

# Cow Mastitis Rapid Test Kit

Product #: C40581

## 1. Precaution

- This kit is designed for clinical and sub-clinical mastitis detection in bovine milk, particularly the mastitis caused by microbes, such as *Staphylococcus aureus*, *Streptococcus*, etc.; make sure you are fully aware of the intended use.
- Check the kit package carefully and read this instruction through to confirm the validity of the kit, and the appearance of the package. Only valid kit can be used.
- If any damage or leakage were found, please contact your vendor for replacement. Do not use in test unless otherwise agreed by the vendor.
- The test strip and the microwell reagent shall be used within 20min after opening the tube. Do not open it without planned experiment. Seal the rest and store properly.
- Do not use component from other sources, otherwise the result is not valid.
- The kit is designed for one single use, do not use repeatedly.

## 2. Principle

The kit is based on sandwich immunochromatographic assay, to detect mastitis specific protein marker in bovine milk, which is rapid, accurate and easy-to-operate.

## 3. Application

This kit is designed to detect cow mastitis in bovine milk. Other applications may be provided upon request.

## 4. Kit Components

- Test Strips, 96 pcs, packed in 12 tubes, 8 tests per tube.
- Disposable pipette, 100 pcs
- Kit instruction, 1 pc

## 5. Sample Preparation

Milk can be used as the test sample directly.

## 6. Test Steps

- The test will take **15-20min**. Schedule your time before test.
- Take out the sample, and bring it to room temperature if it is refrigerated. For example, take the sample and keep at room temperature for 30min.
- Take the needed test strip, microwell reagent and plastic pipette (200ul micropipette can also be used).
- Take 200ul milk sample into the microwell reagent, pipet up and down to mix thoroughly. Then wait for **3min at room temperature** (18 -26°C)
- Insert the test strip into the microwell and wait for **7min at room temperature** (18-26°C)
- Take out the test strip and determine the result according to the kit instruction.

**Note:** Result over 20min will be invalid.

## 7. Result interpretation

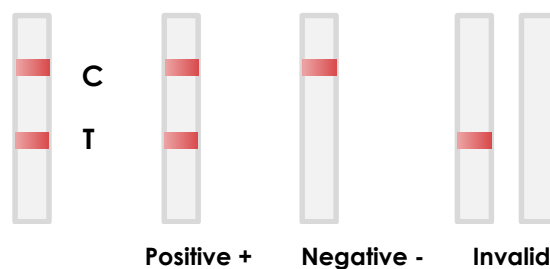
There are 2 lines on the strip, Control Line (Line C) and Test Line (Line T). Line C is used for quality control. If Line C is invisible after testing, the result will be invalid, please run the test again with new test strip.

**NEGATIVE** Only Line C is visible, Line T is not visible

**POSITIVE** Line C and Line T are both visible.

Stronger (Darker) Line T indicates **Strong Positive (++)**

Weak (Lighter) Line T indicates **Weak Positive (+)**



## 8. Sensitivity and specificity

In field trial, for cows with clinical microbial mastitis, this kit demonstrated 95% accuracy and 100% specificity compared with vet diagnosis. In cows with sub-clinical mastitis, this kit detects over 90% accuracy for staphylococcus aureus and streptococcus induced sub-clinical mastitis.

In certain cases, this kit also detects other bacteria caused infections, for example, endometritis, skin infection, etc. In such cases, when positive results are found, please take proper measures to stop further health problems in cows. Consult your vet for further information.

## 9. Limitation of the methodology

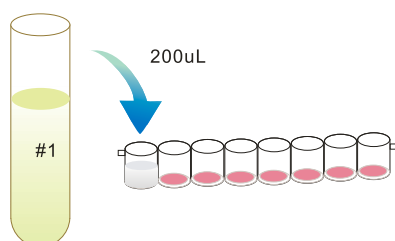
- The kit is for screening purpose and on-site testing of mastitis, especially mastitis caused by microbes. Positive result shall be further confirmed by PCR and/or other official methodologies. Diagnosis of mastitis shall be determined by the vet, considering both clinical symptom and laboratory test.
- Please be aware that For mastitis caused by physical injure or similar factors, the test result may be negative. Always follow the vet's instructions.
- For further measures of positive samples, use KangarooSci Staph Count Plate to determine if staphylococcus aureus is presented. Or use PCR to identify the specific pathogen.
- The Color of Line T is related to protein marker in the sample. If the target concentration is at very high level, Line T may appear and then be lighter, in this case, please further dilute the sample with DD water and run the test again to see a stable Line T.

## 10. Storage and period of validity

The kit will be valid for 18 months when stored at 2-8°C in dry and dark place. Do not freeze. Avoid direct sunlight. Production date and expiry information are printed on the package.

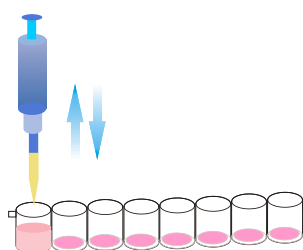
### How to run the testing

Add 200ul milk into microwell

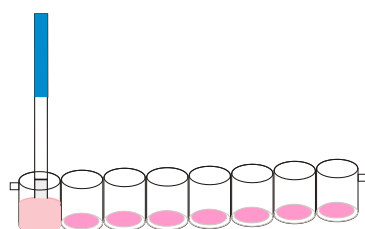


Absorb up and down for 5 times to mix completely.

**Wait for 3 min.**



Insert the strip into well; Incubate for **7 min** at room temperature again.



Take out the strip and check the result

