Melamine (MEL) Rapid Test Kit

Technical Manual

(GICA)

Scan for more info.

Shenzhen Finder Biotech Co.,Ltd.
Web: www.szfinder.com
Tel: +86 0755 23499025 Email: techsupport@szfinder.com
Add: Building B12,Life Science Industrial Park, KuiyongSubdistrict, Dapeng New Area, Shenzhen,China

1 Principle and Application

The test kit is used for detecting Melamine (MEL) in samples such as raw milk.

The kit is developed using the principle of competitive colloidal gold Immunochromatographic Assay (GICA). After the sample solution is added to sample hole, if MEL is present, it will bind with gold labeled antibodies, thereby preventing the labeled antibodies from binding to the MEL conjugates on the nitrocellulose membrane.

If the content of MEL in sample solution is less than detection limit, it will make the test ("T") line colored, and the result is negative. If the content is greater than detection limit, no color reaction will be produced, and the result is positive.

2 Technique Data

Kit Sensitivity: 100ppb (ng/mL)

(Final detection limit = Kit sensitivity × dilution times of the sample)

Detection Limit:

Raw milk 100ppb

3 Kit Content

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

4 Materials Required but Not Supplied

Equipment: Centrifuge, graduated transfer pipette.

Micropipettes: single-channel (20-200μL)

5 Sample Pre-treatment

Take an appropriate amount of fresh milk (full-fat milk) sample and place it in a centrifuge tube. Centrifuge at 4000 rpm for 5 minutes. Then, take sample from the middle layer of the centrifuge tube. What obtained is the sample solution.

If the centrifuge equipment is not available due to limited conditions, shake the fresh milk sample thoroughly. Take the middle layer. What obtained is the sample solution.

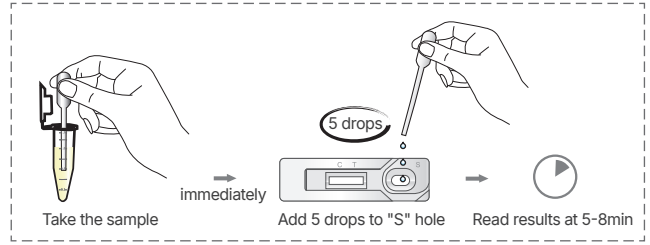
If the Test("T") and the control("C") fail to show up normally, the milk sample needs to be diluted 1:1 with pure water. What obtained is the sample solution.

6 Test Steps

1)Tear the foil pouch, take out of the test card, and put it on a flat, clean work surface.

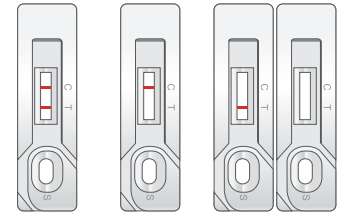
2)Pipette the prepared sample solution with the provided dropper, then add 5 drops (approximately 150μL) vertically and slowly into the sample hole("S"). Please be aware to avoid the formation of foam during the process.

3)Read the result at room temperature in 5 to 8 minutes. Results over 30 minutes can only be used as reference.



7 Results Judgement

Negative: Test("T") line and control("C") line both appear in the result window. It indicates that the concentration of MEL in the sample is below the detection limit, or absent.



Positive: Only control("C") line appears in the result window. It indicates that the concentration of MEL in the sample is above the detection limit.

Invalid: If the control("C") line does not appear, the result might be considered invalid.

8 Notice

8.1 Don't use the expired or damaged products.

8.2 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.

8.3 Avoid touching the white nitrocellulose membrane in the middle of the detection card.

8.4 In order to avoid cross-contamination, the droppers cannot pipet another Solution after pipetting one.

8.5 The sample solution to be examined needs to be clear and free of turbid particles. Otherwise, it is prone to lead to blockage, non-obvious color development and other abnormalities, affecting the determination of the experimental results.

9 Storage Conditions

The kit shall be stored at 2°C to 30°C (35.6°F to 86°F) in dry environment.

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