CLENBUTEROL - FAST (ELISA Kit)

Intended use

Competitive Enzyme Immunoassay For The Quantitative Analysis Of Clenbuterol And Other β-Agonists In Urine, Muscle And Liver (An Additional Sample Preparation Method For Milk Is Available On Request).

General

Clenbuterol belongs to the group of β-agonists. In livestock production clenbuterol improves the meat/fat ratio in fattened animals or accelerate the growth. Up to now β-agonists have not been authorized as adjuvants for fattening. In addition to its lipolytic and anabolic effect, clenbuterol has a relaxing effect on non-striated musculature on which is based its therapeutic use as an antiasthmatic and a tocolytic agent. When employed as a fattening adjuvant, as compared with the therapeutic use, clenbuterol is administered in a 5 to 10 times higher dose. Therefore, it is possible that clenbuterol residues may lead to a risk for consumers after illegal administration. Using the RidaScreen® Clenbuterol Fast Assay, it is possible to detect clenbuterol and other β-agonists in urine, muscle and liver both rapidly and with accuracy.

Materials Provided:

- 1 x Microtiter Plate With 96 Wells (12 strips with 8 removable wells each) coated with antibodies directed against anti-clenbuterol antibodies.
- 6 x Clenbuterol Standard Solutions (1.3 ml each) 0 ppt (zero standard), 100 ppt, 300 ppt, 900 ppt, 2700 ppt, 8100 ppt Clenbuterol in aqueous solution; ready to use.
- 1 x Conjugate (1.2 ml); peroxidase conjugated clenbuterol concentrate; red cap.
- 1 x Anti-Clenbuterol Antibody (1.2 ml); concentrate; black cap.
- 1 x Substrate/Chromogen Solution (10 ml); blue cap; stained red.
- 1 x Stop Solution (14 ml); contains 1 N sulfuric acid; yellow cap.
- 1 x Buffer (25 ml) Conjugate and antibody dilution buffer.

Materials Required But Not Provided:

- Microtiter Plate Spectrophotometer (450 nm).
- Centrifuge.
- Shaker.
- Graduated Pipettes.
- Micropipettes: 20 µl-, 50 µl-, 100 µl-, 200 µl-.
- Rida® C18 column (R-Biopharm AG, Art. No.: R2002).
- Methanol.
- Sodium Hydroxide.
- n-Heptane (or n-hexane).
- 50 mm HCl.
- 50 mm Potassium-Dihydrogen-Phosphate-(KH2PO4)-buffer, pH 3.0.
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- 50 mm Tris-HCl-buffer, pH 8.5.

Kit Specifications:

- Detection Limit: 100 ng/kg (ppt).
- Time Requirement: 1 h.
- Sample Preparation:
  - Urine: no sample preparation necessary.
  - Tissue: chromatographic prepurification by means of Rida® C18 columns (R 2002).
  - Cattle eyeball: freeze and use of thawing liquid.
- Cross Reaction:
  - Clenbuterol approx. 100%.
  - Brombuterol approx. 150%.
  - Mabuterol approx. 86%.
  - Terbutalin, Salbutamol approx. 10%.
  - Cimaterol approx. 6 %.
  - Carbuterol approx. 4 %.
  - All other cross reactions are <1.0%.
- Samples Per Kit: Up to 42 in duplicate.
- Standards: 0/100/300/900/2,700/8,100 ppt.
- Measurement: Microtiter Plate Reader (450 nm).
Product ID #: - R1707.