

## MilkGuard Goat Milk Adulteration Test Kit

### 1. Principle

This kit is based on the specific reaction of antibody-antigen and immunochromatography. Bovine casein 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.

### 2. Applications

This kit is used for rapid qualitative analysis of Milk adulteration in goat milk sample.

### 3. Detection Limit (LOD): 0.1%

### 4. Kit components

- 8 wells and 8 test strips in one bottle, 12 bottles/ kit.
- microwell holder
- Kit insert
- Plastic pipette, 96pcs

### 5. Equipments

Metal incubator (suggested product: Kwinbon Mini-T4)

Test Dipstick Reader (suggested product: Kwinbon K-reader, not required)

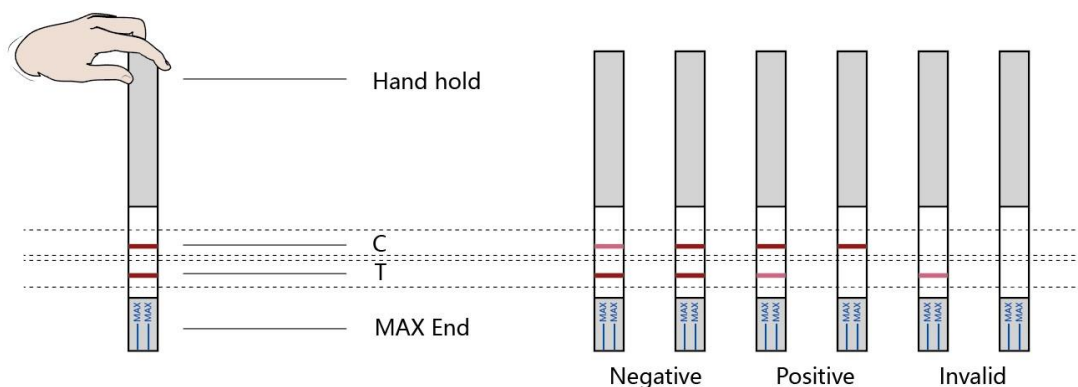
### 6. Operations

- (1) Read the instructions carefully before experiment. Bring the test kit and samples to room temperature.

**PS:** Goat milk powder samples should be diluted 1: 9 with pure water. 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. Put well in incubator and Incubate for 5min at 40°C.
- (4) Insert the test strips into the wells with the "MAX" end fully dipped in to the mixture, then incubate for 5 min at 40°C again.
- (5) Take out the strip; Read results in 2 min. Judge the result according to Part 7.

### 7. Result



(一) **manual interpretation**

- (1) If control line does **NOT** appear, this indicates that the result is **invalid**.
- (2) If control line (Line C) is red, judge the result according to the following diagram:

Color depth show (T&C)	Result Judgement	Result Analysis
<b>T&gt;C</b>	<b>Negative</b>	<b>Milk adulteration content in the test sample are lower than LOD</b>
<b>T≈C</b>	<b>Suspected positive</b>	<b>Milk adulteration content in the test sample are closer to LOD</b>
<b>T&lt;C or T show no color</b>	<b>Positive</b>	<b>Milk adulteration content in the test sample are equal or higher than LOD</b>

**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.*

(二) **Instrument interpretation**

- (1) Turn on colloidal gold analyzer, click the "detect" button, and select the reagent name "Goat milk adulteration";
- (2) Connect the scanner, read the QR code, and check whether batches information in the upper right corner at the detection interface of the colloidal gold analyzer is consistent with the batches of reagent strips to be tested;
- (3) Insert the test strip into the holder of the colloidal gold analyzer with the handle end out, and press the "detect" button. The colloidal gold analyzer will automatically interpret the test strip.
- (4) When the "Result" is "-", the sample test result is negative;  
When the "Result" is "+", the sample test result is positive;

**8. Specificity**

The kit shows negative with 500µg/L of sulfamethazine, Quinolones, Tetracycline and Aflatoxin M1.

**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.

**9. 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.
- (5) Do not mix test strips and microwell reagents in different batches.