



CANINE DISTEMPER

Canine distemper is one of the most significant and very contagious viral diseases of dogs worldwide. The virus targets various organs at the same time in an animal's body adding up to its severity of the disease. Canine distemper can affect dogs at any age. The typical distemper victims are rescue or pet store dogs or puppies, usually with questionable vaccination history. The infected dog typically infects other dogs by coughing infected respiratory secretions; furthermore the virus is shed also in most other body secretions, including urine. Distemper is therefore highly contagious. Clinically an infection affects the gastrointestinal tract, skin, the immune and nervous systems. Transient fever or dramatic and sporadic increases in body temperature is a telltale sign of an infection. Generally the signs for an infection are highly variable and the course of the disease depends both on immune response and the viral strain. Common symptoms include various respiratory and gastrointestinal symptoms, as well as central nervous system disorders. A more or less unique skin sign in dogs with canine distemper is the hardening of footpads and nose pad most evident in older dogs. Sudden death is not uncommon with this disease. Dogs that die as a result of distemper invariably die from central nervous complications caused by the disease, or from secondary bacterial infections. Many industrialized countries having implemented great vaccination programs against the disease have successfully controlled the virus from spreading. Vaccination of young dogs begins as early as 6 weeks of age. From an epidemiological point of view it is important to point out that with a high vaccination status in a population an outbreak of canine distemper can be nearly precluded. Nevertheless due to the increasing vaccination fatigue an infection cannot easily be precluded.

Sensitivity and Specificity of Fassisi® CanDis

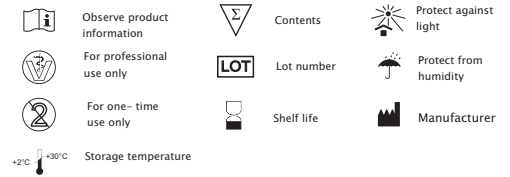
Study 2021

	Sensitivity	Specificity	TTP
CDV	96,59 %	99,99 %	98,08 %

Comparison Test: enzyme-linked immunosorbent assay

TTP: Total test performance

Symbols



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 kit.
- Use the test cassette within 60 minutes after opening the pouch.
- The test cassette must be in a horizontal position on a smooth surface under 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.

Can a vaccination cause a false-positive test result?

Generally the virus titer in a vaccine is very low, which should not lead to a false-positive test result. Nevertheless cross reactions never can be fully ruled out. Therefore it is recommended to wait at least 6 day after a vaccination before testing.

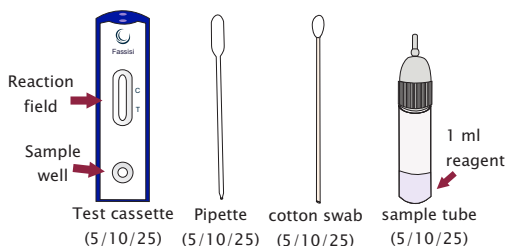
Storage of the test kits

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

Literature:

Kaaden O-R, Gedek B, Mahnel H, Mayr A. „Spezielle Virologie“ in: Medizinische Mikrobiologie, Infektions- und Seuchenlehre. Stuttgart 1993
INGRID D. R. PARDO; 2006: Phylogenetic characterization of canine distemper virus detected in naturally infected North American dogs.
Martella V, Elia G, Buonavoglia C. (2008) Canine Distemper Virus. Vet Clin North Am Small Anim Pract. 2008 Jul;38(4):787–97

Components of the test kit



Choice of sample material and test procedure

Conjunctiva, urine and feces

Conjunctiva specimens contain in case of an on-going infection a higher canine distemper virus titer than other sample materials. Conjunctiva specimens are recommended as sample material.

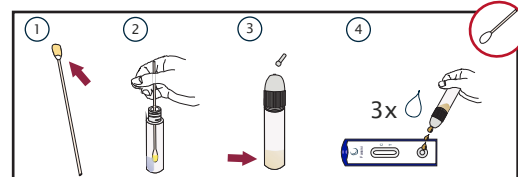
Note: It is important that the swab is applied with a certain pressure, so that sufficient superficial conjunctiva cells are collected. The sampling may be unpleasant for the animal, but this is important for a correct antigen detection. Alternatively feces or urine samples can be used; use the cotton swab for sampling (for the fecal sample, the tip of the swab should be covered with sample material).

Test procedure

Conjunctiva, Urine and feces

Open the aluminium pouch, remove the test cassette. Place the test cassette on a flat surface and unscrew the sample tube and place it aside.

- ① Take up the sample with the cotton swab.
- ② Stir up well the fluid with the swab. For an optimal test result it is strongly recommended to wring the swab in the sample tube by squeezing the tube with the swab in the middle a couple times, so that the sample material dissolves well in the reagent.
- ③ Remove the swab. Close the sample tube tightly. The reagent in the tube will treat and conserve the sample. Shake the test tube well for some seconds and break off the pin.
- ④ Hold the sample tube with the lid down over the sample well of the test cassette. Apply three (3) drops of the sample fluid to the sample well of the test cassette.



Fassisi CanDis can detect CDV in conjunctiva, urine as well as serum, even feces is possible, if the infected dog are in viremia (presence of infectious virus particle in blood) conditions. Fassisi CanDis does not work with eye mucous or saliva.

Serum

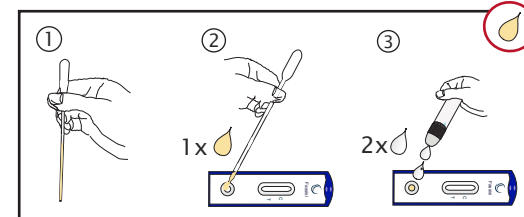
Separate the serum from whole blood. The sample must be at room temperature and should be shaken well before used for testing.

Test procedure

Serum and supernatant

Open the aluminium pouch, remove the test cassette. Place the test cassette on a flat surface and unscrew the sample tube and place it aside.

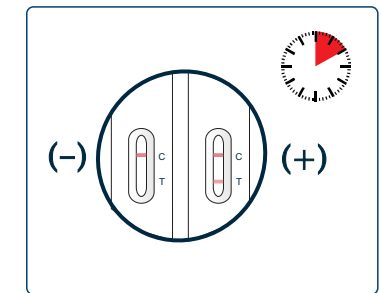
- ① Take up the sample with the pipette.
- ② Carefully put one (1) drop (30µl) of sample material into the sample well.
- ③ Add two (2) drops of the reagent from the sample tube into the sample well. Ensure that no air bubbles are formed.



The liquid starts to run up the test strip. If the liquid does not run up the test strip after a few seconds (> 60 seconds), add another drop to the sample well and/or slightly push with the upper tip of the swab into the sample well to reactivate the flow.

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 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 antigens were detected.

Invalid test result:

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

Remark:

Due to the infection cycle of a Canine distemper virus infection the virus can be detected usually from the viremia phase (presence of infectious virus particle in blood), approximately after 6 days after an initial infection.

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