# Tetracycline Rapid Test (Tissue)

*Cat. No.:DTS447*
*Pkg.Size:*

## Intended use

CD Tetracycline Rapid Test is a competitive immunoassay for the semi-quantitative detection of the presence of Tetracycline residue in animal's tissue.
**Cut-off**: 100 ppb
**Assay Time**: 5 - 10 min

## General Description

Tetracycline (INN) is a broad-spectrum polyketide antibiotic produced by the Streptomyces genus of Actinobacteria, indicated for use against many bacterial infections. It is a protein synthesis inhibitor. It is commonly used to treat acne today, and, more recently, rosacea, and is historically important in reducing the number of deaths from cholera. Tetracycline is marketed under the brand names Sumycin, Tetracyn, and Panmycin, among others. Actisite is a thread-like fiber formulation used in dental applications. It is also used to produce several semisynthetic derivatives, which together are known as the tetracycline antibiotics. The term "tetracycline" is also used to denote the four-ring system of this compound; "tetracyclines" are related substances that contain the same four-ring system.

## Principle Of The Test

CD Tetracycline Rapid Test is based on competitive lateral flow immunochromatographic assay. The TC-conjugate in the test zone will capture the immuno-gold (colloid gold-TC antibody conjugate), when there is very little dissociative TC in the samples. A visible red test band indicates a negative result when the control line (C zone) shows that the card is valid. The test band (T zone) will be not visible if TC is present in concentration of 100 ppb and above which explains a positive result.

## Reagents And Materials Provided

1. 10×foil pouches each containing one cassette with one pipette and a desiccant
2. 12×centrifugal tubes (2×,15 mL; 10×,1.5 mL)
3. 2×graduated pipettes (3 mL )
4. 10×pipettes
5. Product Manual

## Storage

The kit can be stored at room temperature (2-30°C). The test kit is stable through the expiration date (18 months) marked on the foil pouch. **DO NOT FREEZE**. Do not store the test kit in direct sunlight.

## Assay Procedure

1. Collect tissue as sample. Get rid of the fat tissue. Homogenize the sample at 10000 rpm for 1 min. Weigh out 4.0 g of sample into a 15 mL centrifugal tube and tightly cover the lid.
2. Put the tube into a water bath (80°C ) for 10 min. Take out as much the extract into a 1.5 mL of centrifugal tube.
3. Do centrifugation at 4000 rpm for 1 min to make the extract clear.


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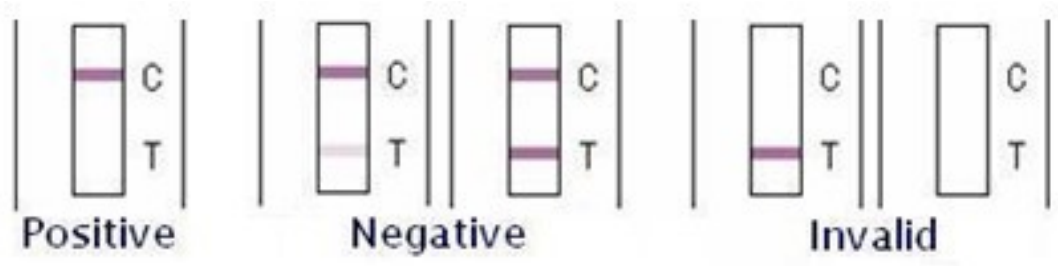
4. Take out the cassette from the foil pouch and place it horizontally.
5. Gradually drip 3 drops of sample extraction into the sample hole “S”.
6. Interpret the result in 5 - 10 min. Result after 10 min is considered as invalid.

## Interpretation of Results

**Positive**: Only one clear band in C zone indicates a positive result. Positive shows that the concentration of Tetracycline is at or above 100 ppb in the sample.
**Negative**: The presence of both clear band in C zone and T zone.
**Invalid**: No colored band appears in C zone.




## Specificity

The results are negative when the test is applied to detect 100 ppm of Chloramphenicol, Aminoglycosides, Macrolides, beta-lactam and fluoro quinolones.

## Precautions

1. For best results, please strictly adhere to these instructions.
2. All reagents must be at room temperature before running the assay.
3. Do not remove test cassette from its pouch until immediately before use.
4. Do not reuse the test kit.
5. Do not use the test beyond its expiration date marked on the foil pouch.
6. The components in this kit have been quality control tested as standard batch unit. Do not mix components from different lot numbers.

## Limitations

CD Tetracycline Rapid Test is a useful tool offering a rapid and accurate testing in field screening, exceeding with its convenience. It provides a semi-quantitative method to detect the Tetracycline above 100 ppb in meat. If you want a quantitative result, please adopt other method such as ELISA in practice.

## REFERENCES

1. "Coronagraph Mounts Done". The Science News 62 (6): 83. 1952.
2. Jukes, Thomas H. Some historical notes on chlortetracycline. Reviews of Infectious Diseases 7(5):702-707 (1985).
3. Olson CA, Mitchell KD, Werner PA (October 2000). "Bait ingestion by free-ranging raccoons and nontarget species in an oral rabies vaccine field trial in Florida". J. Wildl. Dis. 36 (4): 734-43.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