

Instructions for Use

Version: 1.0.1
Revision date: 30-Jul-25

Sulfamethazine (SM2) Rapid Test Kit

Catalog No.: abx092286

Size: 20 tests / 50 tests / 80 tests

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

Application: For qualitative detection of Sulfamethazine (SM2) in pork, beef, mutton, chicken, duck, fish and shrimp muscle samples.

Detection limit: 100 ppb

Introduction and assay principle

Abbexa's Sulfamethazine (SM2) Rapid Test Kit is based on the gold immuno-chromatography assay (GICA) principle. Any Sulfamethazine (SM2) present in the samples combines with the colloidal gold particle-labelled anti-Sulfamethazine (SM2) antibody in the sample well. Sulfamethazine (SM2) in samples competes with Sulfamethazine (SM2) antigen in the detection line, preventing capture of the gold-labelled complex. When the concentration of Sulfamethazine (SM2) 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 Sulfamethazine (SM2) 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
- Sample Diluent

Material Required But Not Provided

- Centrifuge and centrifuge tubes
- High precision pipette with sterile pipette tips
- Scales
- Mechanical homogenizer

Sample preparation

1. Ensure sample is at room temperature before use.
2. Remove the skin and fat from the tissue, and homogenize.
3. Weigh 1 ± 0.05 g of the homogenized sample and add to a 10 ml centrifuge tube.
4. Add 2 ml of the Sample Diluent and shake vigorously for 3 minutes.
5. Centrifuge the sample at 4000 g at room temperature for 5 minutes.
6. Use the supernatant for analysis.

Assay procedure

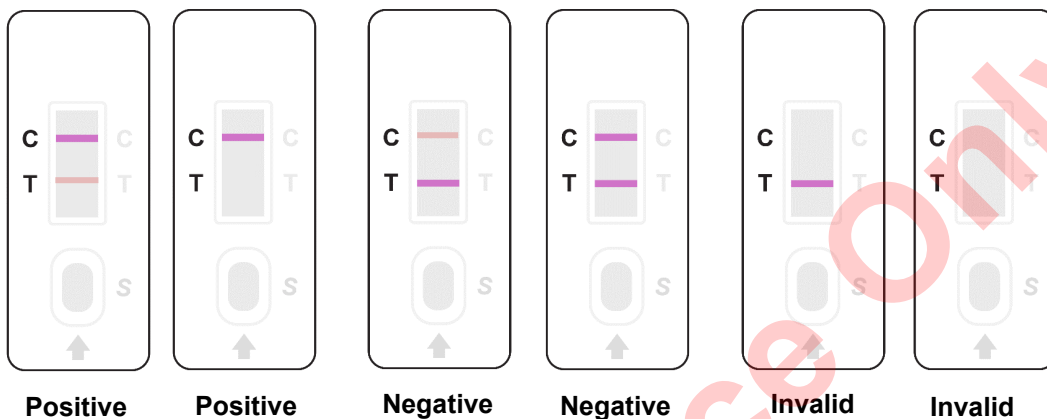
1. Take a Test Cassette and lay it flat on a clean table.
2. Vertically add 100 μ l (about 3 drops) to the sample (S) well.
3. Leave at room temperature for 5–8 minutes, then analyze the result immediately.

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Results analysis

- **Positive result:** A line is observed in the control (C) section but not the test (T) section **or** the test (T) line is lighter than the control (C) line.
- **Negative result:** A line is observed in both the control (C) section and the test (T) section. The control (C) line should be equal to or darker in color than the test (T) line.
- **Invalid result:** No line is observed in the control (C) section.



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 a negative control.
6. Avoid touching the cassette membrane through the sample well or test result window.
7. This kit is for qualitative detection of Sulfamethazine (SM2) in urine 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.
8. 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.
9. 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.

Technical Support

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