WITNESS RELAXIN

GENERAL INFORMATION

The WITNESS RELAXIN kit is intended to determine pregnancy in the bitch and queen, as well as to distinguish between pseudopregnancy and real gestation in the bitch. The WITNESS RELAXIN kit measures relaxin levels in plasma or serum samples. The presence of significant amounts of this hormone is a reliable indicator of pregnancy.

PREGNANCY DETECTION

Canine: relaxin can be detected in biological samples soon after implantation of the fertilized egg, which occurs about 18 days after LH surge. Relaxin is first detectable by WITNESS RELAXIN during the fourth week of pregnancy (from D22 to D28 after ovulation), reaches its highest level in the 6th-8th weeks, and then declines prior to parturition.

Feline: some pregnancies may be detected as early as 20 days post-mating, while others may not test positive until after 31 days. It is recommended to test after this date if a previous result was negative.

Occasionally, positive results may occur in non pregnant queens with elevated relaxin levels due to cystic ovaries.

TEST INDICATION

The WITNESS RELAXIN test provides an early, inexpensive and reliable way to determine success or failure of a planned mating or unwanted exposure.

TEST PRINCIPLE

The WITNESS RELAXIN test is a simple test, based on Rapid Immunomigration (RIM) technology, that uses the combination of two antirelaxin antibodies to quickly detect this hormone in biological samples (**serum or plasma**) from the bitch and queen. Colloidal gold particles sensitized with an anti-relaxin antibody bind to relaxin molecules present in the sample. The complex is allowed to migrate along a strip and is then captured on a sensitized reaction line (second antibody) where its accumulation causes the formation of a clearly visible pink band. A control band, located at the end of the reading window, ensures that the test was performed correctly.

SPECIMEN INFORMATION

- The test can be performed on **serum** or **plasma** (anticoagulated with EDTA, sodium citrate or heparin).
- Samples should always be collected with a sterile needle and syringe.
- Haemolysis does not significantly interfere with the test, but strongly haemolyzed samples may partly obscure a weak positive line (due to haemoglobin background).

Storage

It is preferable to test samples immediately after collection and no longer than 4 hours after collection, if stored at room temperature. If testing is further delayed, samples should be kept refrigerated (2°C – 8°C) for up to 2 days.

For prolonged storage, samples should be kept frozen (-20°C).

KIT CONTENTS

- A. 5 pouches, each containing 1 test device and desiccant.
- B. 1 buffer dropper bottle (2ml).
- C. Instructions for use.
- D. 5 pipettes.

Note:

Prior to use, test and control bands appear yellow. The bands are dyed yellow for quality control purposes. The dye does not interfere with the test results and will wash away while the test is developing.

GENERAL PRECAUTIONS

- 1. Do not use components after expiration date.
- 2. Store the test kit at 2°C 25°C. Do not freeze.
- 3. Use the test shortly after opening the sealed pouch (within 10 minutes).
- 4. Avoid touching or damaging membrane at windows (1), (2), (3).
- 5. The WITNESS device should be placed on a flat , horizontal surface while performing the test.
- 6. Use a separate pipette for each sample.
- 7. Hold pipette and buffer bottle vertically when dispensing sample and buffer respectively.
- 8. For veterinary use only

TEST PROCEDURE

Important : Allow samples and buffer drops to fall onto membrane at window (1). Avoid touching the membrane while applying the sample or buffer drops. Do not touch the membrane with pipette or buffer bottle tips.

1. Sample application

- Tear open a provided pouch and place the test device on a flat horizontal surface for the duration of the test.
- Holding the provided pipette vertically, transfer two drops of plasma or serum sample to the sample well, window (1).

(Do not use whole blood).

3. Reading test

- After 10 minutes, observe the presence or absence of pink / purple bands in reading windows (2) and (3).
- Sample results are read in window (2). The control band is read in window (3).

Notes:

- The test is complete and may be read before 10 minutes if two pink/purple bands are clearly visible in both windows (2) and (3).
- The presence of a pink/purple band only in window (3) before the 10 minutes does not mean that the test is complete. A pink/purple band in window (2) may develop slower than the control band in window (3).

2. Buffer dispensing

- . Check that the sample has truly penetrated the membrane.
- Remove the cap from the buffer bottle, hold it vertically and add two drops of buffer to the sample well, window (1).
- Leave the test device flat during migration of sample/reagent complex through the reading window.

RESILITS

1. Validation

Test is validated if a pink/purple band is present in the reading window (3).

2. Interpretation

- No band in reading window (2), with one band in window (3) : sample is negative for relaxin.
- One band in reading window (2), with one band in window (3):
 sample is positive for relaxin.

Notes:

. No hand in control window (3): invalid test.

Positive samples: All positive result confirms pregnancy.

Negative samples: A negative result means that relaxine is not present in the sample (no pregnancy) or that its level is too low to be detected (too early diagnosis to confirm a pregnancy status).

Two negative results at least one week apart may be required for confirmation of non pregnancy, especially when date of ovulation (or matino) is unknown.

Non pregnancy can be certainly confirmed only starting from d26 after bitches ovulation (31 days post-mating in queens).