

Aflatoxin B1 Rapid Test (Feed)

1. INTENDED USE

Aflatoxin B1 Rapid Test is a competitive immunoassay for screening of the presence of Aflatoxin B1 residue in feed sample.

Cut-off: 5 ppb base

Assay Time: 5 - 10 min

Sample: Feed extraction

2. PRINCIPLE OF THE ASSAY

Aflatoxin B1 Rapid Test is based on competitive lateral flow immunochromatographic assay. The Aflatoxin B1 conjugate in the test zone will capture the immuno-gold (colloid gold-AFB1 antibody conjugate), when there is very little dissociative AFB1 in the extraction. A visible red test band indicates a negative result when the control band (C zone) shows that the card is valid. The test band (T zone) will be not visible if AFB1 is present in concentration of the cut-off value and above which explains a positive result.

3. KIT COMPONENT

- 10×foil pouches each contains one AFB1 cassette with a pipette and a desiccant
- 10×centrifugal tubes (each containing 0.3 ml of assay diluents)
- 10×sampling tube (5 ml)
- Products Manual

4. TEST PROCEDURE

- Grind a representative sample to the particle size of fine instant coffee (50% passes through a 20 mesh screen). Weigh out 2.0 g ground portion of the sample into the sampling tube (5 ml).
- Add 3 ml of 55%(v/v) methanol solution or ethyl acetate into the sampling tube. Shake sufficiently for 5 minutes.
- Standing for a while. According to the required MRLs in below table, specify the volume of the clean supernatant liquid into the assay diluents tube. (REF: Table)

Cut-off (ppb)	5	10	20	30	50
Supernatant (μL)	300	100	50	30	15

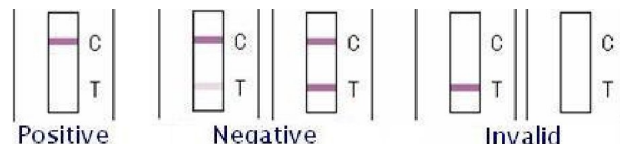
- Take out the cassette from the foil pouch and place it horizontally.
- Suck the liquid and drop 3 drops into the assay sample hole "S".
- Interpret the result in 5-10 minutes. Result after 10 minutes is considered as invalid.

5. INTERPRETATION OF RESULTS

Positive: Only one clear band in C zone indicates a positive result. Positive shows that the concentration of Aflatoxin B1 is at or above 5 ppb in the samples.

Negative: The presence of both bands in C zone and T zone.

Invalid: No band appears in C zone.



6. STORAGE

The kit can be stored at room temperature (2-30°C). The test kit is stable through the expiration date (18 months) marked on the foil pouch. **DO NOT FREEZE.** Do not store the test kit in direct sunlight.

7. PRECAUTIONS

- For best results, please strictly adhere to these instructions.
- All reagents must be at room temperature before running the assay.
- Do not remove test cassette from its pouch until immediately before use.
- Do not reuse the test kit.
- Do not use the test beyond its expiration date marked on the foil pouch.
- The components in this kit have been quality control tested as standard batch unit. Do not mix components from different lot numbers.

8. LIMITATION

Aflatoxin B1 Rapid Test is an useful tool offering a rapid screening in field inspection, exceeding with its convenience. It provides a rapid method to detect the Aflatoxin B1 above 5 ppb in feed samples in totally 10 minutes only. If you want a quantitative result, please adopt other method such as ELISA/ HPLC in practice.