

FB1 (Fumonisin B1) Lateral Flow Assay Kit

Catalog No: E-TO -C010

20T

Version Number:	V1.3
Replace version:	V1.2
Revision Date:	2026.03.31

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 Fumonisin B1 (FB1) in samples, such as grain, Feed, etc. After adding the sample solution into the sample well of detection card, FB1 in the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with FB1 conjugate on the cellulose membrane. When the concentration of FB1 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 FB1 in the sample solution is less than the detection limit, the detect line shows color (shows equal or darker color than control line) and the result is negative.

Technical indicator

Detection limit: Grain, Feed---200 ppb.

Kits components

Item	Specifications
Detection Card (with disposable dropper)	20 T/kit
Sample Diluent	2 vials
Manual	1 copy

Note: All reagent bottle caps must be tightened to prevent evaporation and microbial pollution.

Notes

1. FOR RESEARCH USE ONLY. Do not use product out of date or in a broken aluminum foil.
2. Bring detection card to room temperature before opening the aluminum foil. 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 and unobvious color 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-TO-C010. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-TO-C010 with different lot numbers.

Storage and expiry date

Storage: Store at 2-30°C. With cool and dry environment.

Expiry date: expiration date is on the packing box.

Other materials required but not supplied

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

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

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

2.1 Pretreatment of grain, feed:

- (1) Weigh 2 ± 0.05 g of crushed sample into 15 ml centrifuge tube, add 4 mL of **Sample Diluent**, and oscillate for 3 min.
- (2) Centrifuge at 4000 r/min at room temperature for 5 min.
- (3) Take the supernatant to analysis.

Note: Detection limit: 200 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 the prepared sample with the matching disposable dropper, add 4-5 drops (about 120 µL) of sample to the sample well (S) vertically and slowly (Avoid foaming).
3. Incubate for 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 FB1 in the sample is lower than detection limit or the sample doesn't contain FB1.
2. **Positive:** The control line region (C) show color, the test line region (T) show no color or lighter color than line C. It indicates the content of FB1 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.

