



# Aflatoxin B1 Precise Test (DTS434)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Size</b>	50T
<b>Intended Use</b>	This kit is used for rapid qualitative analysis of Aflatoxin B1 in grains, feed, oil and peanuts.
<b>Reagents And Materials Provided</b>	<ol style="list-style-type: none"> <li>1. Aflatoxin B1 test strips, 50 copies</li> <li>2. Disposable plastic dropper, 1 piece/bag</li> <li>3. Desiccant, 1 piece/bag</li> <li>4. Disposable gloves, 3 pieces</li> <li>5. Sample diluent, 1 bottle</li> </ol>
<b>Materials Required But Not Supplied</b>	<p>Instruments: balance, centrifuge, nitrogen blower, micropipette, vortex shaker (optional)</p> <p>Equipment: 50ml centrifuge tube, disposable pipette tip, ethyl acetate, n-hexane, etc.</p>
<b>Storage</b>	4-30°C, do not freeze. The kit will be valid in 12 months. The lot number and expired date are printed on the package.
<b>Specimen Collection And Preparation</b>	<p><b>1. Grains (rice, corn):</b></p> <ol style="list-style-type: none"> <li>a. Weigh <math>3\pm0.05</math> g of crushed grains and put them into a 50ml centrifuge tube.</li> <li>b. Add 8ml of ethyl acetate and shake vigorously for 5min.</li> <li>c. Centrifuge at 4000r/min for 5min at room temperature.</li> <li>d. Pipette 3ml of the supernatant into a centrifuge tube. Blow dry under nitrogen or air flow at 56°C.</li> <li>e. According to the required detection limit, add an appropriate amount of sample diluent according to the table below, and redissolve by pipetting repeatedly (pay attention to pipe wall). Aspirate 60µl solution for detection.</li> </ol> <p><b>2. Feed:</b></p> <p><b>Regular feed</b></p> <ol style="list-style-type: none"> <li>a. Weigh <math>3\pm0.05</math> g of crushed feed and put it into a 50ml centrifuge tube.</li> <li>b. Add 8ml of ethyl acetate and shake vigorously for 5min.</li> <li>c. Centrifuge at 4000r/min for 5min at room temperature.</li> <li>d. Pipette 3ml of the supernatant into a centrifuge tube, and dry it under nitrogen or air flow at</li> </ol>

56°C.

e. According to the required detection limit, first add an appropriate amount of n-hexane according to the table below, and blow repeatedly (pay attention to blowing the tube wall). Then add the sample diluent, shake for 20s, let stand for 3min (if the lower layer emulsifies, centrifuge at 4000r/min for 5min at room temperature), absorb 60µl of the lower layer for detection.

#### **DDGS**

a. Weigh 3±0.05 g of crushed feed and put it into a 50ml centrifuge tube.

b. Add 8ml of dichloromethane and shake vigorously for 5min.

c. Centrifuge at 4000r/min for 5min at room temperature.

d. Pipette 3ml of the supernatant into a centrifuge tube. Blow dry under nitrogen or air flow at 56°C.

e. According to the required detection limit, first add an appropriate amount of n-hexane according to the table below, and blow repeatedly (pay attention to blowing the tube wall). Then add the sample diluent, shake for 20s, let stand for 3min (if the lower layer emulsifies, centrifuge at 4000r/min for 5min at room temperature), absorb 60µl of the lower layer for detection.

#### **3. Oil:**

a. Weigh 4.0g oil sample into a 50ml centrifuge tube.

b. Add 3ml pure water and 16ml n-hexane, shake for 3min, suck off the upper n-hexane layer.

c. Add 4ml of ethyl acetate, shake with a stopper for 3 minutes, let stand or centrifuge at 4000r/min for 5 minutes.

d. Pipette 3ml of the supernatant into a centrifuge tube. Blow dry under nitrogen or air flow at 56°C.

e. According to the required detection limit, first add an appropriate amount of n-hexane according to the table below, and blow repeatedly (pay attention to blowing the tube wall). Then add the sample diluent, shake for 20s, let stand for 3mins (if the lower layer emulsifies, centrifuge at 4000r/min for 5min at room temperature), absorb 60µl of the lower layer for detection.

#### **4. Peanuts:**

a. Weigh 3g±0.05g of crushed peanuts into a 50ml centrifuge tube

b. Add 5ml of acetonitrile, shake vigorously for 3min,

c. Centrifuge at 4000r/min for 5min at room temperature,

d. Pipette 3ml of the supernatant into a centrifuge tube. Blow dry under nitrogen or air flow at 56°C.

e. According to the required detection limit, first add an appropriate amount of n-hexane according to the table below, and blow repeatedly (pay attention to blowing the tube wall). Then add the sample diluent, shake for 20s, let stand for 3mins (if the lower layer emulsifies, centrifuge at 4000r/min for 5min at room temperature), absorb 60µl of the lower layer for detection.

---

#### **Assay Procedure**

1. Take bottles needed from the kit package, take out required wells and strips, and make

---

- proper marks. Please use these test strips within 1h. Seal the cap of the bottles.
2. Lay the test card flat. Use a disposable plastic dropper to vertically drop 1-2 drops (or pipette 60µl with a micropipette) of the sample to be tested into the sample hole.
3. Let it stand for 3-5 minutes and observe the result. The result is valid within 10 minutes.

<b>Interpretation Of Results</b>	<p><b>Negative(-):</b> Line T and Line C are both red.</p> <p><b>Positive(+):</b> Line C is red, color of Line T is weaker than Line C or Line T is no color.</p> <p><b>Invalid:</b> Line C has no color, which indicates the strips are invalid. In this case, please read the instructions again, and redo the assay with new strip.</p>
<b>Detection Limit</b>	5.0ng/g(5.0ppb)~50ng/g(50ppb)
<b>Specificity</b>	This product has no cross-reaction with other types of drugs such as chloramphenicol, streptomycin, tetracycline, sulfonamides, and quinolones.
<b>Precautions</b>	<ol style="list-style-type: none"><li>1. Please do the assay following the instruction, don not touch the membrane of the strip.</li><li>2. Please seal the bottle after taking out required strips.</li><li>3. Don' t use the strip and the microwells of different batches.</li><li>4. This strip is used for only once; please do not use it repeatedly.</li><li>5. This kit is only for screening test, positive result should be further confirmed with other method.</li><li>6. The test results of this product are for reference only. For confirmation, please refer to relevant national standard methods.</li></ol>