# Ractopamine Residue Rapid Test Strip (Urine)

Prod. No.: DTS011
Pkg.Size: 40T

### *INTENDED USE*

The Ractopamine Residue Rapid Inspection Device is a rapid, one step test for the qualitative detection of Ractopamine in urine samples. The whole time of assay is only approx. 5~8 min.

### *GENERAL DESCRIPTION*

Ractopamine belongs to the group of β-agonists. Ractopamine in feed for animals is responsible for dramatic muscle growth, yet it is not a steroid or hormone, but rather a compound known as a beta agonist. Only a trace amount of ractopamine need be added for a marked increase in protein and decrease in fat accretion in animals, in particular swine.
The Ractopamine Residue Rapid Inspection Device is a rapid test to qualitatively detect the presence of Ractopamine in specimen at the sensitivity of 3 μg/kg. The major advantage of the one step test device is that the result can be observed easily.

### *PRINCIPLE OF THE TEST*

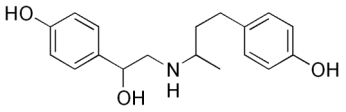
Competitive assays are primarily used for testing small molecules. If Ractopamine is present in the sample it will therefore bind with the conjugate and will be labelled. As the sample migrates along the membrane and reaches the capture zone an excess of labelled antibody will bind to the immobilised antigen so that no visible line is produced. The bound conjugate will then bind to the antibodies in the control zone producing a visible control line. A single control line on the membrane is a positive result. Two visible lines in the capture and control zones is a negative result. However, if an excess of unlabelled Ractopamine is not present, a weak line may be produced in the capture zone, indicating an inconclusive result.

### *REAGENTS AND MATERIALS PROVIDED*

***Ractopamine Residue Rapid Test Device:*** 40 devices
***Product Introduction:*** 1 copy

### *STORAGE*

Store at 15-25℃, DO NOT FREEZE or use beyond the expiration date .The shelf life is 12 months.




**Ractopamine**

### *PRECAUTIONS*

1. Do not use after the expiration date.
2. The test device should remain in the sealed pouch until use.
3. Use device as soon as possible but within 1 hour after removal from the pouch specially.
4. Do not touch the white membrane in the mid of the test device.
5. Use the plastic dropper for one time in case cross reaction happens.
6. It may lead into wrong result if there is bleach, oxydant, or fusty urine.
7. Do the test at room temperature. It takes longer time at high temperature, and shorter time at low temperature.
8. Different samples will influence the result on NC thecal. Read the result according to color differences of the color bar.
9. If test the quality of the device, please use negative urine.
10. Be careful if you are allergic to antibiotics.

### *SPECIMEN TREATMENT*

Get 50 ml urine with clean tube or some other equipment. Centrifuge at 3000 g for 5 min If there is foreign matter. If the urine sample could not be tested immediately, it should be stored in 2~8°C, and it is stable for up to 24 hours. The shelf life is 12 months.

### *TEST PROCEDURE*

1. Prepare samples according to ***SPECIMEN TREATMENT***.
2. Remove the Residue Rapid Test Devices from sealed pouch.
3. Hold the dropper vertically and transfer 3~4 full drops of solution obtained from specimen treatment to the specimen well (S) of the test device, and then start the timer. Avoid trapping air bubbles in the specimen well (S).
4. Wait for purplish red bands to appear. The result should be read in approximately 5~8 minutes. It is significant that the background is clear before reading the test. Do not interpret results after 8 minutes.



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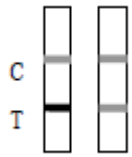
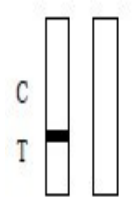
## *INTERPRETATION OF RESULTS*




**NEGATIVE:**
Two lines are visible and the Test Line (T) is the same as or darker than the Control Line (C), which also is the Reference Line (R). This indicates that the Ractopamine concentration in sample is below 3 μg/L.


**POSITIVE:**
No purplish red band appears in T line indicating that the concentration of Ractopamine is higher than 3 μg/L.




**INVALID:**
Reference Line fails to appear. Insufficient specimen volume or incorrect procedural techniques are 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.

## *SENSITIVITY*

To acquire the exact sensitivity, reduplicative experiment has been done on the sample containing 3 μg/L Ractopamine.

## *REFERENCE*

1. "Effective monitoring for ractopamine residues in samples of animal origin by SPR biosensor and mass spectrometry ", Science Direct (2007)
2. "Ractopamine, Response, Economics, and Issues, Allan P. Schinckel, Purdue University

## *QUALITY CONTROL*

Procedural control is applied. Apurplish 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.

Control standard is not supplied in this device. Proper laboratory practice is the confirmation of the test procedure and test performance.

## *LIMITATION OF THE PROCEDURE*

1. The Ractopamine Residue Rapid Test Device is only a preliminary analytical result. A secondary analytical method must be taken for confirmation. Gas or liquid chromatography and mass spectrometry method (GC/LC/MS) is preferred.
2. The Ractopamine Residue Rapid Test Device is a qualitative screening assay and cannot test the Ractopamine concentration in the specimen.
3. Technical or procedural errors, as well as other interfering substance in the specimen may cause falseness.

## *PRECISION*

A multi-center test evaluation is conducted between the Ractopamine Residue Rapid Test Device and other products. 386 specimen is tested, including 206 negative and 180 positive. 98.5% of the Ractopamine Residue Rapid Test Device is effective when comparing to other ELISA Ractopamine reagents.



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