

CCBTS 5in1 Rapid Test Kit

(Ceftiofur / Cefalexin / β -Lactams / Tetracyclines / Sulfonamides)

Art. No.: 100056-96T

Principle

This CCBTS 5in1 rapid test kit is a lateral flow multi residue test which utilizes the high affinity antibodies and capture protein against ceftiofur, cefalexin, beta-lactams, tetracyclines and sulfonamides, which can easily identify these potential hazardous substances in milk without any instrument.

1. Detection Limit (LOD) in raw milk sample

Ceftiofur	MRL(μ g/L)	LOD(μ g/L)	Cefalexin	MRL(μ g/L)	LOD(μ g/L)
Ceftiofur	100	15-20	Cefalexin	100	10-15
Desfuroylceftiofur	100	10-20	-	-	-
Cefquinome	20	10-15	-	-	-
β -lactams	MRL(μ g/L)	LOD(μ g/L)	Cephalosporins	MRL(μ g/L)	LOD(μ g/L)
Penicillin G	4	2-4	Cefquinome	20	15-20
Ampicillin	4	3-4	Cefacetile	125	100
Amoxicillin	4	4-5	Cefalonium	20	18-20
Oxacillin	30	6-8	Cefoperazone	50	40-50
Cloxacillin	30	6-8	Cephapirin	60	50-60
Dicloxacillin	30	6-8	Cefalotin	-	80
Nafcillin	30	20-30	Ceftiofur	100	100
Tetracyclines	MRL(μ g/L)	LOD(μ g/L)	Tetracyclines	MRL(μ g/L)	LOD(μ g/L)
Tetracycline	100	100	Doxycycline	-	100
Oxytetracycline	100	100	Chlortetracycline	100	100
Sulfonamides	LOD(μ g/L)		Sulfonamides	LOD(μ g/L)	
Sulfadiazine	100		Sulfisomidine	30	
Sulfamethizole	50		Sulfamonomethoxine	30	
Sulfadimethoxine	100		Sulfamethoxyipyridazine	60	
Sulfadimidine	15		Sulfaquinoxaline	100	
Sulfachloropyrazine	50		Sulfachloropyridazine	60	
			Sulfamethoxydiazine	40	

2. Kit components

- Test Strip: 96 pcs / package, in 12 tubes, 8 pcs per tube
- Plastic pipette or micropipette tips, 96pcs
- Kit instruction
- Microwell holder, 1pc

3. Operations

- 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.
- Take out required wells and strips from the package, and make proper marks. Please use the test strips within 1h. Seal the cap of the bottles and store the rest of the unused kit.
- 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.

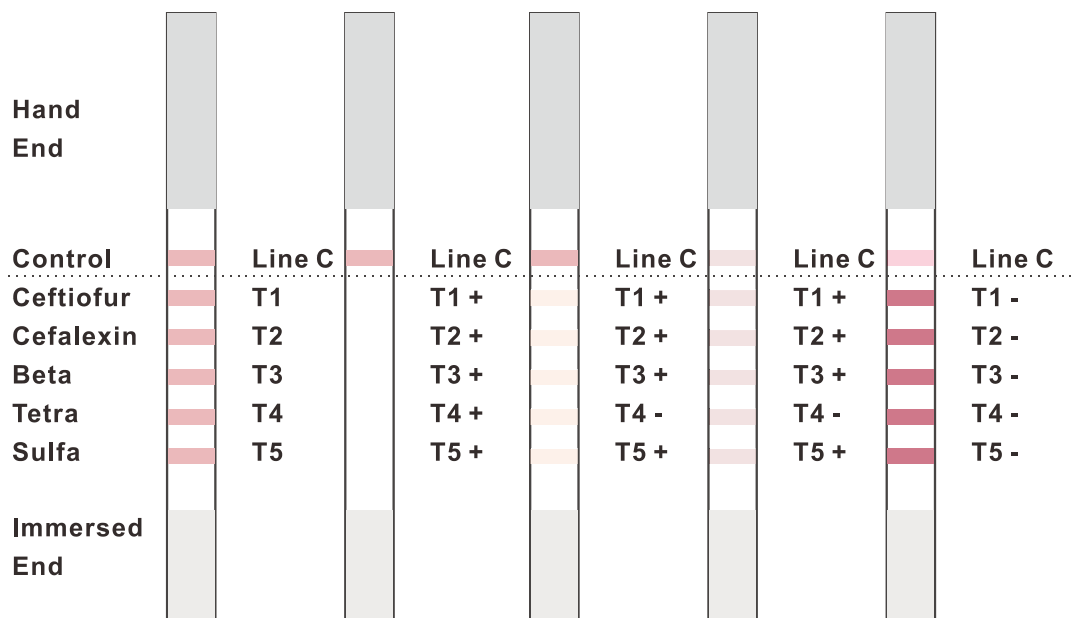
Note: In case you are sampling with plastic pipet, please add sample to the MARKER LINE on the microwell.

- Incubate for **3min at room temperature**, and then insert the test strip into the well with the "Immersed" end fully dipped in to the mixed reagent and sample.

e) Incubate for **7min at room temperature**. Take out the strip; determine the result according to **Part 4**.

4. Result Determination

There are 6 lines on the strip, **Control line, Ceftiofur Line, Cefalexin Line, Beta-lactams Line, Tetracyclines Line and Sulfonamides Line**, which are briefly used as "**Line C**", "**Line T1**", "**Line T2**", "**Line T3**", "**Line T4**" and "**Line T5**". The test results will depend on the color of these lines. The following diagram describes the result determination.



INVALID

Line C has no color. **In this case, the test will be invalid.**

NEGATIVE

For tetracycline: regardless of the color strength, if line T4 is visible, the result is **negative**.

For Ceftiofur, Cefalexin, Beta, Sulfa: Compare the color of Line T1/T2/T3/T5 with Line C, if the color of Line T1/T2/T3/T5 **is deeper than** Line C, the result will be **Negative**

POSITIVE

For Tetracycline: T4: if Line T4 is not visible, the tetracycline result is positive.

For Ceftiofur, Cefalexin, Beta, Sulfa: compare the **Line T (T1, T2, T3 and T5)** with the Line C, if Test Line **is lighter than or equal to** Line C, the result will be positive. If there is **no Line T**, the result is also **positive**.

PLEASE NOTICE **Line C is used as a quality indicator**, which will always appear regardless of the T1/T2/T3/T4/T5 line. If Control line does **NOT** appear, the result is **invalid**. Please check the kit insert again and repeat the assay with new test strip.

5. Storage

2-8°C in cool dark place, do not freeze. The kit is valid for 12 months after manufacture date.

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.

Ring Biotechnology Co., Ltd

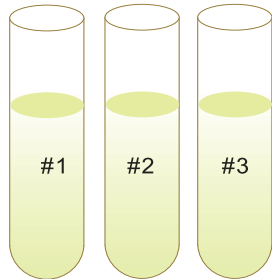
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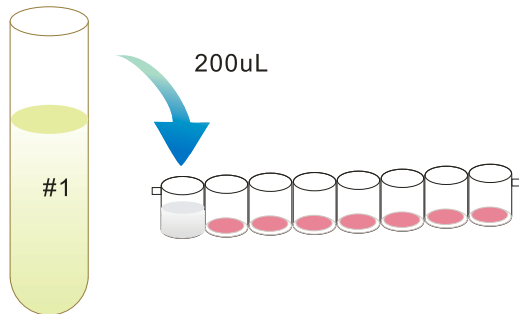
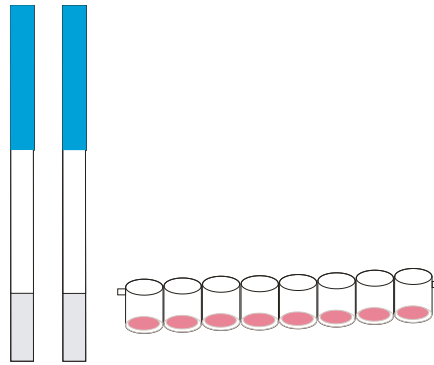
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Schematic Assay Steps

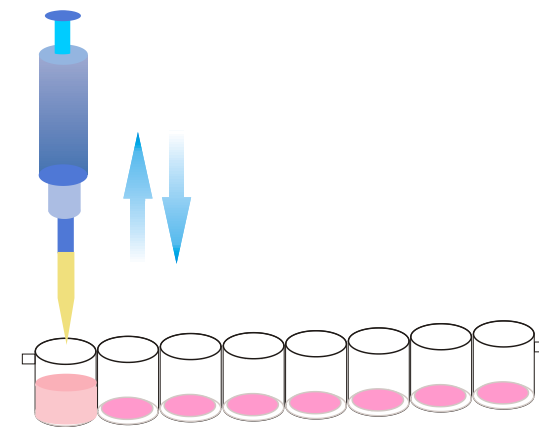
1. Bring all test samples to room temperature; number them to keep record.



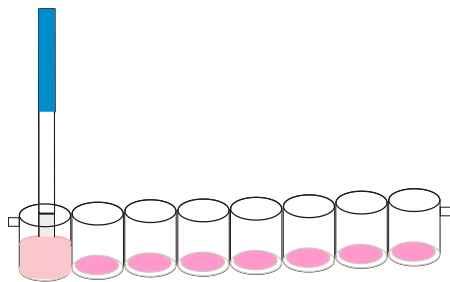
2. Take test kit according to your sample number and also number the kit wells to keep record and consistency.



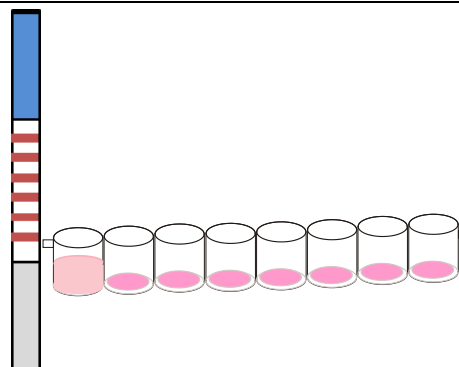
3. Take 200ul sample into the wells using pipet. You can also then put the well into the well holder to avoid sample spill.



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 room temperature.**



5. Insert the "Immersed" end of the strip into the mixture; **Incubate for 7 min at room temperature.**



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

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