

FASTest® LEISH ad us. vet.

Travel disease – a reminder with a serious outcome

Fast test for the qualitative detection of **antibodies against** *Leishmania infantum* in whole blood, plasma or serum of the dog

Fast indirect detection

In case of clinical suspicion (loss of weight, skin lesions, lymphadenitis)

Routine check after travelling abroad or for dogs of unknown origin

Identification of asymptomatic chronic carriers

Routine test before leishmaniasis vaccination





- Simple test procedure with whole blood, plasma or serum
- Fast test interpretation after 15 minutes
- Reliable clinical diagnostics
- Sensitivity 100 % & Specificity 99.1 %
- Storage at room temperature (15–25 °C)
- Long shelf life
- Compact test box with 2, 10, 25 or 50 tests

The visceral leishmaniasis of the dog is caused by the protozoon *Leishmania infantum* world-wide. Dogs and other canines are considered to be the reservoir for leishmaniasis in humans (zoonosis).

To date leishmaniasis was known in Leishmania free regions as a pure travel or import disease. New investigations show increased sporadic occurring autochthonous cases of leishmaniasis in so far Leishmania free regions. The vectors, sandflies (Phlebotominae), admittedly need a subtropical to tropical climate, which however is not geographically dependent on such climatic zones. There are first scientific verified discoveries of sandflies in temperate zones.

Furthermore, an infection via mating (urine/sperm), via diaplacentar transmission and via blood transfusion are discussed.

Leishmania are transferred by sand-flies via stings. They infest and reproduce in macrophages and cells of the reticuloendothelial system (among others liver, spleen, bone marrow, lymph nodes). Dependent on the *Leishmania* zymodem and the immune status of the dog, there are variable clinical symptoms with more or less dermatological (different skin and claw alterations) and visceral (apathy, fever, nose bleeding, lameness, kidney failure) manifestations.

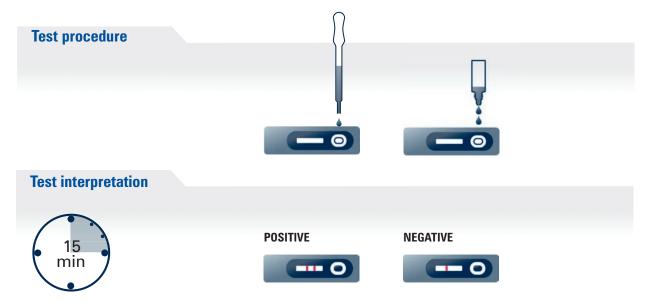
Due to the individual extremely variable incubation times, from a few months to several years, infested animals can be free of symptoms during that time. The detection of Leishmania antibodies can be pointing at an initiating or an existing infection.

Thus, suspected animals and animals from endemic leishmaniasis regions (travel or import) should be tested serologically for antibodies repeatedly in an interval of 2-4 weeks. Animals from endemic areas and asymptomatic animals can show borderline to weak antibody titre ("sero-prevalence"), whereas clinical diseased animals show a clear increase of titre between two tests ("disease prevalence"). Therefore, the indirect detection of antibodies with **FASTest® LEISH** gets a greater diagnostic importance.

FASTest® LEISH is based on highly specific recombinant peptides for the fast and reliable detection of antibodies against *Leishmania infantum* in whole blood, plasma or serum of infected dogs.

Due to the innovation of a Leishmania vaccine, it is required to determine the antibody titre status of the dog before vaccination to get a decision "vaccination or no vaccination" adequate to the guidelines of the vaccine manufacturer.

For the detection of antibodies, a two-step diagnostics is known to be standard. The first step starts with an in-clinic IgG antibody screening test like **FASTest® LEISH**. Due to the fact that dogs from endemic areas show antibodies against Leishmania on principle, a positive **FASTest® LEISH** only means contact with Leishmania in the past, not always implying an active leishmaniasis. In a second step, a quantitative antibody titre determination should be done using indirect immunofluorescence test (**MegaFLUO® LEISH**) to determine the end titre.



With a positive **FASTest® LEISH**, a laboratory confirmation test (second diagnostic step) like indirect immunofluorescence test (**MegaFLUO® LEISH**) or ELISA (**MegaELISA® LEISH**) should be done to determine the end titre.

A travel parasitosis seldom comes single. Coinfections with *Ehrlichia canis* and/or *Dirofilaria immitis* can be detected with *FAST*est® EHRLICHIA canis and/or *FAST*est® HW Antigen.

Infections like Leishmaniasis, Ehrlichiosis, Babesiosis, Borreliosis etc. come along with increasing CRP (C-reactive protein) values, due to increasing inflammatory activities and tissue damage. In case of unclear symptoms the veterinarian can get additional information to a subja-



cent inflammation with the help of FASTest® CRP canine.