

# Tetracycline Residue Rapid Test Strip (Tissue)

Cat. No. DTS020  
Lot. No. (See product label)

## INTENDED USE

The Tetracycline Residue Rapid Test Device is a rapid, one step test for the qualitative (or quantitative) detection of most common Tetracyclines residues in tissues at the sensitivity of 10µg/kg (10ppb). The total assay time takes approx.10min.

## GENERAL DESCRIPTION

Tetracyclines(TCs), is a broad spectrum antibiotic which is widely used as bacteriostatic agents in animal husbandry and veterinary practice. It may cause side effects on gastrointestinal tract, kidney, liver, hematological system. What is worse, it may cause allergic shock. Therefore, it is possible that Tetracycline residues, after use in illegal practice, may lead to a risk for consumers.

## PRINCIPLE OF THE TEST

The test utilizes monoclonal gold conjugated antibody as a signal reagent and a Tetracycline protein conjugate as a solid phase capture reagent. As the sample flows through the absorbent sample pad, the liquid reconstitutes the dried monoclonal gold conjugate. The Tetracycline in the sample will bind to this conjugate antibody and migrate further up the membrane to the test line. If there is no Tetracycline in the sample, the antibody conjugate will bind to the test line giving a negative result, while in the opposite, the antibody conjugate will not bind to the test line giving a positive result.

## SAMPLE PREPARATIONS

1. Weigh 1g homogenized sample into 5ml tube
2. Add 1ml Tetracycline A, shake for 2min
3. Centrifuge at room temperature 4000 rpm/min for 5min
4. Transfer 0.5ml supernatant to another 5ml test tube, add 40 µL Tetracycline B, mix it
5. Suck at least 3 drops (around 100µL ) of mixed sample for test

## REAGENTS PROVIDED

1. Tetracycline Residue Rapid Test Device (40 tests /kit)
2. Product Instruction (1 set /kit)
3. Disposable gloves (20 pieces /kit)
4. Tetracycline A(1bottle /kit)
5. Tetracycline B(1bottle /kit)

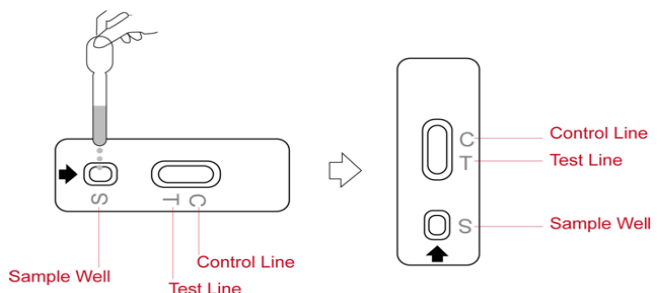
## MATERIALS REQUIRED BUT NOT PROVIDED

Balance, Homogenizer, Centrifuge, Micro-pipettor, Test tubes

## TEST PROCEDURE

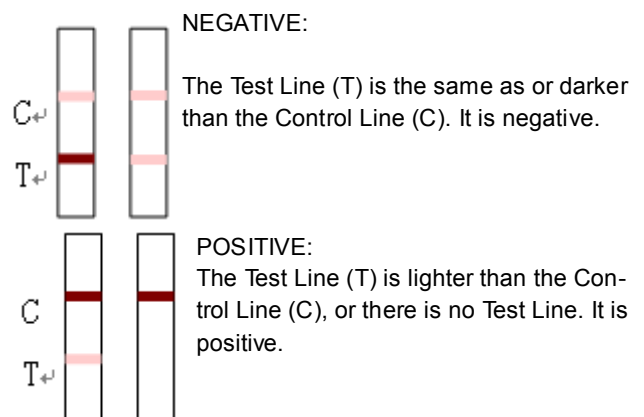
Read the entire procedure carefully before performing any tests.

1. Prepare samples according to chapter 7 (Sample preparations).
2. Remove the Tetracyclines Residues Rapid Test Devices from sealed pouch.
3. Suck prepared meat sample, hold the dropper vertically and drop 3 full drops to the specimen well (S) of the test device (See the illustration upper right) and then start the timer. Avoid trapping air bubbles in the specimen well (S).
4. Wait for red bands to appear. The result should be read in approximately 3~5 minutes. Do not interpret results after 5minutes.



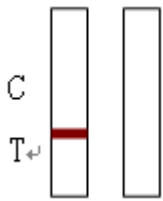
## EVALUATION

### READING RESULTS



Creative Diagnostics. All rights reserved.

45-16 Ramsey Road Shirley, NY 11967, USA  
Tel: 631-398-3652 · Fax:631-614-7828  
E-mail: info@creative-diagnostics.com  
www.creative-diagnostics.com



**INVALID: Reference Line fails to appear.**  
Insufficient specimen volume or incorrect procedural technique is the most likely reasons for an invalid result. Review the procedure and repeat the test with a new test device. Stop using the test kit immediately if the problem is not solved and contact your local distributor.

**Quality Control**

Procedural control is applied. A red band appears in the control region (C), which is also the reference region (R) that is for internal procedure control. It ensures efficiency and correct procedure technique. Controlling standard is not supplied in this device. Proper laboratory practice should be taken to confirm the test procedure and to verify proper test performance.

**STORAGE AND STABILITY**

Store at room temperature. DO NOT FREEZE or use beyond the expiration date. The shelf life is 12 months.

**ASSAY CHARACTERISTICS**

**Sensitivity**

To acquire the exact sensitivity, reduplicative experiment has been done on the sample containing 10µg/kg Tetracyclines.

**Specificity**

It shows positive results when test standard of Oxybicycline at 20µg/kg, and Chlorotetracycline at 23µg/kg.  
No cross-reaction with Chloramphenicol, Streptomycin or Sulfonamides and etc.

**Precision**

A multi-center test evaluation is conducted between the Tetracyclines Residues Rapid Test Device and other products. 233 specimens are studied, including 121 negative and 112 positive. 99% of the Tetracycline Residue Rapid Test Device is effective when comparing to Tetracycline ELISA reagents.

**LIMITATIONS OF THE TEST**

1. The Tetracycline Residue Rapid Test Device provides only a preliminary analytical result. A secondary analytical method must be used to obtain a confirmed result. Gas chromatography and mass spectrometry (GC/MS) are the preferred confirmatory methods.
2. The Tetracyclines Residues Rapid Test Device is a qualitative screening assay and cannot determine the Tetracyclines concentration in the specimen if without Colloidal Gold Reader.
3. Technical or procedural errors, as well as other interfering substances in the specimen may cause erroneous results.

**PRECAUTION**

1. Do not use after the expiration date.
2. Do not open the test device until use.
3. Use device as soon as possible. The unpacked device must be used within one hour.
4. Do not touch the white membrane in the middle of the test device.
5. Do not pipette different reagents with same plastic dropper.
6. Be careful if you are allergic to antibiotics.
7. Do not eat the reagent.

**Creative Diagnostics. All rights reserved.**

45-16 Ramsey Road Shirley, NY 11967, USA  
Tel: 631-398-3652 · Fax: 631-614-7828  
E-mail: info@creative-diagnostics.com  
www.creative-diagnostics.com