

# DairyPal CLOP

Rapid Test for the presence of clopidol in raw cow milk, pasteurized milk, UHT milk

## PRINCIPLE

The **DairyPal CLOP** is competitive test involving one receptor in one operation, the clopidol antibiotics in the milk sample compete for the antibody with the antigen coated on the membrane of the test dipstick. Then after a color reaction, when the sample is free of antibiotics, a colour development occurs at the specific capture line, indicating the absence of the concerned analytes in the milk sample. On the contrary, the presence of antibiotics in the sample will not cause the coloured signal to appear at the specific capture lines.

## APPLICATIONS

The **DairyPal CLOP** is a rapid test that detect the presence of clopidol molecules in a raw cow milk, pasteurized milk, UHT milk sample.

## LIMIT OF DETECTION (LOD)

14 ppb ( $\mu\text{g/L}$ )

## CONTENTS

- 12 tubes each with 1 strip of 8 reagent microwells and 8 dipsticks.
- 1 Microwell holder
- 1 Kit insert
- 100pcs Disposable plastic pipette,

## INSTRUMENT NEEDED BUT NOT PROVIDED

Dry Incubator (suggest to use **DairyPal Mini-T** Dry Incubator)

**DairyPal** Test Dipstick Reader (TSR-100)

## TEST PROCEDURE

1. Read the instruction attentively, choose a clean and dry place to perform the test, wash and dry your hands before starting.
2. Take the kit out of the fridge and wait until the temperature of the reagents reaches the ambient temperature.
3. Calculate how many milk sample will be tested and mark the sample tubes to identify. The milk samples should be fully liquid without any clots or deposition, the ideal temperature of milk sample is between 4 to 20°C.
4. Take the tubes required from the kit package, take out as many micro-wells and dipsticks as the milk samples to be tested, and make proper marks to match the milk sample.
  - *To open a dipsticks tube, press the safety ring down, take off the ring and get the tube cap off with your thumb.*
  - *Recover the cap tightly after taking out the required micro-wells and dipsticks.*
  - *Empty one test tube then open another one.*
  - *Keep the unused micro-well caps tightly sealed. Do NOT tear off the strip of 8 microwell caps.*
  - *Use the exposed dipsticks in 1 hour.*
5. Preheat the Dry Incubator(suggest to use **DairyPal Mini-T** Dry Incubator) to 35°C.
6. Place the required numbers of the microwells in the dry incubator, transfer 200 $\mu\text{l}$  of the milk samples into the microwells, inject and reject the milk sample for 5 times consecutively to homogenize the lyophilized reagent and milk sample.

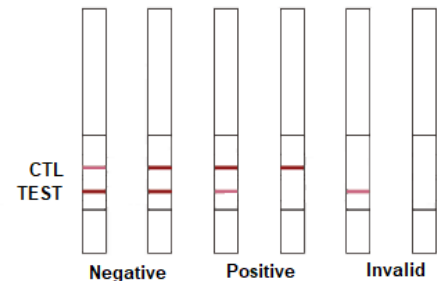
- Dip the end of the plastic pipette (**DairyPal** Mini pipette) tips into the milk and slowly releases the sucker. When the sucker is back into its initial position, transfer the 200µl of milk into the reagents, by slowly pushing the sucker down to the bottom.
7. Start the timer to incubate for 5 minutes at 35°C;
    - During the incubation, The receptors will detect the presence of the antibiotics in the milk sample. The reaction will take 5 minutes.
  8. Dip the dipsticks into the micro-wells with the "**Sample Pad**" down side to the bottom.
  9. Start the timer to incubate for another 5 minutes at 35°C.
  10. Then take out the dipsticks and place them laterally in a dry clean place, peel off the sample pad, interpret the result.
    - Use a clean nipper (or new pipette tip) to scrape gently and slowly the sample pad.
    - The peeling off of the sample pad will stop the ongoing reaction of the receptors.
    - File the used sample pad peeled off dipsticks if necessary.

## RESULTS INTERPRETATION

The dipsticks are embodied with 2 lines, **Control line** and **Test Line**, which are briefly expressed as "**C**" and "**T**". The test results will be determined by the color presence of the lines. The following diagram describes the result identification.

### Visual Interpretation

- **NEGATIVE:** Line **C**, **T** are both visible, color of Line **T** is Stronger than or similar to Line **C**, which means that, the milk sample contains fewer antibiotics than value given in the table.
- **POSITIVE:** Line **C** is visible, Line **T** is weaker than Line **C**, which means that the milk sample contains the clopidol more than the value in the table.



### Instrument Interpretation

Interpret the result with the **DairyPal** Test Dipstick Reader (TSR-100) according to the user manual.

**Remarks:** Control line is used as a quality indicator, which will always appear regardless of the T line. If Control line does **NOT** appear, it indicates that the result is **invalid**. Users please check the kit insert again and re-do the assay with new test dipsticks.

## SPECIFICITY

The test shows negative when spiking at the level of 500µg/L of melamine, chloramphenicol, tetracyclines, sulfonamides, fluoroquinolones etc.

## 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.

## PRECAUTIONS

- Do the assay following the instruction, do **NOT** touch the membrane of the dipstick.
- Seal the bottle after taking out required dipsticks.
- The dipstick is used for only once; Do **NOT** use it repeatedly.
- The positive result should be further confirmed.