

Beta-Lactamase is the enzyme that hydrolyses beta-lactam antibiotics; it is present in the bacteria that has resistance to those antibiotics. When there are too much beta-lactamase exists in the milk, antibiotics such as beta-lactams (penicillins, celphasporins, etc) will be destroyed and sheltered. Due to the unknown hazard to human, it is forbidden to add artificial beta-lactamase in milk. This test kit is a new product for the rapid testing of the presence of beta-lactamase in milk. It takes only 5min to get a direct result, no additional instrument is required. Lab staff or farm workers can easily grasp the operation.

1. Detection Limit (LOD) in Raw milk sample

3 U/mL

2. Kit components

- Test Strip, 96 pcs in 12 plastic bottles, 8 pcs / bottle.
- Kit insert

3. Operations

- a) Read the instructions before experiment. Bring the test kit and samples to room temperature. Milk samples should be fully liquid without any agglomeration and deposition.
- b) Take **200ul** of the milk sample into a white microwell and mix the sample with the reagent in the wells completely.
- c) Put the microwell in a **40°C** dry bath incubator for **20min**.
- d) Take bottles needed from the kit package, take out required wells and strips, and make proper marks. Please use the test strips within 1h. Seal the cap of the bottles and store the unneeded kit.
- e) Take **200ul** of the milk sample from white microwell to the red microwell, then repeatedly absorb up and down for 5 times to mix the sample with the reagent in the wells completely. The mixture should be pink, and then start the timer.

Note: in case you are sampling with plastic pipet, please add sample close to the **MARKER LINE** on the wells.

- f) Incubate for **3min at 40°C**, and then insert the test strip into the well with the "MAX" end fully dipped in to the mixed reagent and sample.
- g) Incubate for **3min at 40°C** again. Take out the strip; determine the result according to **Part 4**.

4. Result Determination

Negative (-): **Line C** is red, **Line T** has no color or lighter than Line C;

Positive (+): **Line T** and **Line C** are both red, and color of **Line T** is deeper than or equal to Line C.

Invalid (x): **Line C** has no color. In this case, please reread the instructions and repeat assay with new strip.

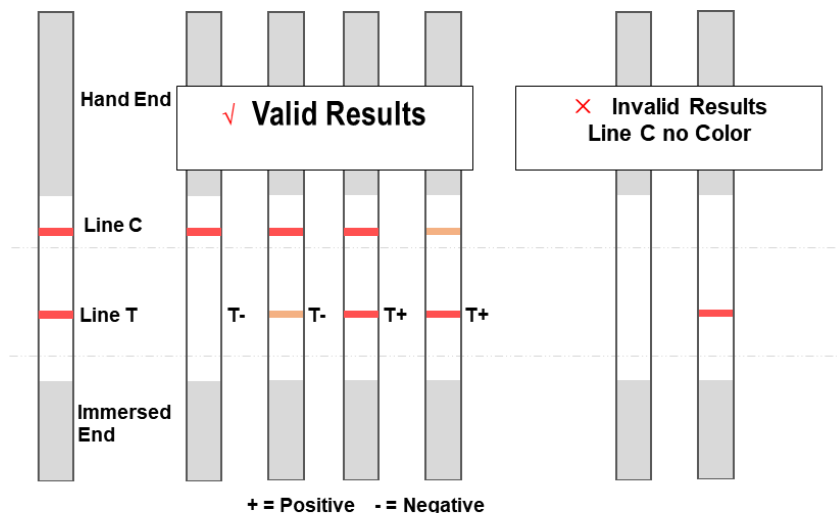
Notice: If the result of the strip needs to be recorded, please cut the "MAX" end, and dry the strip, then keep it as file or paste in your recording book.

5. Storage

2-8°C in cool dark place, do not freeze. The kit is valid for 12 months. Lot No. and expired date are printed on the package.

6. Notice and Precautions for a successful experiment.

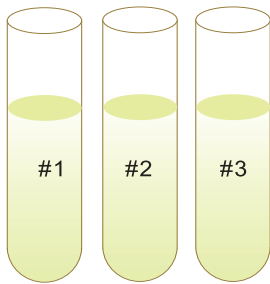
- Perform the assay following the instruction; do not touch the membrane of the strip.
- Seal the bottle after taking out required strips.
- This strip is used **for only once**; please do not use it repeatedly.



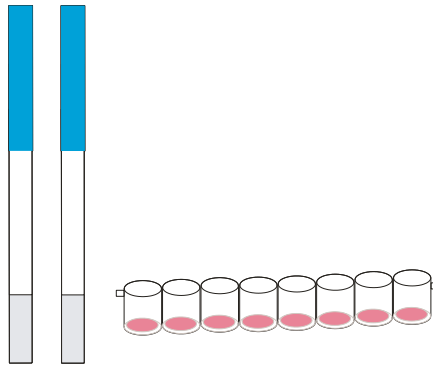
○ This kit is only for screening test, positive result should be further confirmed with other method.

Schematic Assay Steps

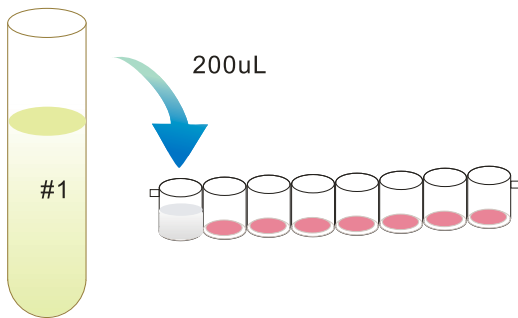
1. Bring all test samples to room temperature; number them to keep record.



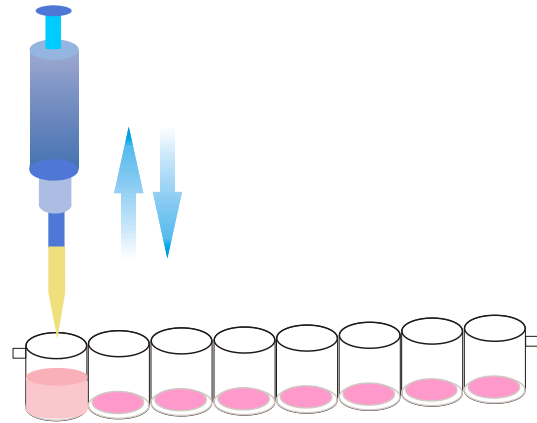
2. Take test kit according to your sample number and also number the kit wells to keep record and consistency.



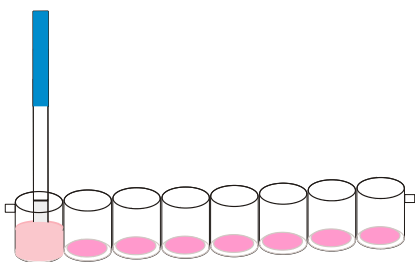
3. Take 200ul sample into the wells using pipet. You can also then put the well into the well holder to avoid sample spill.



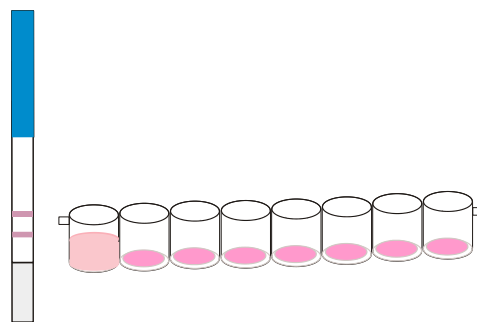
4. Absorb up and down for 5 times to mix sample with reagent completely. Start the timer when the mixture is pink. **Incubate for 3 min at 40°C.**



5. Insert the "MAX" end of the strip into the mixture; **Incubate for 3min at 40°C.**



6. Take out the strip; judge the result according to **Part 4.**



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