BIOEASY

Fumonisin B1 Rapid Test Kit for Feed

Order Code: YRF1006-1

Introduction

This rapid test is used for detection of Fumonisin B1 in feed and feed raw materials based on the colloidal gold immunochromatography technology. The whole process includes two parts: sample preparation and detection. It takes about 7-10 min for sample preparation and 6 min for detection.

Application

Applicable for the rapid test of Fumonisin B1 in feed and feed raw materials on-site or in laboratory.

Performance Information

Sensitivity: limits of detection (mg/kg - ppm)

Residue Name	Feed raw materials	Feed products
Fumonisin B1	30	5

Specificity: No cross reaction with 100mg/kg Deoxynivalenol, Zearalenone, Aflatoxin B1, Ochratoxin A etc. Cross-reaction rate with Fumonisin B2 is 20%.

Storage and Shelf Life

Storage: Store at 2-30℃. Do not freeze. Keep away from direct sunlight, moisture and heat.
Shelf Life: 12 months.

Test Kit Components (48 tests/kit)

1. 6 test tubes, each containing 8 white reagent microwells, 8 red reagent microwells and 8 dipsticks.
2. 1 plate holder.
3. 1 instruction manual.

Materials Required but not provided

1. Distilled water or deionized water.
2. 50% Ethanol (Mix 100% Ethanol with same volume of water, recommending to prepare before use. If it was prepared in advance, make sure the container is well-sealed to prevent volatilization. The shelf life of room temperature is 6 months).
3. Pipettes (20-200μL), pipette tips, scale, timer, centrifuge, centrifuge tube (2mL, 50mL), vortex(optional).
4. Incubator (optional), Reader (optional).

Sample Preparation

1. Weigh 5±0.2g homogeneous milled sample and put into 50mL centrifuge tube.
2. Add 6 times volume of 50% Ethanol, which is 30mL, vortex for 2-3 min to mix well*(If vortex is not available, users may shake the tube vigorously up and down for 2-3mins).*
3. Put the solution standing for 3-7 min and get the supernatant.

- **For Feed raw material (Applicable for Distiller's grain protein raw material and sprayed corn husk)**
  4-1: Take 50μL supernatant into 2mL centrifuge tube, input 1200μL distilled water and mix well, this is the **Detection Solution 1**.
  5-1: Take 50μL **Detection Solution 1** into 2mL centrifuge tube, input 1200μL distilled water and mix well, this is the **Detection Solution 2**.
- **For Feed products**
  4-2: Take 20μL supernatant into 2mL centrifuge tube，input 1500μL distilled water and mix well, this is the **Detection Solution 2.**

Test Procedure

1. Take 100μL ultrapure water into white reagent microwell, input 100μL **Detection Solution 2** and mix well by pipetting up and down for 5-10 times.
2. Transfer all the above reagents from the white reagent microwell to red reagent microwell, mix well by pipetting up and down for 5-10 times.
3. Incubate 3 min at room temperature (20-30℃).
4. Insert the dipstick into the microwell after the first incubation.
5. Incubate another 3 min at room temperature.
6. Take out the dipstick from the microwell and remove the sample pad at the lower end and then interpret the result.

Note: If the Room Temperature is below 20℃, please incubate at 40±2℃ by Bioeasy incubator for same time period during the above two incubation steps.

Test Interpretation

Visual Interpretation

1. Check whether the top control line (C line) is present. If there is normal C line, compare the color intensity of test line (T line) and C line and interpret the test based on following chart.
2. If there is no visible C line, the test is judged as invalid. Please retest with a new dipstick.
3. If the color of the control line (C line) is weak and the color is not obvious, but the color of the test line (T line) is normal, it is recommended to use the reader for interpretation .

- If the reader can read the value normally, the result is still judged as negative;
- If the reader fails to read the value normally, it means that the C line does not show color at all and the test result is invalid. It is recommended to repeat the test with a new dipstick.

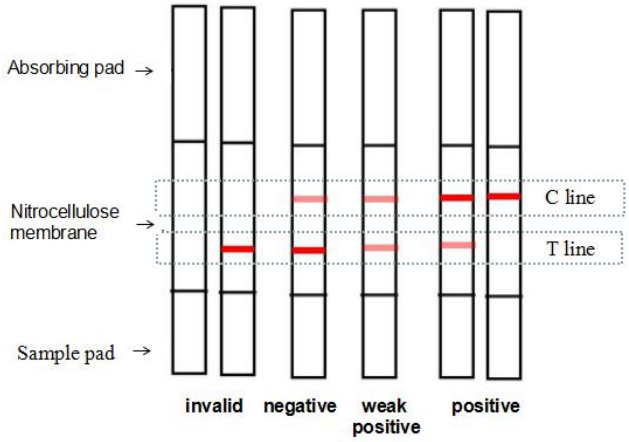
Shenzhen Bioeasy Biotechnology Co., Ltd.
ADD: No. 2-1, 1st Liuxian Street, Xin'an Road, Baoan District, Shenzhen, Guangdong, China，518101 **TEL:** +86-4001111126 /+86-755-27948546 **FAX:**+86-755-27948417 **Email:** info@bioeasy.com **Web:** www.bioeasy.com
V20-02-28

Test Line VS Control Line	Result Interpretation	Result Analysis
T>C	NEGATIVE	The sample contains no Fumonisin B1 or contains Fumonisin B1 at lower level than the detection limits
T=C	WEAK POSITIVE	The sample contains Fumonisin B1 close to the detection limits
T <C or NO T	POSITIVE	The sample contains Fumonisin B1 above the detection limits

Interpretation by Reader

1. Please refer to the reader instruction manual.
2. Negative: R>1.1, Weak positive:0.9≤R≤1.1, Positive: R<0.9.

Interpretation diagram



Precautions

1. It is advisable to use a clean table and wash hands thoroughly and wear gloves before testing to avoid any contamination of the test which is very sensitive to antibacterial substances.
2. As there is low concentration of acid in some of the reagents, please wear gloves for protection purpose.
3. Get the kit from refrigerator and allow the kit warm up to room temperature before testing((15-30℃).
4. Do not mix dipsticks and reagent microwells from different lots. Use dipsticks before they are expired.
5. The tube with microwells and dipsticks should always be well closed after reagents have been taken out. Empty one tube before opening another and try to finish one tube within a week.
6. Use a new pipette tip for every new sample.
7. Hold the dipstick from the upper side (Absorbing pad side). Do not touch the lower end (Sample pad and Nitrocellulose membrane areas), which may affect the performance of the dipsticks.
8. After the second incubation, read the result directly within 5 min. The result is invalid after more than 5 min.
9. When a positive result is identified, repeat testing for double confirmation.
10. If there is obvious breakpoint on the Test line, repeat the test.
11. This product is only used for preliminary screening, and the final result shall be subject to the official arbitration detection methods.

Shenzhen Bioeasy Biotechnology Co., Ltd.
ADD: No. 2-1, 1st Liuxian Street, Xin'an Road, Baoan District, Shenzhen, Guangdong, China，518101 **TEL:** +86-4001111126 /+86-755-27948546 **FAX:**+86-755-27948417 **Email:** info@bioeasy.com **Web:** www.bioeasy.com