ng/mL)

Note: The final detection limit of sample equal to the result of sensitivity multiply by dilution ratio of sample pretreatment.

Detection limit: Grain/Formula feed/Oil---5ppb

Kits components

Item	Specifications
Detect card	50T/kit
Manual	1 copy

Other supplies required

Instruments: Homogenizer, Oscillators, Centrifuge, Graduated pipette, Balance(sensibility 0.01g),

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

Reagents: Methanol, N-hexane

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**

   Reagent 1(sample extracting solution):70% methanol. Methanol(volume): deionized water(volume)=7:3.

3. **Sample pretreatment procedure:**

3.1 Grain, formula feed:

(1) Weigh1g of crushed sample to a 15mL centrifuge tube, add 2mLof sample extracting solution. Oscillate hardly for 5min.Centrifuge at 4000r/min for 10min at room temperature. (If the water-absorbing quality of some sample is too strong to take supernatant, you can appropriately increase the dose of sample extraction solution, the dilution multiple can be count as the actual volume of sample extraction solution.)

(2) Take 0.1mL of the supernatant, add 0.4mLof deionized water. Mix thoroughly for use.

(3) Take 80μL of the solution above to analyze.

Note: Sample dilution factor: 5, Detection limit: 5ppb

Dilute methods of different detection limit:

Crushed sample	2g	2g	2g	2g
Deionized water	2mL	4mL	8mL	20mL
Dilution factor	5	10	20	50
Detection limit	5ppb	10ppb	20ppb	50ppb

3.2 Oil (vegetable oil, sesame oil, salad oil, peanut oil, etc.)

(1) Weigh 2g of sample to a 50mL centrifuge tube, add 8mL of normal hexane and 2mLof sample extracting solution. Oscillate hardly for 5min and centrifuge at 4000r/min for 10min at room temperature.

(2) Remove the supernatant and take 0.1mL of the sublayer liquid. Add 0.4mLof deionized water, mix thoroughly.

(3) Take 80μL of the solution above to analyze.

Note: Sample dilution factor: 5, Detection limit: 5ppb

Dilute methods of different detection limit:

Crushed sample	2g	2g	2g	2g
Deionized water	2mL	4mL	8mL	20mL
Dilution factor	5	10	20	50
Detection limit	5ppb	10ppb	20ppb	50ppb

Experiment procedure

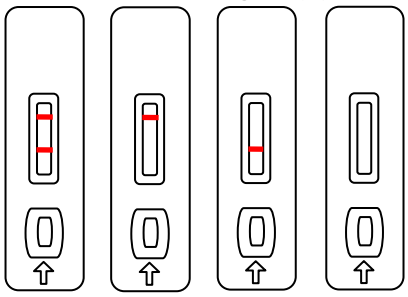
1. Tear the aluminum foil bag of the detect card and take out the detect card, and put it on a smooth, clean table.
2. Take the prepared clear sample supernatant with the matching straw, add 2drops (about 80μL) of sample to the sample well (S) vertically and slowly.
3. Keep the detect card at room temperature for 8-10min, then judge the result. The result can only be considered as a reference if lasts for more than 10 min.

Judgment of result

Negative: the test line region (T) and the control line region (C) shows a purple line at the same time in the observation well.

Positive: only the control line region (C) shows a purple line in the observation well.

Invalid: the control line region (C) does not show a purple line in the observation well.



NegativePositiveInvalid

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 whitemembrane 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 inabnormal phenomena such as obstruction, unobvious color, etc., which affect the judgment of the experiment result.

Storage and valid period

Storage: Store at 2-30℃ with dry condition.

Valid Period: 1 year, production date is on the packing box.