

# Feline Heartworm Antibody Test Kit



HESKA®

## Solo Step® FH

Feline Heartworm Test Cassettes

*In vitro* diagnostic test for the detection of antibodies to *Dirofilaria immitis* in feline serum or plasma.



## Heartworm in Cats

Feline heartworm infection (*Dirofilaria immitis*) is seen wherever canine heartworm infection is present. Heartworm infections in cats are frequently characterized by single-sex infections (approximately 1/3 of infections) with small numbers of worms (1 – 3 worms per cat on average). For these reasons, antigen tests commonly used for heartworm diagnosis in dogs will not detect a large percentage of heartworm infections in cats.

Heartworms live approximately 1 – 2 years in cats and ectopic infections are not uncommon. Clinical signs of feline heartworm disease include, among others, vomiting, coughing, respiratory distress, central nervous system abnormalities and acute death.

## Product Description

HESKA® Solo Step® FH is a one-step, lateral flow immunoassay for the detection of antibodies to *D. immitis* in feline serum or plasma. This test is highly specific and sensitive, and is the first single-step test kit designed specifically for the diagnosis of feline heartworm infection. The test is very simple to use, and results are read within 5 minutes.

Diagnosis of the infection is based on the detection of circulating IgG antibodies to a specific heartworm antigen. The antigen, which is expressed by a single *D. immitis* gene isolated and cloned by Heská's scientists, is present in male and female heartworms. Antibodies to the antigen are first detected in some cats at 50 – 60 days post-infection (corresponding to the late fourth larval stage (L4) to early adult stage of *D. immitis* development). HESKA® Solo Step® FH was developed to detect these antibodies and will detect antibodies resulting from heartworm infections commonly seen in cats, including immature worms, adult male and female heartworms, and single-sex male or female heartworm infections.

## Indications

HESKA® Solo Step® FH is a diagnostic tool developed specifically to assist veterinarians in detecting *D. immitis* infections in cats. This test will also aid in determining prevalence rates of *D. immitis* infection in the cat population.

## Directions for Use

The test cassette is for use in detecting IgG antibodies against *D. immitis* in serum or plasma from cats.

## Required Materials

1. A sample of feline serum or plasma
2. Test cassette (provided)
3. Pipette (provided)
4. Timer or clock

## Procedure

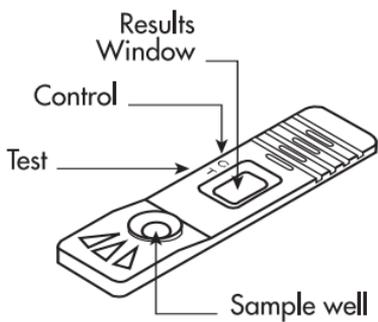
1. Open the foil package and place the test cassette on a flat solid surface (Figure 1).
2. Using the pipette, draw up the patient sample into the stem portion of the pipette. Do not fill the bulb (Figure 2).
3. Holding the pipette vertically, dispense 3 drops of the sample into the round sample well of the test cassette (Figure 3).
4. Allow the test cassette to sit undisturbed for 5 minutes (Figure 4).
5. Read the results in the rectangular Results Window 5 minutes after applying plasma or serum. A blue line (Procedural Control Line) **must** appear on all samples, and a red line (Test Line) may or may not appear (Figure 5).

## Interpretation of Test Results

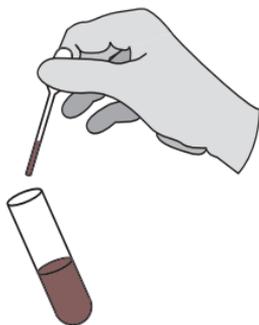
Procedural Control Line (C): You **must** see a blue line within 5 minutes of adding serum or plasma for the test to be valid. This blue procedural control line indicates proper flow of the sample through the test cassette.

**If the blue line does not develop, the test is invalid and should be repeated.** Discard the test cassette, and repeat the test with a new test cassette.

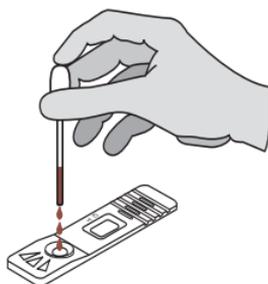
**Figure 1**



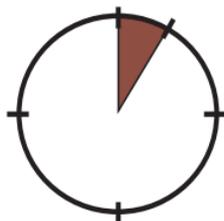
**Figure 2**



**Figure 3**

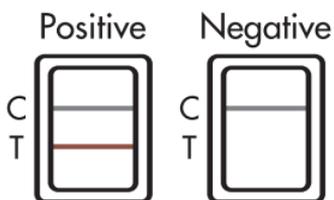


**Figure 4**



5 minutes

**Figure 5**



**Test Line (T):** Any visible red line within 5 minutes of adding serum or plasma indicates a positive result. Antibodies to *D. immitis* are present. This means one or more of the following:

- Adult heartworms are present in the heart and/or pulmonary arteries.
- The cat is infected with late L4 or adult worm(s).
- Heartworm infection has been cleared, but antibodies are still present.
- Ectopic heartworm infection may be present.

In the presence of suggestive clinical signs and other supportive diagnostic data (e.g., radiographic findings, echocardiographic findings, etc.), a positive result will help confirm cardiovascular heartworm disease.

No red line within 5 minutes of adding serum or plasma indicates a negative test result. There are no antibodies to *D. immitis* present. This means one of the following:

- The cat is not infected with *D. immitis*.
- The cat was infected less than 60 days prior to collection of the sample.

If a negative result is obtained and clinical signs are present, a retest within 2 – 3 months is recommended. Additional diagnostic tests should be employed to rule out other causes of the clinical signs.

## Sample Collection and Storage

**Plasma:** Collect an anticoagulated blood sample using standard clinical laboratory procedures. Separate plasma by centrifugation. Plasma samples may be stored refrigerated (2° – 7° C) for up to 72 hours; for longer storage, freeze at or below -20° C in vials with air-tight seals.

**Serum:** Collect and prepare serum samples using standard clinical laboratory procedures. Serum samples may be stored refrigerated (2° – 7° C) for up to 72 hours; for longer storage, freeze at or below -20° C in vials with air-tight seals.

## Precautions

1. Do not expose the test cassette to direct sunlight.
2. Do not use to test species other than cats.
3. After 10 minutes, a very faint red line may appear in the Results Window with samples from some cats which are negative for heartworm infection.
4. Do not use the test cassette more than once.
5. Use the test cassette immediately after opening the foil pouch.

## Storage and Stability

1. Store at room temperature (15° – 30° C [59° – 86° F]).
2. See package for expiration date.

For technical assistance, call Heska at **1-800-GO HESKA (1-800-464-3752)**.



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

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