ZEN (Zearalenone) Lateral Flow Assay Kit

Catalog No: E-TO-C013

20T/40T/80T

Version Number:	V1.5
Replace version:	V1.4
Revision Date:	2026.01.28

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

Technical indicator

Detection limit: Grain, Feed ---60 ppb

Kits components

Item	Specifications
Detection Card (with disposable dropper)	20/40/80T/kit
Gold-labelled micro well	20/40/80T
2×Concentrated Extractant	2/4/8 vials
Manual	1 copy

Other materials required but not supplied

Instruments: Homogenizer, Oscillators, Nitrogen Evaporators, Water bath, Centrifuge, Graduated pipette, Balance (sensibility 0.01 g).

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 Do not use product out of date or in a broken aluminum foil.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 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, 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-TO-C013. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-TO-C013 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 disposable dropper should be disposable to avoid the experiment result be interfered by the contamination.

2. **Reagent preparation**

   Solution 1: **Extractant**

   2×Concentrated Extractant (V): deionized water (V) =1:1

   （Note: If crystals appear in the concentrated extractant, please shake it at room temperature to ensure complete dissolution.）

3. Sample pretreatment procedure:

3.1 Pretreatment of grains, feed sample:

(1) Grind the sample to be tested into a fine powder.

(2) Weigh 1.00 ± 0.05 g of the sample into a 15 mL centrifuge tube.

(3) Add 5 mL of **Extractant (Solution 1)**, vortex for 3 min, then centrifuge at 4000 rpm for 3 min.

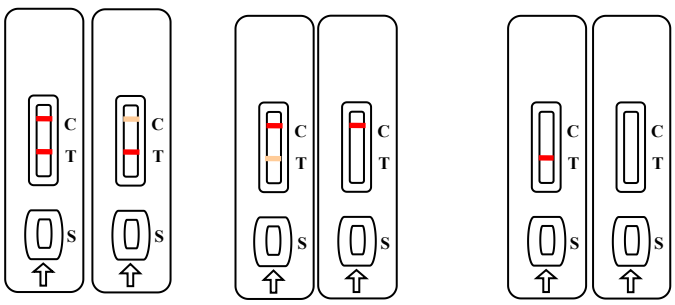
(4) The supernatant is the liquid to be tested

Experiment procedure

1. Before the test, read the manual completely. Before use, restore the sample to be tested in the test card box to room temperature (20-30℃).
2. Take out the test card, the **gold-labelled micro well** and the dropper, and place them horizontally on the table.
3. Take 4 to 5 drops (approximately 120μL) of the sample solution to be tested into the **gold-labelled micro well**, gently pipette for 30 seconds until the purple-red particles at the bottom of the well are completely dissolved, and incubate at room temperature for 2 min.
4. After gently pipetting for 10 s, draw the red liquid from the **gold-labelled micro well** and drop it all into the sample hole of the test card.
5. Incubate for 5 to 8 min 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 ZEN in the sample is lower than detection limit or the sample doesn't contain ZEN.
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 ZEN 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