

**Urea Adulteration Test Kit**

Catalog No: E-IA-C022

100T

**Version Number:** V1.0  
**Replace version:** /  
**Revision Date:** 2026.06.02

This manual must be read attentively and completely before using this product.

If you have any problems, please contact our Technical Service Center for help.

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Website: [www.elabscience.com](http://www.elabscience.com)

Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.

**Test principle**

This product is used for the rapid detection of Urea Adulteration in Fresh milk sample, featuring simple operation and short detection time.

**Technical indicator**

**Detection limit:** 2.5 g/L.

**Kits components**

Item	Specifications
Detection Solution A	4 vials
20× Concentrated Extractant	1 vial
4 mL Test Tube	1 pack
2 mL Test Tube	1 pack
Color Comparison Card	1 piece
Manual	1 copy

Note: All reagent bottle caps must be tightened to prevent evaporation and microbial pollution.

**Other materials required but not supplied**

**Instruments:** Homogenizer, Nitrogen Evaporators, Water bath, Centrifuge, Graduated pipette, Balance (sensitivity 0.01g), Oscillators, EP tubes.

**Micropipette:** Single channel (20-200 µL, 100-1000 µL)

**Notes**

- FOR RESEARCH USE ONLY. Do not use product out of date.
- The test tubes can be reused after rinsing and air-drying.
- Detection Solution A is toxic and corrosive.
- Shake the detection solution well before use and add dropwise, store away from light at all times.
- Each reagent is optimized for use in the E-IA-C022. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other E-IA-C022 with different lot numbers.**
- Dispose of solid and liquid waste generated after using this product in accordance with local regulatory requirements to prevent contamination.
- This method is applicable to on-site rapid testing. Samples whose test results do not comply with standard limits or labeled values shall be measured in triplicate.
- The kit is used for rapid screening of actual samples. If the test result is positive, the instrument method such as HPLC, LC/MS, etc. can be used for quantitative confirmation.

### Storage and expiry date

**Storage:** Store at 2-30°C. With cool and dry environment.

**Expiry date:** expiration date is on the packing box.

### Experimental preparation

#### 1. Solution preparation

Solution 1: **Extractant**

Dilute the **20× Concentrated Extractant** with deionized water. (20× Concentrated Extractant (V): Deionized water (V) =1:19)

### Operating Procedures

1. Pipette  $1\pm 0.05$  mL milk sample into a **4 mL Test Tube**, add 3 mL of **Extractant** (Solution 1), cap and mix well, then stand for 5 min to prepare the test sample.
2. Pipette 0.5 mL test sample into a **2 mL Test Tube**, add 10 drops of **Detection Solution A**, cap and shake thoroughly, and observe color development.

### Judgment of result

1. **Positive:** If lemon yellow of varying shades appears, urea is adulterated in fresh milk; compare the color with the **Color Comparison Card** to determine the concentration.
2. **Negative:** If the solution remains colorless, the result is negative.