# Furazolidone Metabolite (AOZ) Rapid Test Kit

**Catalog No.:** abx092036

**Size:** 20 tests / 50 tests / 80 tests

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

**Application:** For qualitative detection of Furazolidone Metabolite (AOZ) in samples such as honey, muscle, and liver.

**Introduction and Assay Principle**

Abbexa's Furazolidone Metabolite Rapid Test Kit is based on the gold immuno-chromatography assay (GICA) principle. Any Furazolidone Metabolite (AOZ) present in the samples combines with the colloidal gold particle-labelled AOZ antibody, preventing the gold particle-labelled AOZ antibody from binding to the AOZ conjugate at the detection line. When the concentration of AOZ 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 AOZ in the sample 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 Disposable Pipette
- Reconstitution Buffer
- Derivatization Reagent

**Reagents Required but not Provided**

- Dipotassium Hydrogen Phosphate Trihydrate ($K_2HPO_4 \cdot 3H_2O$)
- Ethyl acetate
- Sodium hydroxide (NaOH)
- n-Hexane
- Concentrated Hydrochloric Acid (HCl)

**Material Required But Not Provided**

- High-precision pipette and sterile pipette tips
- Timer
- Homogenizer
- Nitrogen Evaporator
- Water Bath
- Centrifuge
- Vortex Mixer
- Balance (sensibility 0.01g)



## A. Reagent Preparation

- **0.5 M Dipotassium Phosphate Solution:** Dissolve 11.4 g $K_2HPO_4 \cdot 3H_2O$ in 100 ml Deionised Water. Mix thoroughly.
- **1 M Hydrochloric Acid Solution:** Dilute 8.6 ml Concentrated Hydrochloric Acid with 100 ml Deionised Water. Mix thoroughly.
- **1 M Sodium Hydroxide Solution:** Dissolve 4 g Sodium Hydroxide in 100 ml Deionised Water. Mix thoroughly.

## B. Sample preparation

**Honey, Muscle, and Liver:**

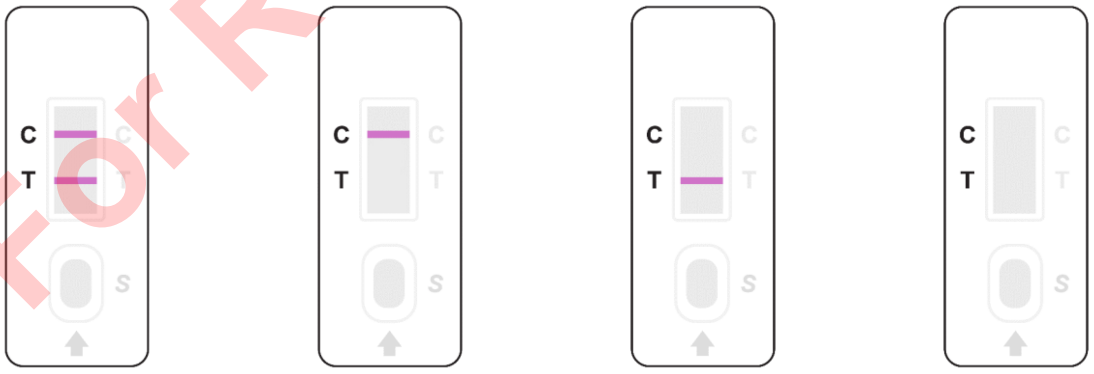
1. Remove any fat from the sample (except for honey) and homogenize.
2. Weight 2 ± 0.05 g of homogenate into a centrifuge tube and add 4 ml of Deionized Water, 0.5 ml of 1 M Hydrochloric Acid solution and 600 µL of Derivatization Reagent. Vortex for 5 mins.
3. Incubate sample for 30 mins in a water bath at 65 °C.
4. Add 1 ml of 0.5 M Dipotassium Phosphate solution, 0.4 ml of 1 M Sodium Hydroxide solution, and 5 ml of Ethyl Acetate to the sample and vortex for 5 mins.
5. Centrifuge at 4000 r/min at room temperature for 5 mins.
6. Take 2.5 ml of the supernatant and dry under a nitrogen evaporator or in a water bath at 50 – 65 °C.
7. Reconstitute with 1 ml n-Hexane and 0.5 ml of Reconstitution Buffer, vortex mix for 30 secs, then centrifuge at room temperature for 5 mins.
8. Discard the upper n-Hexane layer and use the lower liquid for analysis.

## C. 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 sample to the sample well on the test cassette. Avoid foaming.
2. Leave at room temperature for 8 – 10 mins, then analyze the result.

## D. 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.




**Negative** **Positive** **Invalid** **Invalid**

### 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. Avoid touching the cassette membrane through the sample well or test result window.
6. This kit is for qualitative detection of Furazolidone Metabolite in honey, muscle, and liver 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.
7. This kit is for research use only and the results are for reference only.
8. 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.
9. Reagents are optimized for use with abx092036. Do not substitute reagents from other kits, and do not combine abx092036 reagents with different lot numbers.

### Technical Support

For troubleshooting and technical assistance, please contact us at support@abbexa.com.