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# *K9 OVI-C h e c k*

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A SINGLE STEP CANINE LH TEST

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## PRODUCT PROFILE AND INSTRUCTIONS

**Model: Dip-Stick Model**  
**Results: Five minutes**  
**Storage: 4-8°C**

**Simple Procedure: Rapid Canine LH**  
**Sensitivity: 1.0 ng/mL**  
**Shelf Life: 10 months**

### **INTENDED USE**

Canine LH test is an immunochromatography based single step test. The test is designed as a qualitative and semi-quantitative serum/plasma LH test to predict reasonable time of occurrence of ovulation in dogs. This simplified test requires no special instrumentation and the test should be used in conjunction with all other available methods including vaginal cytology and progesterone tests.

### **INTRODUCTION**

Luteinizing Hormone (LH) and Follicle-Stimulating Hormone (FSH) are intimately involved in the control of the growth and reproductive activities of the gonadal tissues, which synthesize and secrete male and female sex hormones. LH is a glycoprotein secreted by the basophilic cells of the anterior pituitary. Gonadotropin-release hormone (GnRH or LHRH), produced in the hypothalamus, controls the release of LH and FSH from the anterior pituitary. Like other glycoproteins FSH, TSH, and hCG, LH consists of two subunits alpha and beta. The LH binds to the theca cells and stimulates steroidogenesis in the ovary. Increased intraovarian estradiol production occurs as follicular maturation advances, thereupon stimulating increased FSH receptor activity and FSH follicular binding. FSH, LH, and estradiol are therefore intimately related in supporting ovarian recruitment and maturation in dogs.

Ovulation occurs approximately 12-24 hours after the LH reaches a maximum peak level. Ovulation is a physiological process regulated by hormones, which eventually results in release of eggs from the ovary. LH, which will increase dramatically following the middle part of cycle, aids the process. This short period of increase in LH is called hormonal surge. The LH surge also can be induced by injections of hormones like hCG to prime the ovary. After determination of the LH surge with **K9 Ovi-Check**, ETI's **K9 Proges-Check** test may be used to confirm ovulation. Call 1-800-745-0843 for more information.

### **PACKAGE CONTENTS**

Each package contains 4 test strips and 1 reference test.

1. A reaction pack with an internal membrane using rabbit-LH antibody (affinity purified) and a gold-coated anti-LH beta antibody pad.
2. Desiccant. For storage purpose only.
3. Reference Test performed with 1ng/mL (strip with red sticker).

### **STORAGE AND STABILITY**

The test may be refrigerated (2-8°C) or kept at room temperature (up to 25°C) in the sealed pouch until the expiration date. Do not freeze. The test pack should be closed and kept out of moisture in a sealed plastic bag.

### **PRECAUTIONS**

The test kit is for in vitro use only and should not be used beyond the expiration date.

### **SAMPLE COLLECTION AND STORAGE**

The test is designed for serum or plasma. Collect the blood sample into a plain vacutainer or serum separator tube. Blood should be drawn on the fourth or fifth day of proestrus or when vaginal cytology reaches 50% cornification. Sampling should be performed daily until the LH surge is detected. Allow the blood to clot and spin the cells down. Transfer serum to a clean tube. Serum should be free of red cells, clots and visible debris. Do not use severely hemolysed or grossly lipemic samples. The sample can be stored in the refrigerator if not used immediately.

## INSTRUCTIONS FOR USE

1. Collect serum/plasma into a clean container
2. Remove the test strip from its foil wrapper by tearing along side.
3. Dip the test up to the arrows indicated. Do not dip beyond the arrows; this will results in damage to the test. Dip and wait for 5-10 minutes or more until color bands appear.
4. Read results within 20 minutes after dipping in the sample. Do not interpret results after 30minutes.

## INTERPRETATION OF RESULTS

1. If the color intensity of the test band is darker than that of the Reference test band (test provided 1.0 ng/mL), the LH concentration in the sample is higher than 1.0 ng/mL, the dog is likely to ovulate with in 24-48 hours.
2. If the color intensity of the test band is equal to or less than the test provided (1.0 ng/mL), the LH levels are 1.0 ng/mL or even less and the dog is not likely to ovulate soon (12-24 hrs).
3. When neither a test band nor a control band appears, the test is invalid. This is probably due to the user following improper test procedures or deterioration of reagents on the membrane.
4. For a complete fertile timing confirm the baseline progesterone on the first day of testing.

## LIMITS OF THE TEST

1. You must follow the directions carefully to get accurate results.
2. Do not open a foil pouch until you are ready to do the testing.
3. Do not use the test immediately following an hCG injection for priming the ovary.
4. Do not use the kit after the expiration date listed on the box.
5. The part of this test provided should always be matched and used as a guide.
6. Do not re-use a test once it has been conducted.

## Quality Control

The procedural control line is included in the test. A colored line appearing in the upper region indicates proper procedure and reactive reagents.

## Performance Characteristics

**Sensitivity:** Canine LH in serum/plasma at a concentration of 1.0 ng/mL.

**Specificity:** Other related hormones like FSH and TSH at levels of 100 ng/mL when added gives negative lines and did not show any cross reactivity in the assay.

## REFERENCES

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Revised 072401

**Rapid K9Ovi-Check (LH Test)**

**K9 OVI-CHECK**

**Product Profile and Instructions**

 **ENDOCRINE**  
TECHNOLOGIES, INC.

**1-800-745-0843**

[www.endocrinetech.com](http://www.endocrinetech.com)