Elabscience®

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

AFB1(Aflatoxin B1) Rapid Test Kit

Catalog No: E-TO-C006

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 B1 (AFB1) in samples, such as grain, formula feed, etc. After adding the sample solution into the sample well of detect card, AFB1 of the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with AFB1 conjugate on the cellulose membrane. When the concentration of AFB1 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 AFB1 in the sample solution is less than the detection limit, the detect line shows purple and the result is negative.

Technical indicator

Sensitivity: 1 ppb (ng/mL)

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

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

Kits components

Item	Specifications
Detect card	50 T/kit
Manual	1 copy

Other supplies required

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

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. That is, methanol: deionized water (volume) =7:3.

3. Sample pretreatment procedure:

3.1 Grain, formula feed:

(1) Weigh 2g of crushed homogenate, add sample extracting solution according to the different detection limit as the following table:

Detection limit	5 ppb	10 ppb	20 ppb	50 ppb
Sample extracting solution	4 mL	8 mL	16 mL	40 mL

Oscillate hardly for 5 min. Centrifuge at 4000 r/min for 5min at room temperature.

(2) Take 0.1mL of the supernatant, add 0.15 mLof deionized water. Mix thoroughly to be used.

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

(1) Weigh1g of sample, add sample extracting solution according to the different detection limit as the following table:

Detection limit	5 ppb	10 ppb	20 ppb	50 ppb
Sample extracting solution	2 mL	4 mL	8 mL	20 mL

Add 8mL of normal hexane. Oscillate hardly for 5min and centrifuge at 4000r/min for 10 min at room temperature.

(2) Remove the supernatant and take 0.1mL of the sub-layer liquid. Add 0.15mLof deionized water, mix thoroughly for use.

Assay procedure

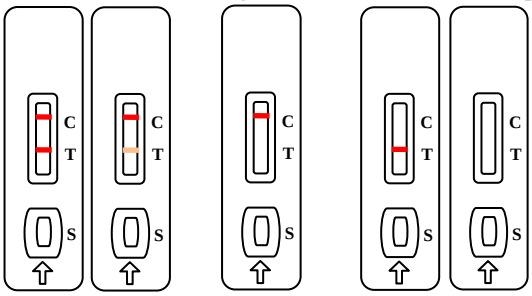
1. Tear the aluminum foil bag of the detect card and take out the detect card, and put it on a smooth, clean table.
2. Take the prepared clear sample supernatant with the matching straw, add 2-3 drops (about 60μL) of sample to the sample well (S) vertically and slowly.
3. Keep the detect card at room 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.



NegativePositive Invalid

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 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℃ with dry condition.

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