Fassisi® CanDiro

FASSISI®

The rapid test for the detection of canine Dirofilaria immitis (CHW antigen)

Instruction Manual

Fassisi® CanDiro is used for the detection of specific antigens of Dirofilaria immitis (canine heartworm) in whole blood, serum or plasma.
Dirofilaria immitis, also known as heartworm, was originally known as a regional disease common in southern climates, but now it has spread over the world, except Antarctica. Areas with high mosquito population are the most affected with this parasite. It is most common in dogs but it also can affect a large variety of animals and even humans. The major problem with a heartworm infection is that only very little symptoms are observed and most of the symptoms appear only in the final stages of the disease. Dirofilaria immitis parasites go through different stages and through different hosts until reaching the adult form. The period between the initial infection and the maturation of the worms into adults living in the heart takes approx. 6 to 7 months in dogs and is known as the "prepatent period". After this time symptoms start to appear. Here the worms multiply and block the right chamber of the heart and hence the blood flows to other organs. Between 75 and 120 days after an infection the immature heartworms enter the bloodstream and are carried by the heart to reside in the pulmonary artery. Left untreated, this disease can be fatal for host. Heartworms can be discovered by doing a blood test. Dirofilaria immitis antigens can be detected 6–8 month after an infection.
It is important to detect heartworms at an early stage for a proper treatment and prevention. With the Fassisi® CanDiro veterinarians have a useful tool for the accurate and rapid detection of canine heartworm antigens.

Literature:

Simón F, Kramer LH, Román A, Blasini W, Morchón R, Marcos-Atxutegi C, Grandi G, Genchi C. (2007) Immunopathology of Dirofilaria immitis infection. Vet Res Commun. 31(2):161-71

Hoch H, Strickland K. (2008) Canine and feline dirofilariasis: life cycle, pathophysiology and diagnosis. Compend Contin Educ Vet. 30(3):133-40

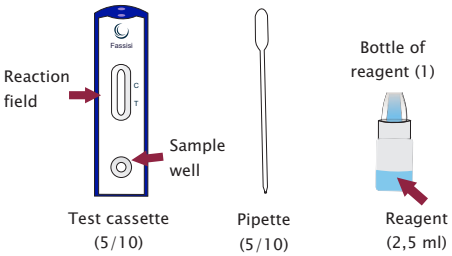
Kaaden O-R, Gedek B, Mahnel H, Mayr A: „Spezielle Virologie" in: Medizinische Mikrobiologie, Infektions- und Seuchenlehre. Stuttgart 1993

Sensitivity and Specificity

Comparison Test: enzyme-linked immunosorbent assay

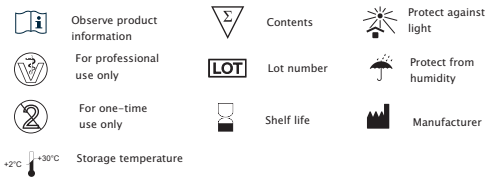
Study 2019 N=116	Sensitivity	Specificity	TTP (TTP: Total test performance)
CanDiro	94,12 %	99,99 %	98,27 %

Components of the test kit



Symbols

GI-01-007-02-03



Please note before use

- Use a new test cassette for every individual test.
- Only for one-time usage.
- For veterinary use only.
- Use only the original test components provided in the Fassisi kit.
- Use the test cassette within 60 minutes after opening the pouch.
- The test cassette must be in a horizontal position on a flat surface while the test is performed.
- Note the amount of sample material needed. An incorrect number of drops or too small drops may lead to false results.
- Consider the test results as invalid after the read out time.
- Do not use the test after the expiration date on the pouch.
- Dispose of all contaminated materials properly. Disinfect the work area after the test execution.

Storage of the test kits

The Fassisi test kit should be stored between 2–30°C.

Choice of sample material

Serum and plasma

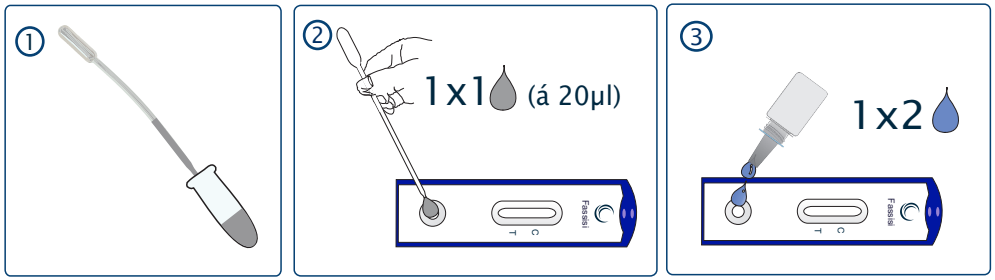
Recommended sample material is a freshly collected serum or plasma to achieve the highest detection sensitivity.

Separate the serum or plasma from whole blood as quickly as possible, the specimen should be clear and non-hemolyzed.

Whole blood

A whole blood sample should used as quickly as possible. Heparin blood and EDTA blood may also be used. Hemolyzed samples should not be used for testing.

Note: Whole blood samples have a lower detection sensitivity. In case of a negative test result with whole blood, the test should be repeated with a serum or plasma sample.



Test procedure

Open the pouch, remove the test cassette, place the test cassette on a flat surface and unscrew the bottle of reagent and place it aside.

1. Take up the serum or plasma sample with the pipette.
2. Carefully put one (1) drop (20µl) of sample material into the sample well of the test cassette.
   Allow the material to be drawn into the sample well. This may take a few seconds. Only after the sample has been completely drawn in may the reagent from step 3 be added.
3. Add two (2) drops of the reagent from the bottle of reagent into the sample well. Ensure that no air bubbles are formed.

If the fluid does not run up the test strips after 60 seconds, add an additional drop of the reagent into the sample well.

Test result

The results of the test can be read after 10 minutes.

Positive test result:

If the test result is positive, two red lines will appear on the test strip in the reaction field of the test cassette. The upper line (control line) confirms the correct working of the test; the bottom line (test line) indicates a positive test result.

A weak test line should also be considered a positive CHW antigen detection.

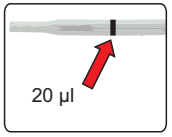
Negative test result:

Only a red line in the upper area of the reaction field (control line) becomes visible, no test line becomes visible.

No CHW antigens were detected .

Remark: The test results should always be judged in connection with the anamnestic and clinical context. Only mature infections (older than 5–6 months) with at least one female worm are detectable. Low worm burdens (fewer than two adult females) and infections with only male worms may not be detected.

Alternative procedure

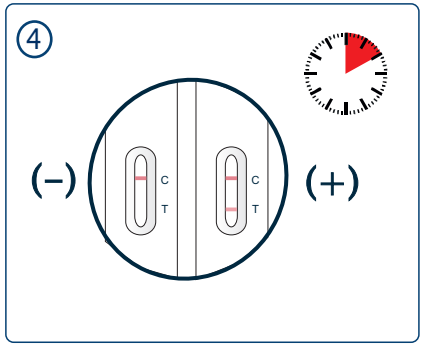


Hold the pipette at the drawing on the left. Mark the pipette with a black line at the marked position. This represents the 20 µl mark.

Take up as much sample material with the marked pipette that it can reach the mark (20 µl).

Now add this material to the sample well. Allow the material to be drawn into the sample well.

With this alternative test procedure you can ensure that you do not add too much sample material to the sample well and risk that the run slows down.



Invalid test result:

If no control line appears after the test is conducted, the test is invalid.

Note: The C-line is not a reference line and may have a different line intensity than the T-Line.

For questions, comments or techincal questions, please contact our service department:
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