

## Clenbuterol Rapid Test for Tissue Samples (20 tests/kit)

For Detection of clenbuterol residue from tissue samples.

### INTRODUCTION

Clenbuterol, often referred to as “clen”, is a potent beta-2 agonist that can stimulate beta-2 receptors in mammals, which in turn leads to fat loss by allowing the body to release and burn more stored fat. It has been used as a performance-enhancing drug by athletes and body builders (now banned by IOC), and has been illegally used for decades in the veterinary world to increase the lean yield of livestock.

Clenbuterol can cause a multitude of adverse effects upon entering human body, such as dizziness, nausea, diarrhea, agitations, muscle cramps, hypertension, and even acute myocardial infarction (heart attack). Therefore, it has been banned in many countries to be used on food-producing animals.

The Tribo™ Clenbuterol test strip provides a convenient test to screen tissue samples. It allows for **fast, simple, sensitive** and **reliable** detection of Clenbuterol in tissue at the sensitivity of 3 ppb.

### KIT APPLICATIONS

The Clenbuterol Rapid Test is a lateral flow strip test for rapid detection of clenbuterol in tissue samples.

Assay sensitivity: 3 ng/ml (3 ppb); Assay time: 5-10min

### PRINCIPLE OF THE ASSAY

Assay Principles of The Clenbuterol Rapid Test is based on the principle of competitive lateral flow immunochromatography. A clenbuterol antibody is conjugated to colloidal gold and placed on conjugate pad. Colloidal gold provides red color to visualize antibody-antigen binding. Clenbuterol antigen is immobilized on nitrocellulose membrane. After test sample is loaded onto sample pad, it mixes with gold-antibody conjugate and migrates together along the membrane. If sample contains no clenbuterol, antibody conjugated to colloidal gold will bind the antigen immobilized on membrane, leading to clear red color presented on membrane detection line where the test antigen is immobilized (indicating a negative result). If the clenbuterol is present the test sample, it will bind gold-antibody conjugate and prevent its binding onto the antigen line on membrane. As a result, no color will be visible on detection line on membrane (indicating a positive result).

### KIT CONTENT AND STORAGE CONDITIONS

- 20×foil pouches/kit. Each pouch contains one cassette, one pipette and a desiccant.
- Assay buffer (8 mL)

Shelf-life: Storage at room temperature (2-30°C) is stable for one year.

### PRECAUTIONS

Wear protective gloves, clothing, eye, and face protection.

Wash hands thoroughly after handling.

### SAMPLE PREPARATION AND TEST PROCEDURES

**Bring test strip, samples, and all reagents to room temperature (20-25°C) before use.**

1. Collect tissue sample about 4g without fat tissue into 15mL tube.
2. Add 0.5mL of assay diluent, and tightly cover the lid
3. Incubate in water bath at 80°C for 10min.
4. Take out the extracted liquid into a 1.5mL tube. Then centrifuge at 4000 rpm for 1min to make the extract clear.  
Note: if there is fat layer, just insert the pipette through the fat layer, and take the water phase liquid for the assay.
5. Take out the cassette from the foil pouch and place it horizontally.
6. Gradually drip 3 drops of sample into the sample hole “S”.
7. Interpret the result in 5-10 minutes.
8. Result Interpretation.

Test result is interpreted by observing test line and control line shown in result window as the below diagram (Fig. 1).

**Negative (-):** both test (T) and control lines (C) are present, indicating Clen concentration in sample is lower than 3 ng/ml; **Positive (+):** control line(C) is present, and test line (T) is absent. This result indicates Clen centration is higher than 3 ng/ml in the sample. **Invalid test:** no control line (C) is present. Please repeat the test using a new test strip following instructions on this user guide.



**Fig. 1 Diagram for result interpretation.**

### Relative Products

- Clenbuterol Rapid Test for urine (TBS11111)
- OTA Rapid Test Strip (TBS11116)
- Chloramphenicol (CAP) Test Strip (TBS11121)
- Ractopamine Rapid Test Strip (TBS11131)
- Salbutamol Rapid Test Strip (TBS11141)
- Shiga Toxin Test Strip (TBS11151)
- Deoxynivalenol (DON) Test Strip (TBS11156)
- Aflatoxin B1 Test Strip (TBS11166)
- Zearalenone (ZEA) Test Strip (TBS11171)
- Microbial Magnetic DNA Extraction (TBS6025)
- STEC-Salmonella qPCR kit (TBS42029)
- 4-in-1 Aspergillus qPCR kit (TBS42025)

**For research use only.**