

ELISA kit for Zeranol and Taleranol

Cat. N. FA636

Assay principle

Competitive enzyme immunoassay for quantitative analysis of zeranol and taleranol.

Applications

Urine and muscle tissue.

Standard curve range

0.005 – 0.2 ng/ml

Detection limit

Urine: direct method: 0.06 ppb

SPE method: 0.25 ppb

Muscle: 0.02 ppb

Measuring range

Urine: direct method: 0.06 – 2.4 ppb

SPE method: 0.25 – 10 ppb

Muscle: 0.02 – 0.8 ppb

Specificity (% cross-reactivity)

Zeranol	100
Taleranol	34.6
Zearalenone	19.6
α -zearalenol	55.2
β -zearalenol	7.8
Zearalanone	150

Sample preparation

Urine-direct method: centrifugation and dilution

Urine-SPE method: hydrolysis and purification on solid phase (SPE column C₁₈)

Muscle: homogenation, extraction with solvents, purification on solid phase (SPE column C₁₈).

Assay time

Over night (+4°C) incubation + 30' (sample preparation not included)

Kit contents

- Microtiter 96 well plate, 12 strips with 8 removable wells each
- One plate sealing tape
- Zeranol standard solutions: 0, 0.005, 0.01, 0.02, 0.05, 0.1, 0.2 ng/ml, ready to use
- Anti-zeranol antibody, lyophilised
- Enzyme conjugate, concentrated
- Developing solution, ready to use
- Dilution buffer, concentrated
- Stop solution, ready to use
- Washing buffer, concentrated
- Instructions

Material not provided

- Distilled water
- Phosphate buffer (muscle and urine-SPE method)
- β -glucuronidase from *Helix pomatia* (urine – SPE method)
- Methanol (muscle and urine-SPE method)
- Hexane (urine-SPE method)
- Ethyl acetate (urine-SPE method)
- Ter-butyl methyl ether (muscle)
- SPE C₁₈ columns (muscle and urine-SPE method)
- Petroleum ether (muscle)
- Dichloromethane (muscle)
- Sodium hydroxide (muscle)
- Phosphoric acid (muscle)
- Tris buffer (muscle)
- Ethanol (muscle)
- Homogenizer (e.g. Ultraturrax only for tissues)
- Ter-butyl methyl ether

Additional equipment

- Bench-centrifuge
- Incubator (urine-SPE method)
- Equipment to evaporate solvents from vials (muscle and urine-SPE method)
- Shaker (muscle)
- Vacuum system (muscle)
- 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 a 450 nm filter

Advantages

- Screening of a high number of samples in a single analytical session.
- Most of the components ready to use.

Storage conditions

+2/+8 °C.

Shelf-life

12 months after manufacture.

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