# QNs (Quinolones) Lateral Flow Assay Kit

Catalog No: E-FS-C128

20T/40T/80T

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|---|---|
| **Version Number:** | V1.4 |
| **Replace version:** | V1.3 |
| **Revision Date:** | 2026.10.14 |

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.

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Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.

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## Test principle

This kit uses the principle of Immunochromatography assay for the qualitative detection. It can detect QNs (Quinolones) in tissue, aquatic products samples. After adding the sample solution into the sample well of detection card, QNs of the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with QNs conjugate on the cellulose membrane. When the concentration of QNs 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 QNs in the sample solution is less than the detection limit, the detect line show color (shows equal or darker color than control line) and the result is negative.

## Technical indicator

**Detection limit of quinolones:**

| Name | Detection limit (Method 1) (ppb) | Detection limit (Method 2) (ppb) | Detection limit (Method 3) (ppb) | Detection limit (Method 4) (ppb) | Detection limit (Method 5) (ppb) |
|---|---|---|---|---|---|
| Norfloxacin | 7 | 15 | 35 | 50 | 70 |
| Enrofloxacin | 8 | 20 | 40 | 60 | 80 |
| Danofloxacin | 7 | 15 | 35 | 50 | 70 |
| Levofloxacin | 8 | 20 | 40 | 60 | 80 |
| Ofloxacin | 10 | 25 | 50 | 75 | 100 |
| Ciprofloxacin | 8 | 20 | 40 | 60 | 80 |
| Lomefloxacin | 9 | 25 | 45 | 65 | 90 |
| Pefloxacin | 8 | 20 | 40 | 60 | 80 |
| Difloxacin | 10 | 25 | 50 | 75 | 100 |
| Marbofloxacin | 10 | 25 | 50 | 75 | 100 |
| Enoxacin | 9 | 25 | 45 | 65 | 90 |
| Flumequine | 8 | 20 | 40 | 60 | 80 |

## Kits components

| Item | Specifications |
|---|---|
| Detection Card (with disposable dropper) | 20/40/80 T/kit |
| Sample Diluent | 2/4/8 vials |
| 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, Oscillators, Centrifuge, Graduated pipette, Balance (sensibility 0.01), 10mL centrifuge tube.

**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. **Each reagent is optimized for use in the E-FS-C128. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-FS-C128 with different lot number**
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.

## 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 (25℃) 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:**

**3.1 pretreatment of tissues (pork, beef, mutton, chicken, duck, pork fat, etc.) and aquatic products (grass carp, crucian carp, common carp, snakehead, sea bass, catfish, tilapia, bullfrog, freshwater shrimp, razor clam, clam, oyster, etc.) sample:**

(1) Remove the skin and fat of fish, shrimp and livestock, homogenize with homogenizer.

(2) Weigh 1±0.05 g of homogenate sample into 10 mL centrifuge tube. Add 5 mL of **Sample Diluent**, oscillate for 1 min, and mix fully. Centrifuge at 4000 r/min at room temperature for 5 min.

(3) **Method 1:** The supernatant is the test solution.

**Method 2:** Transfer 100 µL of the supernatant into a 1.5 mL centrifuge tube, add 200 µL of **Sample Diluent**, mix well and set aside for testing.

**Method 3:** Transfer 100 µL of the supernatant into a 1.5 mL centrifuge tube, add 300 µL of **Sample Diluent**, mix well and set aside for testing.

**Method 4:** Transfer 100 µL of the supernatant into a 1.5 mL centrifuge tube, add 400 µL of **Sample Diluent**, mix well and set aside for testing.

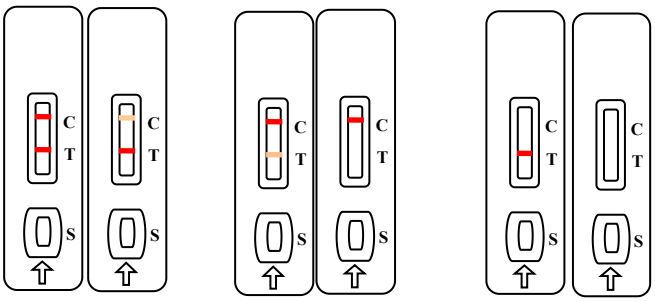
**Method 5:** Transfer 100 µL of the supernatant into a 1.5 mL centrifuge tube, add 500 µL of **Sample Diluent**, mix well and set aside for testing.

## 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 clear sample with the matching disposable dropper, add 3 drops (about 100 µL) of sample to the sample well (S) vertically and slowly (Avoid foaming).
3. 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 QNs in the sample is lower than detection limit or the sample doesn't contain QNs.
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 QNs 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.




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