Aflatoxin M1 (AFM1) Rapid Kit

【Intended Application】

The test kit is used for detecting Aflatoxin M1 (AFM1) in various samples such as raw milk. .

【Principle】

The kit is developed using colloidal gold immunochromatography assay (GICA) based on competition. After the sample solution is added to sample hole, if AFM1is present, it will bind with gold labeled antibodies, thereby preventing the labeled antibodies from binding to the AFM1 conjugates on the nitrocellulose membrane. The results are judged according to the contrast of color strength

【Storage Conditions】

The kit shall be stored at 2 to 30℃ in dry environment.

Shelf life: 12 months. The date of manufacture is presented in the label of the box.

【Technique Data】

Kit sensitivity: 0.05 ppb (ug/kg=ppb)

【Kit Content】

Package specification	20T/Kit	50T/Kit
Test device (with disposable dropper)	20	50
Instruction	1	1

【Materials Required but Not Supplied】

- ✧ Equipment: constant temperature device or centrifuge (for frozen milk only. Fresh milk does not need to be handled).
- ✧ Micropipettes: single-channel (20-200μL)

【Sample Pre-treatment】

The temperature in the experimental environment must be above 20℃. The frozen milk is obviously granules, which is easy to cause the liquid to fail to reach the control(“C”) line. The sample should be heated to 40-50°C using a constant temperature device until fully dissolved (or you can centrifuge the sample and collect the intermediate layer for testing.).

Reminder：

1.Labware must be clean. Use disposable pipette tips to avoid contamination of interference results.

2.Repeated freezing and thawing of raw milk can lead to deterioration, thereby affecting the experimental results.

3.The fresh milk sample can be stored at 2-8°C for 24 hours to prevent invalidation or contamination if not assayed immediately.

4.The testing is intended solely for raw milk; testing processed milk is not recommended.

【Test Steps】

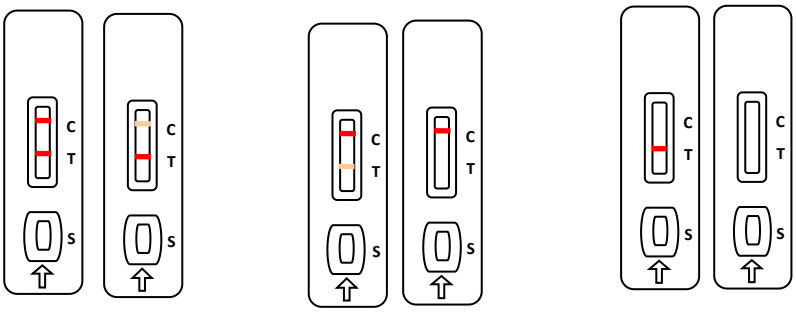
1) Tear the foil bag, take out of the test card, gold-labeled well and dropper. Then put them on a flat, clean work surface.

2) Restore the prepared sample to room temperature (20°C-30°C), then use the provided dropper to draw 6 drops

of the sample (or use a micropipette to transfer 150μL) into the gold-labeled well. Gently pipette up and down with the provided dropper (or a micropipette) for 30 seconds to completely dissolve the red substance at the bottom of the gold-labeled well. Allow it to stand for two minutes, then gently pipette up and down for 10 seconds. Draw all the liquid from the gold-labeled well and transfer it to the sample hole(“S”) on the test card. Start the timer.

3) Results should be read at 10 minutes, and any readings taken after 30 minutes can only be considered as reference.

【Results Judgement】



Negative Positive Invalid

- **Negative**: Test(“T”) line and control(“C”) line both appear in the result window. The color of the test(“T”) line is consistent or deeper than the control(“C”) line. It indicates that the concentration of AFM1 in the sample is below the detection limit, or absent.
- **Positive**: In the result window, the control(“C”) line appears, while the Test(“T”) line does not appear or appears lighter in color than the control(“C”) line. It indicates that the concentration of AFM1 in the sample is above the detection limit.
- **Invalid**: If the control(“C”) line does not appear, the result might be considered invalid.

【Notice】

- Don’t use the expired or damaged products.
- When the test card is taken out of the refrigerator, it should be restored to the room temperature and then opened. The opened test card should be used as soon as possible to avoid failure after being affected by moisture.
- Avoid touching the white nitrocellulose membrane in the middle of the detection card.
- In order to avoid cross-contamination, the droppers cannot pipet another liquid after pipetting one.
- The sample solution to be examined needs to be clear, free of turbid particles and without bacterial contamination. Otherwise, it is prone to lead to blockage, non-obvious color development and other abnormalities, affecting the determination of the experimental results.
- Avoid direct sunlight and direct exposure to electric fans during testing. Avoid direct sunlight and direct exposure to electric fans during testing.