Chlorpyrifos Lateral Flow Assay Kit

Catalog No: E-FS-C154

20T

Version Number:	V1.0
Replace version:	/
Revision Date:	2026.04.13

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 product is used for the rapid detection of chlorpyrifos pesticide residues in vegetables or fruits, featuring simple operation and short detection time.

Technical indicator

Detection limit: Vegetables; Fruits--- 0.02 mg/kg (ppm).

Kits components

Item	Specifications
Detection Card	20 T/kit
Gold-labelled micro well	20 T
Diluent	2 vials
Disposable Dropper	1 packet
Manual	1 copy

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

Other materials required but not supplied

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

Micropipette: 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 Do not use product out of date or in a broken aluminum foil.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. This test card is for single use only, do not reuse.
3. Avoid of contacting the whitemembrane at the middle of the sample well. Avoid direct sunlight and direct fan blowing during testing. Knives used for sample preparation must be cleaned before use to prevent cross-contamination.
4. The disposable dropper cannot be mixing to avoid the cross-contaminant.
5. Do not use water or other liquids as a negative control for detection.
6. 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. Use the sample within 30 min after preparation, if the time is too long, reprocess the sample before testing. Too much or too little sample volume will affect the color development. Please strictly follow the instructions.
7. **Each reagent is optimized for use in the E-FS-C154. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C154 with different lot numbers.**
8. The reagents involved in this product are safe and reliable, and do not contain carcinogenic, highly toxic, flammable, explosive, or highly corrosive reagents.
9. 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**.**

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. Sample pretreatment procedure:

2.1 Pretreatment of vegetables, fruits sample:

(1) Cut the sample into pieces smaller than 1 cm^3.

(2) Weigh 2±0.05 g of sample into 50 mL centrifuge tube, add 5 mL of **Diluent**, seal the bottle tightly with the stopper, oscillate vigorously for 2 min in centrifuge tube. Let stand for 1 min to obtain the sample solution.

(3) Dilute the sample solution with **Diluent** at different ratios to prepare the test solution. (Refer to the table below for specific dilution ratios.).

Note: Detection limit: 0.02 mg/kg (ppm)

Before detection, users need to perform dilution operations on various types of test samples. The dilution list is as follows:

Sample Type	**Dilution Ratio (μL)** (Sample Solution + Diluent)
Vegetables: Cabbage, spinach, chives, cucumber, wax gourd, bitter melon, loofah, zucchini, pak choi, Chinese cabbage, cowpea, common Chinese cabbage, green beans, white radish, carrot, stem lettuce, cauliflower	No dilution
Vegetables: Garlic	100 + 300
Vegetables: Celery, asparagus, crown daisy	100 + 100
Fruits: Strawberry	20 + 280
Fruits: Plum, grape	20 + 480
Fruits: Mandarin orange, tangerine, fingered citron, kumquat, apple, pear, hawthorn, loquat, pomelo, yueju, fresh wolfberry, litchi, longan	20 + 980
Fruits: Orange, lemon, pomelo, kiwifruit, banana	20 + 1980
Fruits: Peach, apricot	20 + 2980

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 120 μL of the prepared test solution to the **gold-labelled micro well**, whip the purple residual for 30 s until it is completely dissolved (Avoid foaming), Incubate at room temperature for 2 min.
3. Gently blow and beat with a dropper for 10 s, remove all the liquid of the **gold-labelled micro well** to the sample well (S).
4. Incubate for 5 to 8 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 chlorpyrifos in the sample is lower than detection limit or the sample doesn't contain chlorpyrifos.
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 chlorpyrifos 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.