

## Rapid test kit for Aflatoxin B1

Cat. No.: DTSJZ006

Pkg. Size: 40T

### Intended use

This kit is used for rapid qualitative analysis of aflatoxin B1 in grain and feed.

### Principle of the Test

This kit is based on the specific reaction of antibody-antigen and immunochromatography. Aflatoxin in the sample competes for the antibody with the BSA-linked antigen coated on the membrane of the test strip. Then after a color reaction, the result can be observed.

### Reagents and Materials Provides

1. 8-well strip and 8 test strip in one bottle. 5 bottles / kit.
2. Kit inset
3. Microwell holder, 1 pcs
4. Plastic pipette, 96 pcs

### Sampler preparation

#### 5.1 Grain (Peanut, rice, soybean meal, wheat)

-----Homogenize the sample.

-----Weigh  $5.0 \pm 0.05$ g homogenate into a 50ml polystyrene centrifuge tube.

-----Add 7ml of 80% methanol, seal the cap, vortex for 3min, then centrifuge for separation: 3000g / 5min / ambient temperature.

-----Transfer 100 $\mu$ g/ml of supernate into a 2ml polystyrene centrifuge tube, then add 200 $\mu$ l of aflatoxin B1 diluent, mix completely for assay.

#### 5.2 Feed

-----Homogenize the sample.

-----Weigh  $5.0 \pm 0.05$ g homogenate into a 50ml polystyrene centrifuge tube.

-----Add 15ml of 80% methanol, seal the cap, vortex for 3min, then centrifuge for separation: 3000g / 5min / ambient temperature. The supernate is the sample solution. Dilute the supernate based on the table indicated.

<b>Detection Limit (ppb)</b>	10	20	30	50	100
<b>Supernate + Sample Diluent (μL)</b>	100+200	100+400	100+900	100+1500	50+1500

NOTE: Adjust the pH of sample solution to 7 with the 1mol/L NaOH/HCl if the pH is less than 6 or bigger than 8.

## Assay operation

- (1) Read the instructions carefully before experiment. Bring the test kit and samples to room temperature. Milk samples should be fully liquid without any agglomeration and deposition.
- (2) 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.
- (3) Take 200ul of the test samples into the wells, then repeatedly absorb for 5 times, mix the sample with the reagent in the wells completely. The mixture should be pink, and then start the timer.
- (4) Incubate for 5min at room temperature (25 °C), insert the test strips into the wells with the "**MAX**" end fully dipped in to the mixture.
- (5) Incubate for 5min at room temperature again. Take out the strip; judge the result according to **Results**.

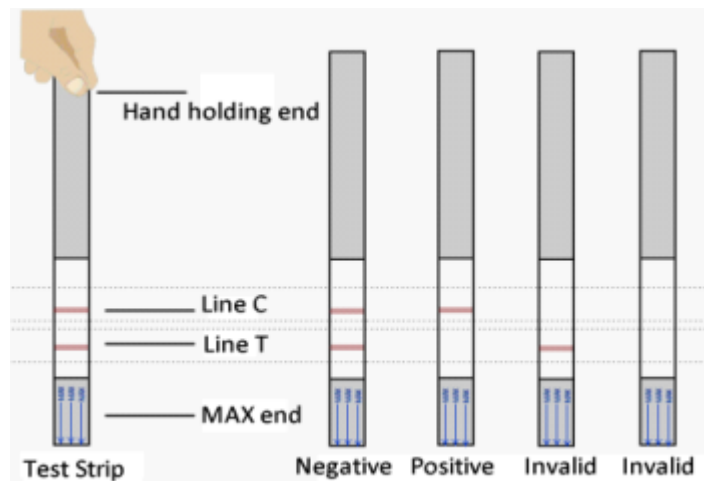
## Results

**Negative (-):** Line T and Line C are both red.

**Positive (+):** Line C is red, line T has no color.

**Invalid:** 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.

**Note:** If the result of the strip needs to be recorded, please cut the foam cushion of the "**MAX**" end, and dry the strip, then keep it as file.



## Detection Limit (LOD)

Grain: 5 μg/kg (ppb)

Feed: 10 μg/kg (ppb)

## Specificity

The product shows negative at the level of 500µg/L of zearalenone, vomitoxin, fumonisins, ochratoxin..

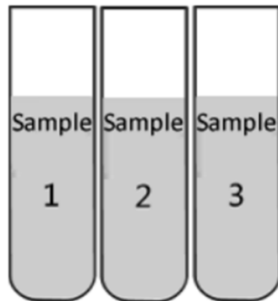
## Storage

2-8 °C in cool dark place, do not freeze. The kit will be valid in 12 months. The lot number and expired date are printed on the package.

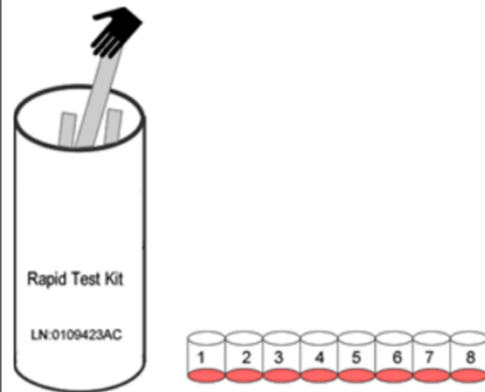
## Notice for Operations

- (1) Please do the assay following the instruction, don not touch the membrane of the strip.
- (2) Please seal the bottle after taking out required strips.
- (3) This strip is used for only once; please do not use it repeatedly.
- (4) This kit is only for screening test, positive result should be further confirmed with other method.

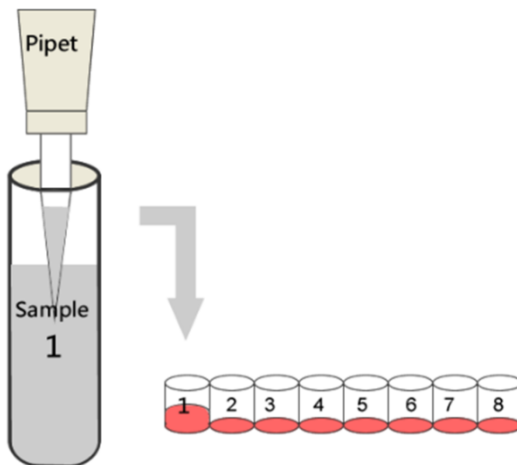
## Assay Steps



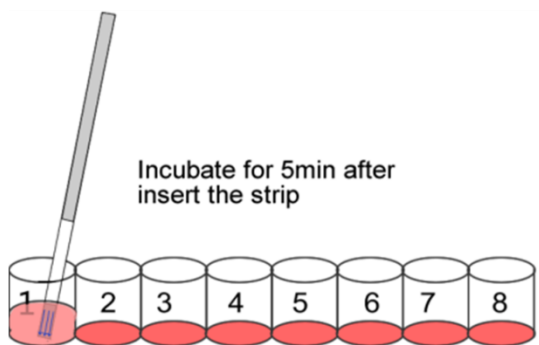
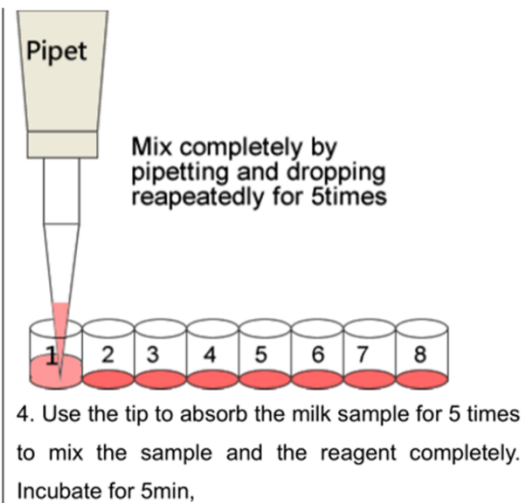
1. Prepare the test samples. Make proper marks, bring them to room temperature.



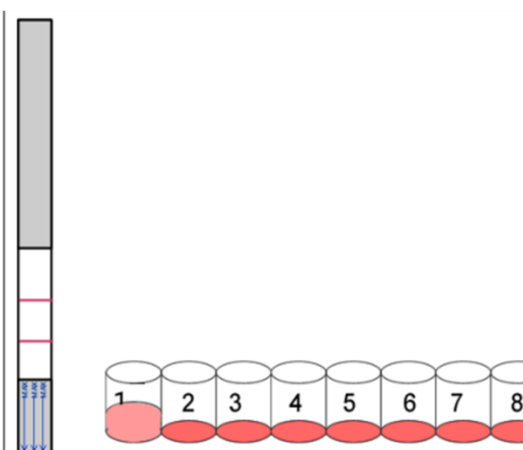
2. Take out required test wells, make proper marks.



3. Take 200µl test sample into the wells,



5. Insert the test strips into the wells with the "MAX" end fully dipped in to the mixture. Incubate for 5min at room temperature.



6. Take out the strip; judge the result according to Result