## **Instructions for Use**

Version: 1.0.1

Revision date: 30-Jul-25



# Sulfadiazine (SD) Rapid Test Kit

Catalog No.: abx092287

Size: 20 tests / 50 tests / 80 tests

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

Application: For qualitative detection of Sulfadiazine (SD) in pork, beef, mutton, chicken, duck, fish and shrimp

muscle samples.

Detection limit: 100 ppb

#### Introduction and assay principle

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

#### Sample preparation

- 1. Remove the skin and fat from the tissue, and homogenize.
- 2. Weigh  $1 \pm 0.05$  g of the homogenized sample and add to a 10 ml centrifuge tube.
- 3. Add 5 ml of the Sample Diluent and shake vigorously for 3 minutes.
- 4. Centrifuge the sample at 4000 g at room temperature for 5 minutes.
- 5. Add 50 µl of the supernatant into a 1.5 ml centrifuge tube, add 650 µl Sample Diluent and mix well.

### Assay procedure

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

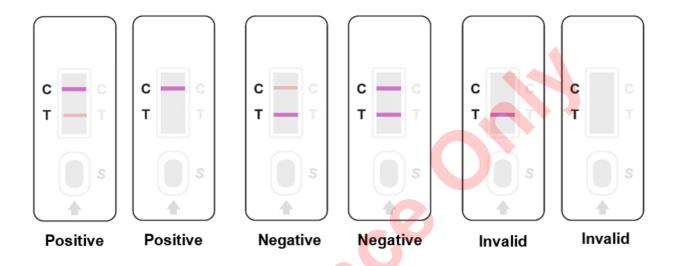
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### Results analysis

- Positive result: A 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.



#### **Notes**

- 1. The Test Cassettes and samples should be brought to room temperature before use.
- 2. After opening the aluminum foil, use the test cassette as soon as possible.
- 3. Do not mix or re-use the disposable pipettes to avoid cross-contamination.
- 4. Avoid touching the cassette membrane through the sample well or test result window.
- 5. This kit is for qualitative detection of Sulfadiazine (SD) in in pork, beef, mutton, chicken, duck, fish and shrimp muscle 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.
- 6. 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.
- 7. 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.