



KACEY[®] DIAGNOSTICS

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Rodenticide - Stx Poison Test (Serum / Plasma)

Instructions for Use

Catalog # 30312 - (5 Test / Btle) 30313 (10 Tests / Btle)

A rapid and sensitive test for the semi-quantitative detection of ingested compounds such as warfarin, coumadin and their derivatives (a certain anticoagulant class of rodenticides) in the serum or plasma of animals.

For Veterinary Use Only

Intended Use

The Kacey Rodenticide Test provides a means of detecting Warfarin (Coumadin and their derivatives) in the blood of animals that have accidentally ingested Rodenticides containing these type anticoagulants. The test is for in-vitro diagnostic use only.

Summary

The clinical manifestations of poisoning by Warfarin like compounds included but may not be limited to the following:.....

Principle

The Kacey Rodenticide Test is a semi-quantitative test for the detection of Warfarin Coumadin and their derivatives in animal serum or plasma. The test itself is composed of a membrane coated with warfarin like particles in the test line "T" position. An antibody against warfarin and its' derivatives are conjugated to a detector particle, and will bind either to the anticoagulant on the test line "T" or to the warfarin in the animal serum or plasma, if present, when the sample is applied to the sample well. The detector particle allows the interaction of the antibody and the warfarin to become visible to the eye. A second reagent in the control line "C" position indicates the correct functioning of the test, and it should always develop by the end of the testing period.

If there is no warfarin like products present in the animal serum or plasma sample, the antibody on the detector particle will bind to the warfarin on the test line "T", resulting in a blue-purple line. However, following accidental ingestion of warfarin-based rodenticides, the warfarin present in the animal's serum or plasma will bind to the antibody against warfarin on the detector particle, leaving little or no antibody remaining to bind to the test line. In this case the test line "T" will either not develop at all or may result in a faint "T" line indicative of incomplete inhibition.

Reagents

The test device contains warfarin and its derivatives coated on the membrane and anticoagulant antigen conjugated to colloidal gold.

Precautions

- For professional *in vitro* diagnostic use only. Do not use after expiration date.
- Do not eat, drink or smoke in the area where the specimens or kits are handled.
- Handle all specimens as if they contain infectious agents. Observe established precautions against microbiological hazards throughout testing and follow the standard procedures for proper disposal of specimens.
- Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are being tested.
- Humidity and temperature can adversely affect results.
- The test should remain in the sealed pouch until use.
- Optimal assay performance requires strict adherence to the assay procedure described in this Instruction sheet and any deviations from the procedure may lead to aberrant results.

Storage & Stability

The kit can be stored at room temperature or refrigerated (2-30°C). The test device is stable through the expiration date printed on the sealed pouch. The test device must remain in the sealed pouch until use. **DO NOT FREEZE.** Do not use beyond the expiration date.

Materials

Materials Provided:

- Test device
- Buffer
- Instructions for Use
- Dropper pipet
- Dessicant

Materials required but not Provided:

- Pipette capable of delivering 75 µL specimen
- Timer
- Specimen collection container
- Centrifuge

Specimen Collection & Preparation

- The Kacey Rodenticide Test Device can be performed using serum or plasma.
- Separate the serum or plasma from whole blood sample as soon as possible to avoid hemolysis. Only clear, non-hemolyzed specimens can be used.
- Testing should be performed immediately after the specimens have been collected. Do not leave the specimens at room temperature for prolonged periods. Specimens may be stored at 2-8°C for up to 2 days.
- Bring specimens to room temperature prior to testing.

Frozen specimens should not be thawed to perform test

Directions for Use:

Allow test device, serum or plasma specimen, and/or controls to equilibrate to room temperature (15-30°C) prior to testing.

1. Remove the test device from the sealed pouch and use it as soon as possible.
2. Place the test device on a clean and level surface. Add 75µL or two (2) drops of serum or plasma specimen to the "S" well and set the timer for Five (5) Minutes
3. Start the timer.
4. Wait for the purple line(s) to appear. It is important that the test be read at the end of the Five (5) minutes a longer time period could result in erroneous results.
5. Level of detection (LOD) 70µg. This is the cutoff of a positive (+) test.

Interpretation of Results:

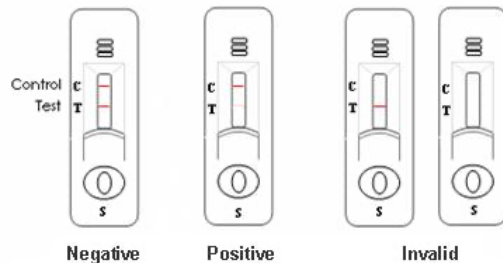
POSITIVE: One distinct purple line appears in the "C" position and no visible line in the "T" position. A small "faint" line in the "T" position indicates that there may be a small amount of the rodenticide in the animal specimen or that insufficient time as elapsed following ingestion for the full dose to reach the animal's plasma

NEGATIVE: Two distinct lines appear. The control line (C) and Test (T) line are visible on the test cassette. The test is Negative

INVALID: Control line fails to appear. The test results are INVALID, if no control line (C) is visible, regardless of the presence or absence of line in the Test (T) region of the cassette.

Repeat the test using a new cassette.

NOTE: The intensity of the color in the test line region (T) will vary depending on the concentration present in the specimen. However, neither the quantitative value nor the rate of increase in Rodenticide can be determined by this qualitative test.



Quality Control

A procedural control is included in the test. A red line appearing in the control region (C) is the internal procedural control. It confirms sufficient specimen volume and correct procedural technique. A clear background is also required.

Number of samples tested fell within the testing Linearity range of the test and compared well within the parameters of known controls tested

125 Canine plasma sample, 75 Feline Plasma Samples

Results for 200 Spiked Plasma samples of known controls that were tested.

Results: 200 samples

Unit of Measure: µg (equivalent to one billionth of gram)

Linearity: Ut (Upper threshold) 120 µg

Lt (Lower threshold) 70µg

LOD (Level of Detection) 70µg

- Accuracy: 95% - Specificity:98% - Reproducibility 95% Coefficient of Variation 5%

Results of testing on file at Kacey

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