DESCRIPTION

OVUCHECK® PREMATE is a semi-quantitative test for the measurement of progesterone in a drop of plasma or serum. The quantity of progesterone present is indicated by a change in colour, which is compared with high and low progesterone standards. This kit is quick and simple to use. It gives reliable information which allows you to:

- Plan mating of the bitch at the optimum time;
- Determine the time of whelping of the bitch;
- Investigate the causes of infertility of the bitch: anovular cycles, silent heats with normal ovulation;
- Determine if the queen has ovulated.

SUMMARY AND EXPLANATION

Bitch:

Hormonal changes occurring in the bitch in the course of prooestrus, oestrus, beginning of dioestrus, and gestation are shown below. At the end of pro-oestrus, the drop in oestrogen levels, secreted by the maturing ovarian follicle, causes the luteinising hormone (LH) surge. Ovulation normally happens 24 to 48 hours after the LH surge. The follicles gradually produces progesterone above basal levels (<0.5 ng/mL) a few days before the LH surge. When the LH surge occurs, progesterone levels may reach 2 to 4 ng/mL. At the time of ovulation, the progesterone level is generally between 4 and 10 ng/mL. This normally happens 11 to 13 days after the start of prooestrus (characterised by the presence of blood and swelling of the vulva). After ovulation, progesterone levels continue to rise to reach maximal levels 2 to 3 weeks after the start of dioestrus. However, because of the large variations between breeds and individuals, one can only be certain that ovulation has taken place when the level of progesterone has exceeded the value of the high standard of the PREMATE test (10 ng/mL). At the end of gestation, 12 to 24 hours before giving birth, the level of progesterone falls again to reach values of less than 2 ng/mL. Thus, a level of progesterone higher than the low standard of the PREMATE test shows that parturition will not occur in the next 12 to 24 hours.

Queen:

The oestrus cycle of the queen is seasonal and polycyclic. There are 5 phases in the queen’s oestrus cycle: pro-oestrus, oestrus, interoestrus, dioestrus, and anoestrus. In queens, ovulation is induced by vaginal penetration, leading to development of the corpus luteum (luteal phase) which synthesizes and secretes progesterone, whether or not the mating was fertile.
CHARACTERISTICS

> Semi-quantitative test
> Competitive binding of progesterone
> Rapid (less than 1 hour)
> Tests per kit: 5 tests Premate 5
  10 tests Premate 10

<table>
<thead>
<tr>
<th>ASSAY PROCEDURE</th>
<th>INCUBATION TIME/ TEMP.</th>
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<tbody>
<tr>
<td>1. Preparation of substrate</td>
<td></td>
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<tr>
<td>2. Incubation of samples, standards and conjugate</td>
<td>15 min / AT</td>
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<tr>
<td>3. Successive washes</td>
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<tr>
<td>4. Incubation with substrate</td>
<td>15 min / AT</td>
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<tr>
<td>5. Interpretation of the results</td>
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AT : Ambient Temperature