

7th Edition, revised in April, 2017

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

QNs(Fluoroquinolones) Rapid Test Kit

Catalog No: E-FS-C027

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 QNs(Fluoroquinolones)in samples, such as honey, tissue (fish, prawn, crab, meat of livestock and entrails),etc. After adding the sample solution into the sample well of detect 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 reaction (or the color is lighter than the 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 shows purple (the color is equal or darker than the control line) and the result is negative.

Technical indicator

Detection limit:

Name	Detection limit (ppb)
Enrofloxacin	0.5
Norfloxacin	0.5
Ciprofloxacin	0.5
Flumequine	1
Danofloxacin	1
Peflacine	1
Enoxacin	1
Oxolinic acid	2.5
Ofloxacin (racemic)	1
Levofloxacin	10

Kits components

Item	Specifications
Detect card	50T/kit
Sample reconstituted solution	1 vial
Manual	1 copy

Other supplies required

Instruments:Homogenizer, Nitrogen blow-dry device Oscillators, Centrifuge, Graduated pipette, Balance(sensibility 0.01g).

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

Reagents: Methylene chloride, 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. Sample pretreatment of animal tissue and honey:

- (1) Weigh 4±0.05g of homogenized sample into 50 mL EP tube. Add 4 mL deionized water, 8 mL methylene chloride, oscillateon a vortex mixer for 5min. Centrifuge at 4000r/min for 5min.
- (2) Take 4 mL of lower liquid (methylene chloride), blow-dry in nitrogen or by blow drier at 50-60 ℃. Dissolve the dry residual with 0.5 mL reconstituted solution and 1 mL n-hexane. Oscillate fully.
- (3) Centrifuge at 4000r/min for 5min,take the lower liquid for analysis.

Experiment procedure

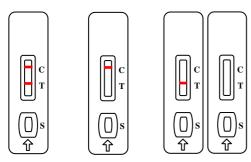
- 1. Tear the aluminum foil bag of the detect card and take out the detect card, and put it on a smooth, clean table.
- 2. Take the prepared clear sample supernatant with the matching straw, add 2-3 drops (about $60\mu L$) of sample to the sample well (S) vertically and slowly.
- 3. Keep the detect card 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. It indicates the content of QNs in the sample is lower than detection limit or the sample doesn't contain QNs.

Positive: only the control line region (C) shows a purple line in the observation well. It indicates the content of QNs in the sample is higher than detection limit.

Invalid: the control line region (C) does not show a purple line in the observation well. It indicates operation process is wrong or the test card is invalid.



Negative Positive Invalid

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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 $2-30^{\circ}$ C with dry condition.

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