

This product utilizes the high affinity of monoclonal antibody against  $\beta$ -Lactams, tetracyclines and sulfonamides, which can identify  $\beta$ -Lactams, tetracyclines and sulfonamides in egg easily. The detection limit of the kit can meet both European and USA MRLs when use properly.

## 1. Detection Limit (LOD) in egg sample

$\beta$ -lactams	MRL( $\mu$ g/L)	LOD( $\mu$ g/L)	Cephalosporins	MRL( $\mu$ g/L)	LOD( $\mu$ g/L)
Penicillin G	-	6-8	Cefquinome	-	200
Ampicillin	-	8-10	Cefacetile	-	300
Amoxicillin	-	20-40	Cefalonium	-	20
Oxacillin	-	50-70	Cefoperazone	-	20
Cloxacillin	-	30-50	Cephapirin	-	60-80
Dicloxacillin	-	30-50	Cefalotin	-	40
Nafcillin	-	200	Ceftiofur	-	1000
Cefazolin	-	150-200			
Tetracyclines	MRL( $\mu$ g/L)	LOD( $\mu$ g/L)	Tetracyclines	MRL( $\mu$ g/L)	LOD( $\mu$ g/L)
Tetracycline	-	60-80	Doxycycline	-	60-80
Oxytetracycline	-	60-80	Chlortetracycline	-	60-80
Sulfonamides	LOD( $\mu$ g/L)		Sulfonamides	LOD( $\mu$ g/L)	
Sulfadimidine	5-8		Sulfachloropyrazine	10-15	
Sulfisomidine	8-10		Sulfamonomethoxine	8-10	
Sulfachlorpyridazine	20-40		Sulfadiazine	30-50	
Sulfamerazine	8-10		Sulfamethizole	100-120	
Sulfamethoxydiazine	15-25		Sulfaquinoxaline	200	
Sulfamethoxypyridazine	30-50		Sulfadoxine	20-40	
Sulfamoxole	50-70		Sulfamethoxazole	1000-1500	
Sulfapyridine	100-120		Sulfathiazole	800	

## 2. Kit components

- Test Strip, 96 pcs in 12 plastic bottles, 8 pcs / bottle.
- NBReader (optional)
- Kit insert
- Sample buffer 20ml

(The proportion of ingredients in egg dilution(200ml): Na<sub>2</sub>HPO<sub>4</sub>·12H<sub>2</sub>O(1.15g); NaH<sub>2</sub>PO<sub>4</sub>·12H<sub>2</sub>O(0.12g); Triton-114(0.1g); Tween-20(0.25g); ProClin300(0.25g); Ultrapure water(200ml))

## 3. Sample pretreatment

(1) The eggs are broken into disposable cup or beaker, and thoroughly stirred with bamboo chopstick or glass rod. Then the egg whites and egg yolks should be thoroughly mixed as a test solution.

(2) The test sample is the mixture of test solution and egg diluent (1:2).

## 4. Operations

- a) Read the instructions before experiment. Bring the test kit and samples to room temperature. Egg 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 egg sample into the microwell, 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.

- d) Incubate for **5min at room temperature (20-25 °C)**, Insert the test strip into the well with the "Immersed" end fully dipped in to the mixed reagent and sample.
- e) Incubate for **5min at room temperature (20-25 °C)** again. Take out the strip; determine the result according to **Part 5**.

**5. Result Determination**

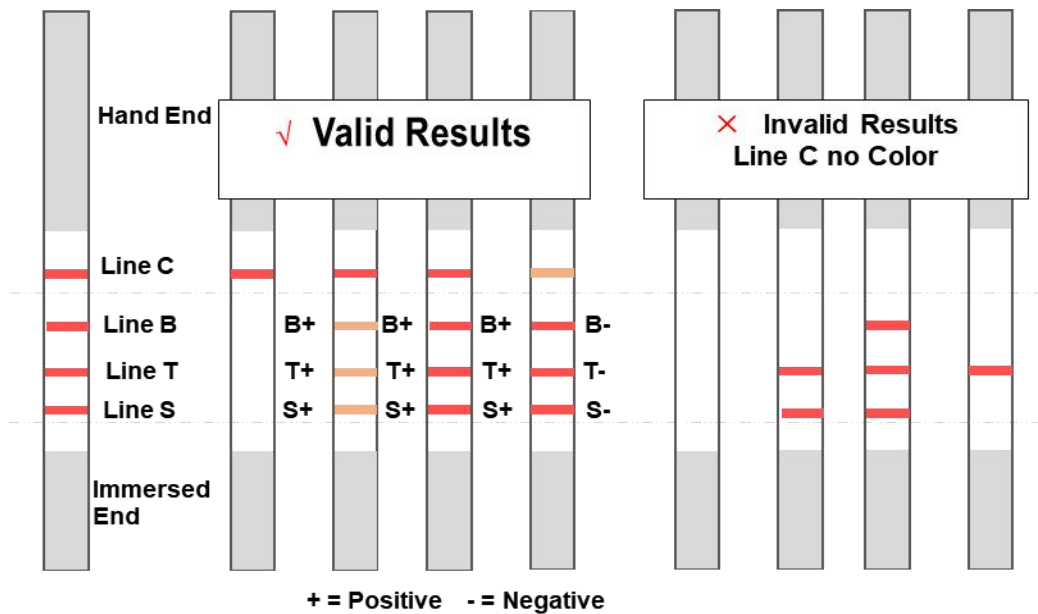
There are 4 lines on the strip, Control line, **Tetracyclines Line**, and **Beta-lactams Line**, **Sulfonamides Line** which are briefly used as "**Line C**", "**Line T**", "**Line B**" and "**Line S**". The test results will depend on the color of these lines. The following diagram describes the result determination.

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

**NEGATIVE** **Negative:** Compare the color of **Line T1**, **Line T2** or **Line T3** with Line C, if the color of Line T1, Line T2 or Line T3 **is deeper than** Line C, the result will be negative.

**POSITIVE** **Positive:** Compare the color of **Line T1**, **Line T2** or **Line T3** with Line C, if the color of Line T1, Line T2 or Line T3 **is lighter than or Equal to** Line C, the result will be positive. If there is **no Line T1, Line T2 or Line T3**, 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 line. If Control line does **NOT** appear, this indicates that the result is **invalid**. Users please check the kit insert again and repeat the assay with new test strip.



**6. Specificity**

The results are all negative when test melamine, chloramphenicol, aminoglycoside, fluoroquinolones and macrolides with the concentration of 500 µg/kg.

**7. Storage**

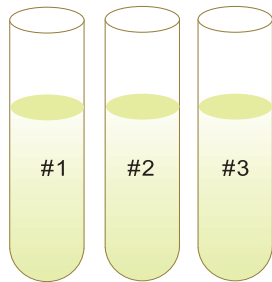
2-8 °C in cool dark place, do not freeze. The kit is valid for 12 months. Lot No. and expired date are printed on the package.

**8. Notice and Precautions for a successful experiment.**

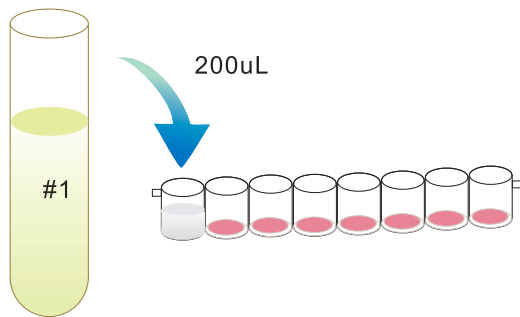
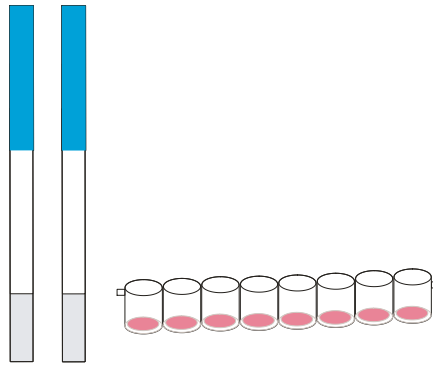
- Perform the assay following the instruction; do not touch the membrane of the strip.
- Seal the bottle after taking out required strips.
- This strip is used **for only once**; please do not use it repeatedly.
- This kit is only for screening test, positive result should be further confirmed with other method.

## Schematic Assay Steps

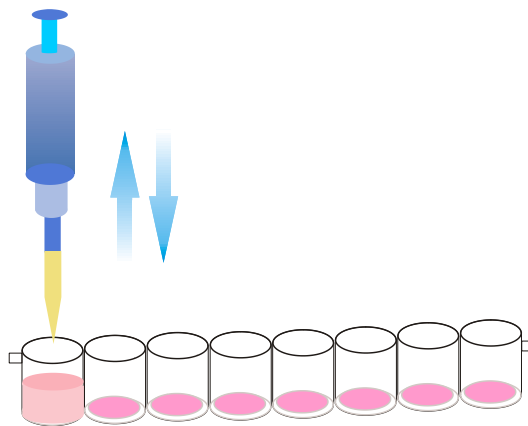
1. Bring all test samples to room temperature; number them to keep record.



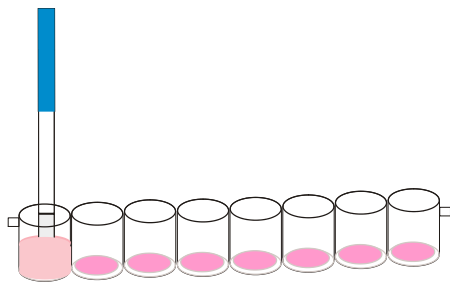
2. Take test kit according to your sample number and also number the kit wells to keep record and consistency.



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

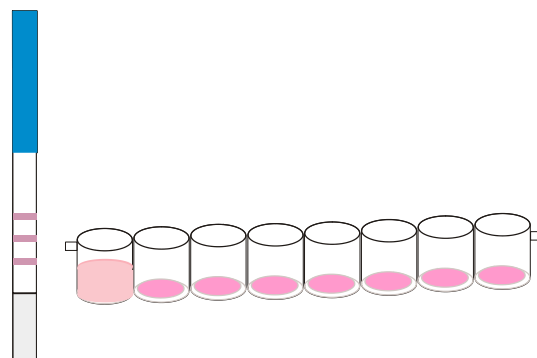


4. Absorb up and down for 5 times to mix sample with reagent completely. Start the timer when the mixture is pink. **Incubate for 5 min at room temperature (20-25 °C).**



5. Insert the "**Immersed**" end of the strip into the mixture; **Incubate for 5 min at room temperature (20-25 °C) again.**

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



Ring Biotechnology Co., Ltd

E-mail: [export@ringbio.com](mailto:export@ringbio.com) [diego@nbgen.com](mailto:diego@nbgen.com) Web: [www.ringbio.com](http://www.ringbio.com)

Add: Building 3, Zhongtongtai TechnoPark, No. 11, Kechuang 14th St, Beijing 100176, CHINA

Tel: +86-10-56267496 Technical Support & Service: +86-18600362934