Aflatoxin Lateral Flow Kit

Catalog Number: AU2051

For Research Use Only. Not for use in Diagnostic Procedures.

1. Intended Use

For the screening of Aflatoxin at or above 2 ppb in grain samples.

2. Introduction

Attogene' s Aflatoxin B1 Lateral Flow Kit can be used to detect Aflatoxin in extracted samples.

Format: - Run Time: 15 Minutes

3. Kit Contents

Component Name	Volume	Storage
Aflatoxin B1 Cassette	10 each	RT
Sample Extraction/Running Buffer	50 mL	RT
Sample Extraction Tube	10 each	RT
200ul fixed volume pipette	10 each	RT

4. Storage and Stability

- The kit should be stored at room temperature until ready to use.
- The test must remain in the sealed pouch until use.

5. Required Materials Not Supplied

- Timer - For timing use
- Marker – for labeling

6. Extraction

- Collect the sample using the Sample Collection Bottle
- Remove 1gram of ground sample and add into the extraction tube
- Apply 2ml of sample extraction/running buffer.
- Vortex or shake for 3 minutes.
- Let the solution settle for 2 minutes.
- Use 200ul for the assay as described below.

7. Precautions

- The Aflatoxin B1 Lateral Flow Kit provides preliminary qualitative test results. Using a lateral flow reader can add quantitative determination and numerical readouts. Instrumental analysis such as HPLC can also be used to obtain a confirmed quantitative analytical result.
- Prior to use, ensure that the product has not expired by verifying that the date of use is prior to the expiration date on the label.
- The test cassettes are individually packaged in a foil pouch with a desiccant.
- Avoid cross-contamination of samples by using a new bottle for each sample.
- Use only Aflatoxin Lateral Flow Kit reagents from one kit lot, as they have been adjusted in combination.
- It is good laboratory practice to use positive and negative controls to ensure proper test performance. Samples which do not contain Capsaicin (negative controls) as well as samples containing known quantities of Aflatoxin (positive controls) may be analyzed with each lot of test strips to provide a reference for line intensity to be expected.

8. Procedure

- Using gloves, remove each lateral flow cassette from the foil pouch. A marker may be used to write on the plastic cassette if desired.

Perform A and B for each sample evaluation starting with the negative control first.

A. Negative Control (perform first):

- Transfer 200ul of the Negative Control (Sample Extraction/Running Buffer) directly into the sample port of the cassette with the 200ul fixed volume pipette.
- Set a timer for 15 minutes.

B. Sample:

- Transfer 200ul of the extracted sample directly into the sample port of the cassette.
- Set a timer for 15 minutes.
- Read the cassette in a lateral flow reader or by eye

9. Interpretation of Results

For samples prepared as described above, screening concentrations are determined by comparison

of the intensity of the test line to the intensity of the control line on parallel test strips. Although control line intensity may vary, a visible control line must be present for results to be considered valid. Test strips with a test line which is darker than or of equal intensity to the test line of the control indicate a result which is below the limit of detection of the test. Test strips with a test line which is lighter than the control strip indicates a result which is $\geq$ 2ppb. Test strips with no test line visible (only the control line is visible) indicates a result which is $\geq$ 20 ppb. Results should be determined within 15 minutes after completion of the strip test procedure. Determination made using strips which have dried for more or less than the required time may be inaccurate, as line intensities may vary with drying time.

To obtain semi-quantitative results in the range of 0 – 20 ppb, solutions of known Aflatoxin B1 concentration (control solutions are not supplied with the kit) may be tested concurrently with samples. Sample test line intensities can then be compared with control solution test line intensities, yielding approximate sample concentrations. Do not use strips run previously to determine semi-quantitative sample concentrations, as test line intensities may vary once strips are completely dry.

10. Additional Analysis

If necessary, positive samples can be confirmed by ELISA, HPLC, or other conventional methods. A lateral flow reader may also be employed to generate numerical readings from the visual result. Contact us if you have any questions.