

ELISA kit for β -agonists (clenbuterol)

Cat. N. AA101

β -agonists drugs are used in human and veterinary therapy as antiasthmatic.

In animal production the non therapeutic use of β -agonists is illegal in the European Community because at higher dosage these drugs shift the flow of nutrient from adipose tissue toward muscle tissue..

Assay principle

Competitive enzyme immunoassay for quantitative analysis of β -agonists.

Applications

Urine, serum, feed, milk and milk powder, liver, eye.

Standard curve range

0.15 – 5 ng/ml

Detection limit

Urine, serum: 0.15 ppb

Feed, milk and milk powder: 7.5 ppb

Liver: 0.3 ppb

Eye: 0.75 ppb

Cut-offs are suggested in the kit insert.

Measuring range

Urine, serum: 0.15 – 5 ppb

Feed, milk and milk powder: 7.5 – 250 ppb

Liver: 0.3 – 10 ppb

Eye: 0.75 – 25 ppb

Specificity (% di cross-reactivity)

Clenbuterol	100%
Mabuterol	60%
Salbutamol	20%
Terbutaline	15%
Cimaterol	5%
Methylclenbuterol	9%
Hydroxymethylclenbuterol	6%

Sample preparation

Urine, serum: centrifugation.

Feed: extraction, centrifugation.

Milk, milk powder: extraction, centrifugation.

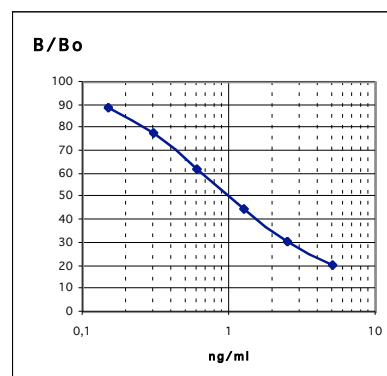
Liver: extraction, centrifugation.

Eye: protease digestion, incubation, centrifugation.

Assay time

45 min. (sample preparation not included).

Example of calibration curve



Kit contents

- Microtiter 96 well plate, 12 strips with 8 breakable wells
- Clenbuterol standard solutions, ready to use
- Anti β -agonist antibody, ready to use
- Enzyme conjugate, ready to use
- Washing buffer, concentrated
- Developing solution, ready to use
- Stop solution, ready to use
- Instructions

Materials not provided

- Distilled water
- Chloridric acid (feed, milk, milk powder, liver)
- Sodium hydroxide (feed, milk, milk powder, liver)
- Phosphate buffer (eye)
- Subtilisin Carlsberg protease (eye)

Additional equipment

- Bench-centrifuge
- Grinder (feed)
- Balance (feed, milk powder, liver, eye)
- Scalpel (eye)
- pH-meter (feed, milk, milk powder)
- Incubator (milk, milk powder, eye)
- Vortex (liver)
- Micropipette 20-200 μ l and 200-1000 μ l with suitable tips
- Multichannel micropipette 20-300 μ l with suitable tips (optional)
- ELISA plate or strip reader with 450 nm filter

Advantages

- Low matrix effect.

Storage conditions: +2/+8 °C

Shelf-life: 12 months after manufacture.

Manufacturer: Tecna Srl, azienda certificata ISO9001/UNI EN ISO 9001 – Ed. 2000 (SGS, N° IT01/0291).