

Instructions for Use

Version: 1.0.1
Revision date: 7-Aug-24

Quinolones Rapid Test Kit

Catalog No.: abx092065

Size: 20 tests / 50 tests / 80 tests

Storage: Store all reagents at 2-30°C. Keep dry.

Application: For qualitative detection of Quinolones in muscle tissue, honey, egg, and milk samples.

Detection Limit: Muscle – 0.5 ppb (ng/ml); Honey – 0.5 ppb; Egg – 0.5 ppb; Milk – 1 ppb

Introduction and assay principle

Abbexa's Quinolones Rapid Test Kit is based on the gold immuno-chromatography assay (GICA) principle. Any Quinolones present in the sample combine with the colloidal gold particle-labelled anti-Quinolones antibody in the sample well, and the complex diffuses to the test area. Quinolones in the sample compete with Quinolones in the test area for the antibody binding. When the concentration of Quinolones in the sample is more than the detection limit, there is no color change in the detection line and the result is positive. When the concentration of Quinolones in the sample solution is less than the detection limit, there is a color change in the detection line and the result is negative.

Kit Components

- Test cassettes with pipettes
- Reconstitution Buffer

Material Required But Not Provided

- High-precision pipette and sterile pipette tips
- Timer
- Homogenizer
- Orbital shaker
- High precision balance (sensitivity 0.01 g)
- Deionized water
- Acetic acid (CH₃COOH)

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Reagent preparation

- **Acetic acid:** Dilute 0.1 ml Acetic Acid with 99.9 ml of deionized water and mix thoroughly.

Sample preparation

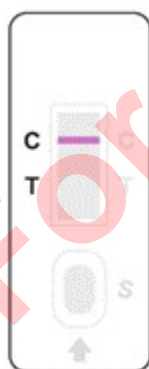
- **Muscle/Honey/Egg:** Remove fat (muscle tissue samples only) and homogenize. Add 1 g of sample to a 15 ml centrifuge tube and add 1 ml of prepared Acetic acid solution. Shake gently for 5 minutes, then centrifuge at 4000 × g for 5 minutes at room temperature. Transfer 0.1 ml of supernatant to a fresh tube, then add 0.2 ml of Reconstitution Buffer and mix thoroughly.
- **Milk:** Dilute milk with deionized water to a 1:1 ratio and mix thoroughly.

Assay procedure

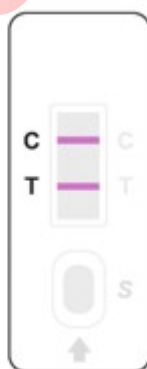
1. Take a test cassette and lay it flat on a clean table. Using the provided pipette, slowly and vertically add 2-3 drops (approximately 60 µl) of prepared sample to the sample well on the test cassette. Avoid foaming.
2. Leave at room temperature for 8-10 minutes, then analyze the result.

Results analysis

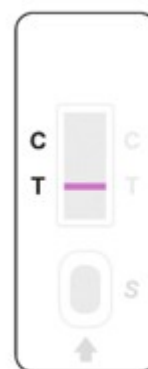
- **Positive result:** A colored line is observed in the control (C) section but not the test (T) section.
- **Negative result:** A colored line is observed in both the control (C) section and the test (T) section.
- **Invalid result:** No colored line is observed in the control (C) section.



Positive



Negative



Invalid



Invalid

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Notes

1. The test cassettes should be brought to room temperature before use.
2. After opening the aluminum foil, use the test cassette as soon as possible.
3. Samples should be clear with no visible particles, turbidity or bacterial pollution.
4. Do not mix or re-use the disposable pipettes to avoid cross-contamination.
5. Do not use water, PBS, or similar solutions as the negative control.
6. Avoid touching the cassette membrane through the sample well or test result window.
7. Detection limits for Quinolones types: Enrofloxacin – 0.5 ppb; Norfloxacin – 0.5 ppb; Ciprofloxacin – 0.5 ppb; Flumequine – 1 ppb; Danofloxacin – 1 ppb; Peflaxine – 1 ppb; Enoxacin – 1 ppb; Oxolinic acid – 2.5 ppb; Ofloxacin (racemic modification) – 1 ppb; Levofloxacin – 10 ppb.
8. This kit is for qualitative detection of Quinolones in muscle tissue, honey, egg, and milk samples. For other sample types, a preliminary experiment is recommended to determine compatibility with this kit. Positive samples can be tested with another method (e.g. HPLC, LC/MS) for quantitative results.
9. This kit is for research use only and the results are for reference only. It is recommended to use this kit in conjunction with another detection method.
10. All waste should be disposed of appropriately. Please note that you may need to follow special waste disposal procedures for infectious samples. Please check local disposal regulations.

For Reference Only