

Macrolides belong to the polyketide class of natural products. Some macrolides have antibiotic or antifungal activity and are used as pharmaceutical drugs. Macrolides are bacteriostatic in that they suppress or inhibit bacterial growth rather than killing bacteria completely. Due to the potential hazard to human, strict MRLs have been set in EU, USA and other countries. This Macrolides Rapid Test Kit is based on lateral flow immunoassay kit to detect tilmicosin and tylosin in meat. It utilizes the high affinity of monoclonal antibody against tilmicosin. The detection limit of the kit can meet both European and USA MRLs.

## 1. Detection limit (LOD) in meat sample

Tylosin: 8-10 ppb

Tilmicosin: 10-15 ppb

## 2. Kit components

- Test Strip, 48 pcs in 6 plastic bottles, 8 pcs / bottle.
- Concentrated sample buffer (10 X), 10 ml \* 2
- Kit insert
- NBReader Q3 (optional)

## 3. Instruments and reagent required but not provided

- Stomacher / homogenizer
- Vortex / Vortex mixer
- Centrifuge
- Centrifuge tube

## 4. Sample Preparation

### ● Dilution of sample buffer

Restore the concentrated sample buffer (10 X) to room temperature and ensure that the precipitated crystals are completely dissolved before use.

Dilute the 10X concentrated buffer with deionized water in the volume ratio of 1:9, mix thoroughly. The diluted sample buffer can be stored at 2-8 °C for 1 month.

### ● Preparation of meat sample

Take 10g of sample, grind with a grinder/homogenizer, then weigh  $2 \pm 0.01$ g into a centrifugal tube; Add 2ml of diluted sample buffer and shake firccely for 2 minutes; Centrifuge at 4000rpm for 5 minutes, take the supernate (upper layer) for assay.

## 5. Operations

- a) Read the instruction before experiment. Bring the test kit and samples to room temperature.
- 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 prepared sample supernate 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: if you are sampling with plastic pipet, please add sample to the MARKER LINE on the well.**

- d) Incubate for **5min at room temperature (20-25°C)**, 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 **5min at room temperature** again. Take out the strip; determine the result according to **Part 6**.

## 6. Result determination

**Positive (+)** Line C is red, line T has no color, OR color of Line T is lighter than OR equal to Line C;

**Negative (-)** Line T and Line C are both red, and color of Line T is deeper than Line C.

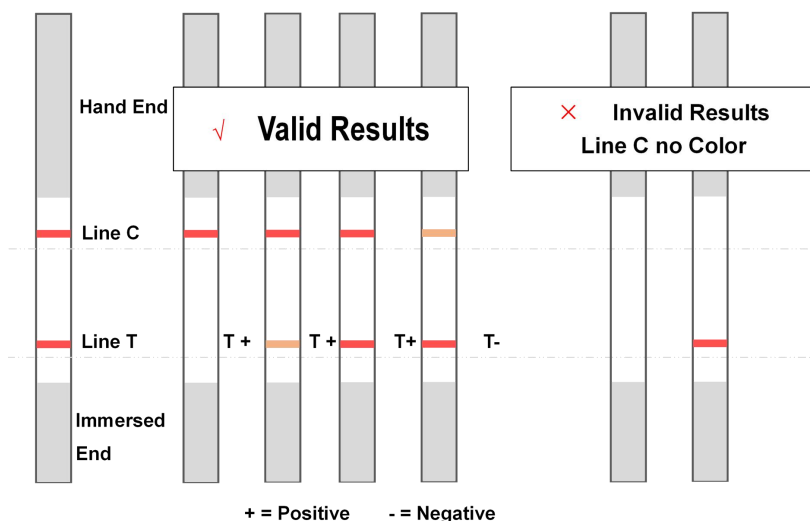
**Invalid (x)** Line C has no color. In this case, please reread the instructions and repeat assay with new strip.

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

You can also interpret the result with a NBReader Q3 if you have it.

### 7. Specificity

The results are all negative when test sulfonamides, chloramphenicol, quinolones and tetracyclines at the concentration of 500 µg/kg.



### 8. 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.

### 9. 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.
- This product is also available for milk / honey testing. Please contact us for more details.

### Ringbio Meat Test Kits

Product #	Product	Unit size
510001	Meat Beta Lactams Rapid Test Kit	48T/96T
510006	Meat Tetracyclines Rapid Test Kit	48T/96T
510008	Meat Sulfonamides Rapid Test Kit	48T/96T
510005	Meat Lincomycin Rapid Test Kit	48T/96T
510014	Meat Chloramphenicol Rapid Test Kit	48T/96T
510032	Meat Florfenicol Rapid Test Kit	48T/96T
510009	Meat Fluoroquinolones Rapid Test Kit	48T/96T
510023	Meat Macrolides Rapid Test Kit	48T/96T
510034	Meat Trimethoprim Rapid Test Kit	48T/96T
510035	Meat Olaquinox Rapid Test Kit	48T/96T

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