

Beta-Lactams & Tetracyclines & Chloramphenicol & Streptomycin Rapid Test Kit

READ COMPLETELY BEFORE USE

【Intended Use】

Beta-Lactams & Tetracyclines & Chloramphenicol & Streptomycin Rapid Test Kit is a lateral flow assay that determines a qualitative level for the presence of both beta-lactam, tetracycline and streptomycin and chloramphenicol and Dihydrostreptomycin antibiotic residues in raw cow's milk. This test is designed for on-site rapid detection or daily control in laboratories.

【Limit of Detection】 (μg/kg=ppb)

Be-lactams		
Penicilins		
Antibiotic	EU MRL(μg/kg)	Detection Limit (μg/kg)
Penicillin G	4	1-2
Cloxacillin	30	3-6
Amoxicillin	4	2-3
Oxacillin	30	5-7
Nafcillin	30	7-10
Ampicillin	4	2-3
Dicloxacillin	30	3-6
Benzathine	/	3-5
Cefalosporins		
Cefquinome	20	5-7
Cefalonium	20	3-5
Ceftiofur	100	70-90
Cephapirin	60	4-8
Cefoperazone	50	3-5
Cefacetrile	125	15-20
Cefazolin	50	20-30
Tetracyclines		
Tetracycline	100	7-10
Chlortetracycline	100	7-10
Doxycycline	*	7-10
Oxytetracycline	100	7-10
Streptomycin		
Dihydrostreptomycin	200	50
Streptomycin	200	50
Chloramphenicol		
Chloramphenicol	**	0.3

* This drug is not for use in animals from which milk is produced for human consumption.

** This drug is prohibited.

【Scope of Application】

Raw cow's milk, buffalo milk.

【Kit Contents】

- Test strips: 96 strips total
- Microwells (Reaction wells): 96 wells total
- Positive control: 1 tube (Tetracycline 10ppb, Chloramphenicol: 0.3ppb, Streptomycin: 50ppb, Penicillin G: 2ppb)
- Negative control: 1 bottle
- Pipette: 1
- Pipette tips: 100/kit or disposable droppers : 100/kit
- Microwell holder: 1
- QR Code (Optional)

【Materials Required But Not Provided】

- Micropipette (20-200μL)
- Timer

- Incubator
- Reader (Optional)

【Sample Preparation】

No sample preparation necessary.

【Quality Control Preparation】

- Negative Control
Pipette 2mL of deionized water into the negative control bottle; blend vigorously until the solid content dissolves completely. Get the negative control sample ready for use.
- Positive Control
Pipette 200μL of the prepared negative control into the positive control microwell, pipette up and down until the solid content dissolves completely. Get the positive control sample ready for use.
- Pipette 200μL of each prepared positive control into the reaction microwell and follow the testing procedures.

IMPORTANT: The reconstituted positive control should be used immediately.

【Test Procedure】

Note: READ COMPLETELY BEFORE USE!

All reagents and kit components should reach room temperature (20-25°C) before use. Shake the milk vigorously to ensure sample homogeneity.

Method 1: operate with incubator

Note: the milk sample doesn't need to return to room temperature when running the test.

- Remove the cover of the tube and take appropriate number of test strips and microwells and immediately cover the tube. Re-store the remaining components at 2-8°C.
- Place the microwells into the wells of the incubator (40 °C)
- Using a single channel pipette (*Optionally, using a disposable pipette*), add 200μL of milk sample to each microwell. Dissolve the coating conjugate in the microwell by pipetting the content up and down for 5 or 6 times.
- Incubate the sample for **3 minutes** at **40°C** and then put one test strip into one well.
- Let the test strip develop color for **7 minutes** at **40°C**.
- Remove the absorbent pad and interpret test results within 1 minute.

Method 2: Operate without incubator

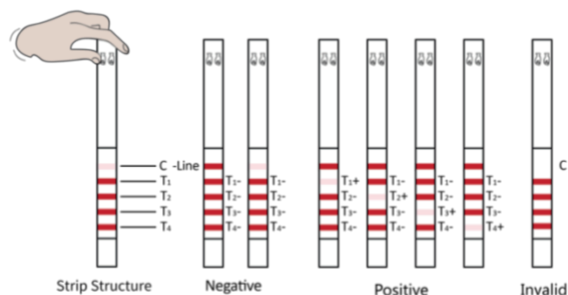
Note: the milk sample should return to room temperature before running the test (20-25°C).

- Remove the cover of the tube and take appropriate number of test strip and microwells; place the microwells in a microwell holder and immediately cover the tube. Re-store the remaining components at 2-8°C.
- Shake the milk vigorously to ensure sample homogeneity.
- Using a single channel pipette (*Optionally, use a disposable pipette*), add 200μL of milk sample (room temperature) to each microwell. Dissolve the coating conjugate in the microwell by pipetting the content up and down 5 to 6 times.
- Incubate for **3 minutes** at **room temperature** (20-25°C) and then put one test strip into one well.
- Allow the test strip to develop color for **7 minutes** at **room temperature** (20-25°C)
- Remove the absorbent pad and interpret test results within 1 minutes.

【Interpretation of the Results】

1. Visual interpretation

A color line always appearing in the upper section of the test strip indicates that the test strip is working properly. This line is Control Line (C). Line(s) in the lower section of the test strip indicate the test result(s) for Tetracyclines, Chloramphenicol, Streptomycin and Beta-lactams respectively. These lines are the Test Lines (T).



T1: Tetracyclines
T3: Streptomycin

T2: Chloramphenicol
T4: Beta-lactams

Color Intensity	Result	Analysis
T line \geq C line	Negative	Target analyte(s) in the sample is lower than the limit of detection.
T line < C line or T line invisible	Positive	Target analyte(s) in the sample is higher than or equal to the limit of detection.
C line invisible	Invalid	Improper operation or the strip is invalid.

2. Interpretation by Reader

Please read the result in 1 minute and refer to the instruction manual of Reader.

【Precautions】

1. Adhere to the instructions of test procedures. Do not run more than 8 tests at one time.
2. Store test kits at 2-8°C when not in use, and do not use the kits beyond the expiration date.
3. Please don't touch the membrane on the strips.
4. Remove microwell sealer slightly to prevent the powder from being released from the wells.
5. The sample to be tested must be a homogeneous liquid which cannot be agglomerated, fermented, rancid precipitated, etc., and cannot be colostrum.
6. Avoid direct sunlight and direct blows during testing.
7. Do not re-use pipette tips, test strips or microwells.
8. The unsealed microwells should be used within 1 hour.
9. Do not take tap-water, distilled water or deionized water as the negative control.
10. This test method is just used for rapid screening purpose, if positive results are occurred, please verify them by a quantitative method.
11. Considering that all materials, containers and devices exposed to the sample are contaminated with harmful substance, please wear protective gloves and safety glasses while using the kit.
12. The components in this test kit have been quality control tested as a standard batch unit. Do not mix components from different lot numbers.
13. Any problem encountered during usage, please contact with the supplier.

【Storage and Shelf Life】

1. Storage: The kits should be stored at a dry place away from the

sunlight and the storage temperature is 2-8°C. **DO NOT FREEZE!**

2. Shelf life: 18 months.
3. Production date, expiration date and lot number please refer to the label on the out package.



For More Info

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