SAL (Salbutamol) Lateral Flow Assay kit
Catalog No: E-FS-C010
50T

This manual must be read attentively and completely before using this product.

If you have any problems, please contact our Technical Service Center for help.

Phone: 240-252-7368(USA) Fax: 240-252-7376(USA)
Email: techsupport@elabscience.com
Website: www.elabscience.com

Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.
Test principle
This kit uses the principle of Colloidal Gold Immunochromatography assay. It can detect Salbutamol (SAL) in samples such as urine, feed, tissue, etc. After adding the sample solution into the sample well of detection card, SAL of the sample solution combine with the gold-labelled antibody, so as to prevent the combining of gold-labelled antibody with SAL conjugate on the cellulose membrane. When the concentration of SAL in the sample solution is more than the detection limit, the detect line do not show color reaction and the result is positive. When the concentration of SAL in the sample solution is less than the detection limit, the detect line show color and the result is negative.

Technical indicator
Sensitivity: 5 ppb (ng/mL)
Detection limit: Urine ---5 ppb; Tissue---10 ppb; Feed---50 ppb.

Kits components

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection card (with pipette)</td>
<td>50 T/kit</td>
</tr>
<tr>
<td>Manual</td>
<td>1 copy</td>
</tr>
</tbody>
</table>

Other materials required but not supplied
Instruments: Homogenizer, Nitrogen Evaporators, Water bath, Oscillators, Centrifuge, Graduated pipette, Balance (sensitivity 0.01 g)
High-precision transferpettor: Single channel (20-200 μL, 100-1000 μL)
Reagents: Sodium sulfate (Na₂SO₄), N-hexane, Methanol.

Sample pretreatment
Restore all reagents and samples to room temperature before use.

1. Sample pretreatment Notice:
   Experimental apparatus should be clean, and the pipette should be disposable to avoid the experiment result be interfered by the contamination.

2. Sample pretreatment procedure:
2.1 Pretreatment for urine (swine) sample:
   Take clear upper urine sample to detect, the sample needs to be centrifuged at 4000 r/min for 10 min if turbid.
   Note: Detection limit: 5 ppb
2.2 Pretreatment of tissue (livestock) sample:
(1) Weigh 3.0 ± 0.05 g of homogenized fresh sample into a 50 mL EP tube, add 2 mL of deionized water and oscillate for 5 min.
(2) Incubate the tube in boiling water bath for 5~10 min. Stand the tube for 5 min to make it cool, then take the supernatant for detection.

Note: Detection limit: 10 ppb

2.3 Pretreatment of feed sample:
(3) Weigh 1.0 ± 0.05 g of homogenized sample, add 1 g of Na₂SO₄ and 10 mL of Methanol, oscillate for 3 min, Centrifuge at 4000 r/min at room temperature for 10 min.
(4) Remove 1 mL supernatant to dry in nitrogen evaporators/water bath at 50-60°C. Dissolve the residual with 1 mL deionized water, add 1mL of N-hexane and oscillate for 30s. Centrifuge at 4000 r/min at room temperature for 5 min.
(5) Take 80 µL lower liquid for analysis.

Note: Detection limit: 50 ppb

Experiment procedure
1. Tear the aluminum foil bag of the detection card and take out the detection card, and put it on a smooth, clean table.
2. Take the prepared clear sample supernatant with the matching pipette, add 2-3 drops (about 60 µL) of sample to the sample well (S) vertically and slowly (Avoid foaming).
3. Incubate for 8 to 10 minutes and then judge the results immediately.

Judgment of result
1. Negative: The control line region (C) and the test line region (T) both show a line. It indicates the content of SAL in the sample is lower than detection limit or the sample doesn’t contain SAL.
2. Positive: Only the control line region (C) show a line. It indicates the content of SAL in the sample is higher than detection limit.
3. Invalid: The control line region (C) does not show a line. It indicates operation process is wrong or the test card is invalid.
Notes
1. Do not use product out of date or in a broken aluminum foil.
2. The detection card should be adjusted to room temperature after removed from the refrigerator before opening. The opening detection card should be used as soon as possible so as not to be invalid because of moisture.
3. Avoid of contacting the white membrane at the middle of the sample well.
4. The droplets cannot be mixing to avoid the cross-contaminant.
5. The tested sample should be clear, no turbidity particle and no bacterial pollution, otherwise it is easy to result in abnormal phenomena such as obstruction, unobvious color, etc., which affect the judgment of the experiment result.
6. If the samples are not indicated in the manual, a preliminary experiment to determine the validity of the kit is necessary.
7. The kit is used for rapid screening of actual samples. If the test result is positive, the instrument method such as HPLC, LC/MS, etc. can be used for quantitative confirmation.

Storage and valid period
Storage: Store at 2-30°C for 1 year. With cool and dry environment.
Expiry date: expiration date is on the packing box.