

## INTENDED USE

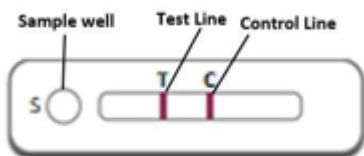
**Sensit Progesterone Ovulation Rapid test Kit** is an in-vitro immunochromatographic assay designed for quantitative determination of progesterone concentration in human whole blood, serum or plasma specimen. The test is used as an aid to track ovulation, monitor the effect of progesterone therapies and in early pregnancy to help diagnose an ectopic or failing pregnancy.

## SUMMARY & TEST DESCRIPTION

Progesterone is a female hormone produced primarily by the ovaries. It plays a crucial role in regulating ovulation and menstruation. During the follicular phase of the menstrual cycle, progesterone levels remain low. Following the LH surge and ovulation, luteal cells in the ruptured follicle (now called the corpus luteum) begin producing progesterone in response to LH. This causes progesterone levels to rise rapidly, peaking around days 5–7 after ovulation.

During the luteal phase, progesterone transforms the estrogen-primed endometrium from a proliferative to a secretory state, preparing it for possible implantation. If pregnancy does not occur, progesterone levels decline during the last four days of the cycle, leading to menstruation.

If conception occurs, the ovaries continue producing progesterone at mid-luteal levels during the first trimester. This hormone helps build and maintain the uterine lining to support implantation and early pregnancy. Around weeks 9–10 of pregnancy, the placenta takes over progesterone production, ensuring continued support for fetal development.



## TEST PRINCIPLE

A **Progesterone Rapid Test** based on chromatographic immunoassay follows a competitive binding principle. The test strip consists of a sample pad, a conjugate pad containing colloidal gold-conjugated anti-progesterone antibodies, a nitrocellulose membrane with two lines—one test line (T) coated with progesterone antigen and a control line (C) coated with goat anti-mouse antibody—and an absorbent pad to facilitate proper flow. When a sample, such as blood, serum, urine, or milk, is applied to the sample pad, it migrates through the conjugate pad, where any progesterone present in the sample binds to the gold-labeled anti-progesterone antibodies. If the progesterone level is high, most antibodies are occupied, preventing them from binding to the immobilized progesterone antigen at the test line, resulting in a weak or absent test line. Conversely, if progesterone levels are low, more free antibodies bind to the test line, producing a darker visible band. Regardless of progesterone concentration, the sample continues migrating to the control line, where a reaction occurs, forming a visible control band to confirm the validity of the test. This principle is widely used in both veterinary and human applications to assess progesterone levels, aiding in fertility monitoring and estrus detection.

## PRECAUTION & WARNING

- 1) Use within 10 minutes after opening pouch.
- 2) Do not touch result window.
- 3) Use only the buffer supplied along with the kit.
- 4) Do not mix components from different kits.
- 5) Do not use with specimen containing precipitates

## MATERIALS PROVIDED

1. Each Kit contains 30 test devices, each sealed in a foil pouch containing following items:
  - a. One test card
  - b. Dropper
  - c. Desiccant
2. Instruction Leaflet

## MATERIAL REQUIRED BUT NOT SUPPLIED

Specimen collection containers.

## STORAGE & STABILITY

Store the test kit between 4-30°C till the expiration date indicated on the pouch / carton. **DO NOT FREEZE**. Ensure that the test device is brought to room temperature before opening.

## SPECIMEN COLLECTION

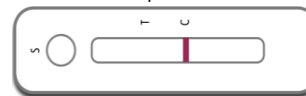
1. Urine specimen may be collected at any time in a clean, dry container either plastic or glass without preservatives.
  2. If specimen cannot be assayed immediately, it can be stored at 2-8°C for up to 48 hours prior to testing frozen at -20°C for longer period of time.
  3. Specimens should be equilibrated to room temperature before testing if they were refrigerated or frozen.
  4. Urine specimen exhibiting visible precipitates should be filtered, centrifuged, and settled so that clear aliquots can be obtained for testing.
- Choose a convenient time of the day to collect urine. Try to collect urine at about the same time each day for the entire cycle.*

## INTERPRETATION OF RESULT

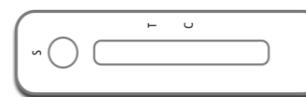
**Positive:** Color bands at position C and T.




**Negative:** Color band at position C.



**Invalid:** Color band at C does not appear



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