

## Product Manual

### Aflatoxin Rapid Test Kit (Colloidal gold)

**Catalog No.:** abx092054

**Revision date:** 4-Sep-19

**Size:** 50 tests

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

**Detection Limit:** 5 ppb (Grain/Feed/Oil)

**Sensitivity:** 1 ppb (ng/ml)

**Application:** For qualitative detection of total aflatoxin in food samples.

#### Introduction and assay principle

Abbexa's Aflatoxin Rapid Test Kit is based on the gold immuno-chromatography assay (GICA) principle. Any Aflatoxin present in the samples combine with the colloidal gold conjugated antibody, producing a purple color within 10 minutes.

#### Kit components

1. Detection cards: 50
2. Disposable pipettes: 50

#### Materials required but not provided

1. Deionized water
2. Methanol
3. N-hexane

#### Reagent preparation

Sample extraction solution (70% methanol): Add methanol to deionized water at a ratio of 7:3. Determine the volume of methanol required for 1 g of sample according to the table below.

Detection limit required	5 ppb	10 ppb	20 ppb	50 ppb
Volume of 70% methanol	2 ml	4 ml	8 ml	20 ml

#### Sample preparation

1. **Grain and Feed:** Weigh 1 g of crushed sample and add to a centrifuge tube. Add 70% methanol according to the table above. Vortex for 5 minutes, then centrifuge at 4000 RPM for 5 minutes at room temperature. Take 0.1 ml of supernatant and add 0.15 ml of deionized water. Mix thoroughly.
2. **Oil:** Weigh 1 g of crushed sample and add to a centrifuge tube. Add 70% methanol according to the table above. Add 8 ml of N-hexane, then vortex for 5 minutes. Centrifuge at 4000 RPM for 10 minutes at room temperature. Discard the supernatant and take 0.1 ml of lower layer. Add 0.15 ml of deionized water and mix thoroughly.

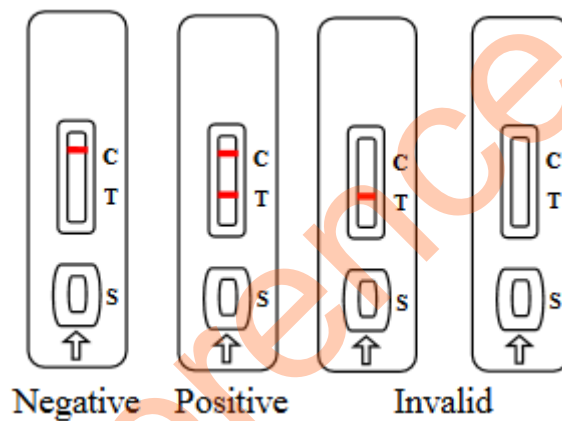
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### Assay procedure

1. Take a detection card and lay it flat on a clean table. Using the provided pipette, add 2-3 drops (approximately 60 µl) of prepared sample to the sample well on the detection card. Avoid touching the membrane in the middle of the sample well.
2. Leave at room temperature for 8-10 min, then analyze the result.

### Results analysis

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



### Notes

1. The detection cards should be brought to room temperature before use.
2. A positive result indicates that the sample is positive for Aflatoxin, a negative result indicates that the sample is negative for Aflatoxin antibody.
3. The purple line should be visible for at least 10 minutes for the result to be valid.
4. Samples should be clear with no visible particles, turbidity or bacterial pollution.