β-Lactams Rapid Test Kit Art. No.: 100001-96T

Being the result of obtaining high milk yield, cow mastitis is quite common in modern dairy farms, thus antibiotics like β-Lactams including penicillin, ampicillin and amoxicillin, etc., are frequently administered in veterinary clinical practice. However, these antibiotics residues in milk may cause potential damage to human health, which is now strictly controlled and supervised in many countries.

This product utilizes the high affinity of β-Lactams capture protein against the antibiotics, which can easily identify these potential hazardous substances in milk without any instrument. The detection limit of the kit can meet both European and USA MRLs.

1. Detection Limit (LOD) in Raw milk sample

β-lactams	MRL(μg/L)	LOD(μg/L)	Cephalosporins	MRL(μg/L)	LOD(μg/L)
Penicillin G	4	2-4	Cefquinome	20	15-20
Ampicillin	4	3-4	Cefacetrile	125	100
Amoxicillin	4	3-4	Cefalonium	20	18-20
Oxacillin	30	6-8	Cefazolin	50	50
Cloxacillin	30	6-8	Cefoperazone	50	40-50
Dicloxacillin	30	6-8	Cephapirin	60	50-60
Nafcillin	30	20-30	Ceftiofur	100	90-100

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 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.

c) Take 200ul of the milk sample into the 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 to the **MARKER LINE** on the microwell.

d) Incubate for 5min at room temperature, and then insert the test strip into the well with the "**MAX**" end fully dipped in to the mixed reagent and sample.

e) Incubate for 5min at room temperature again. Take out the strip; determine the result according to **Part 4**.

4. Result Determination

Positive (+): **Line C** is red, line T has no color.

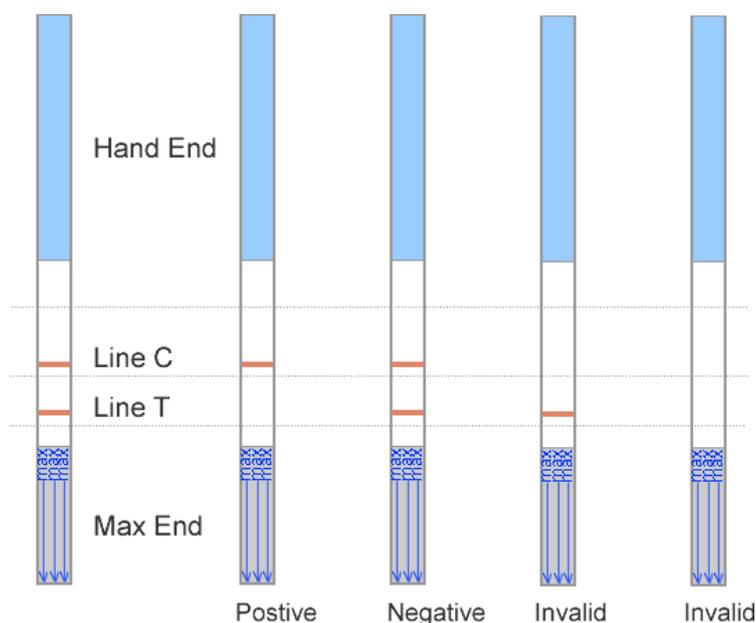**Negative** (-): **Line T** and **Line C** are both red.

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℃ in cool dark place, do not freeze. The kit is valid for 12 months.

Lot number and expired date are printed on the package.

6. Notice and Precautions for a successful experiment.

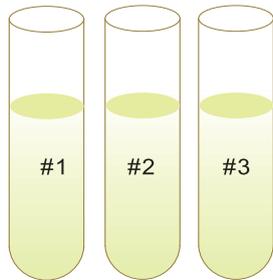Please perform the assay following the instruction, do not touch the membrane of the strip.

Please seal the bottle after taking out required strips.

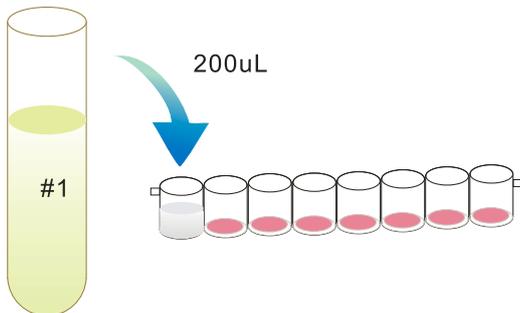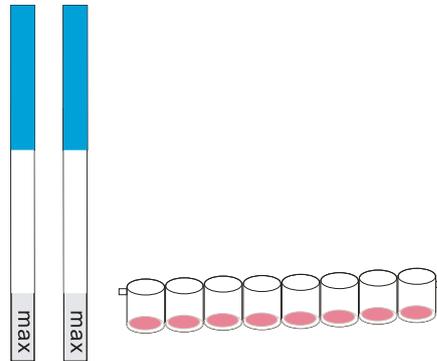This strip is used for only once; please do not use it repeatedly.

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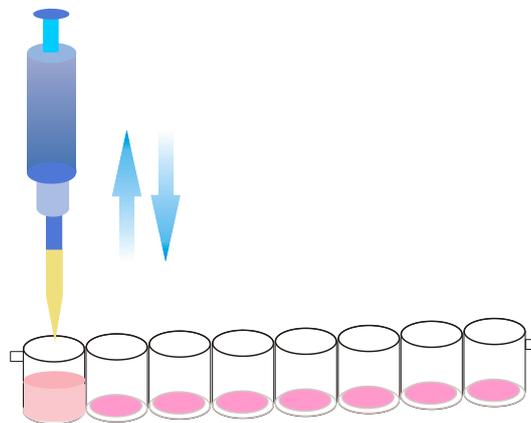
Schematic Assay Steps

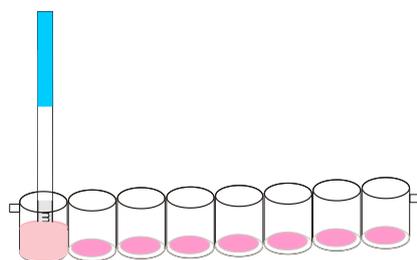1. Bring all test samples to room temperature; number them to keep record.

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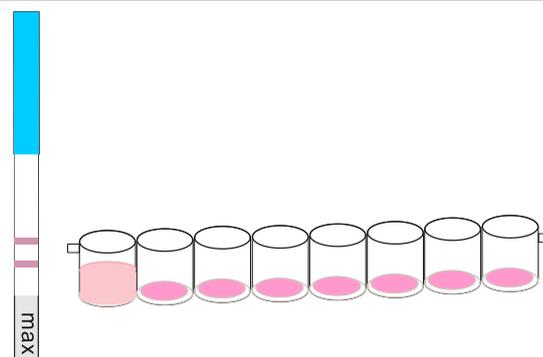

3. Take 200ul sample into the wells using pipet. You can also then put the well into the well holder to avoid sample spill.

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

5. Insert the "**MAX**" end of the strip into the mixture; **Incubate for 5min at room temperature again.**

6. Take out the strip; judge the result according to **kit instruction.**