T-2 Toxin (T2) Rapid Test Kit

Catalog No.: abx092111

Size: 20 tests / 50 tests / 80 tests

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

Detection Limit: 10 ppb

Application: For qualitative detection of T-2 Toxin (T2) in grain and feed samples.

Introduction and assay principle

Abbexa's T-2 Toxin (T2) Rapid Test Kit is a qualitative lateral flow immunochromatographic assay for the detection of T-2 Toxin (T2) in grain and feed samples. The cassette contains a colloidal gold conjugated antibody against T-2 Toxin, which combines with any T-2 Toxin present in the samples, preventing the antibody binding with the T-2 Toxin coated on the test region of the cassette. The test (T) line will not show or will be fainter than the control (C) line if the concentration of T-2 toxin in the sample is higher than the detection limit. This indicates a positive test. A colored band develops in the test region if the concentration of T-2 Toxin (T2) in the sample is lower than the detection limit, which indicates a negative test. The presence of a line in the control (C) region confirms if the test has been successful.

Kit components

- Test Cassettes (packaged in foil pouches containing disposable pipettes)
- Reconstitution Buffer

Materials required but not provided

- Mechanical homogenizer
- Centrifuge and centrifuge tubes
- High precision pipette with tips
- Scales
- Nitrogen evaporator or water bath
- Vortex mixer
- Ethyl acetate

Sample preparation

Grain and Feed:

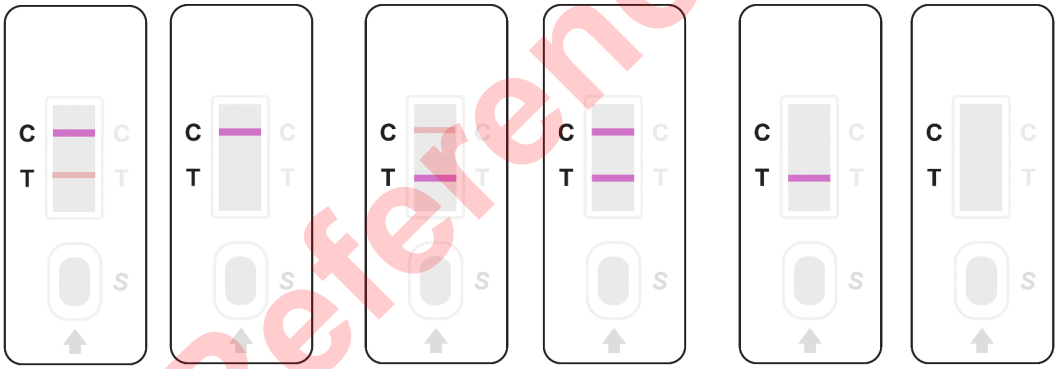
1. Homogenize the sample and measure 2 ± 0.5 g into a 15 ml centrifuge tube.
2. Add 3 ml ethyl acetate and vortex mix for 3 minutes.
3. Centrifuge at 4000 rpm for 3 minutes at room temperature.
4. Take 1 ml of the supernatant and add to a 5 ml centrifuge tube.
5. Leave in a nitrogen evaporator/water bath at 50–60°C. A yellow layer should separate at the bottom of the tube.
6. Dissolve the residual with 0.3 ml of Reconstitution Buffer, and vortex mix for 30 seconds.

Assay procedure

1. Take a Test Cassette and lay it flat on a clean table. Using the provided pipette, add 4–5 drops (approximately 120 µl) of prepared sample to the sample well on the test cassette. Leave at room temperature for 3 minutes.
2. Agitate the purple residual on the sample well of the cassette with a pipette until it has completely dissolved (avoid foaming) and leave at room temperature for 2 minutes.
3. Remove the liquid from the sample well and leave at room temperature for 5–8 minutes. Analyze the result immediately.

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. For samples that are not grain or feed, a preliminary experiment is recommended to determine the suitability of this kit with those samples.
6. Results should only be read within the 5–8 minute timeframe.

Technical Support

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