



Canine leishmaniasis

The disease

Canine leishmaniasis is caused by the **infection with Leishmania** protozoa, and results in chronic cutaneous and visceral disease. The clinical appearance is strongly influenced by the overall health of the infected animals, including factors such as immune status, concurrent infections and nutritional intake.

Leishmaniasis is a pleomorphic disease of slow and progressive evolution which can be easily mistaken by other parasites, diffculting final diagnosis. The disease can be treated if detected in time, otherwise it can be fatal.

The infection is usually transmitted by the bite of an infected mosquito of the Phlebotomus (in Eurasia and Africa) or Lutzomyia genus (in America) and, therefore, the disease is linked to the presence of this vector. Recently, climate change and animal import have increased its geographical distribution.

Vaccines against leishmaniasis in dogs are commercially available in Brazil and in Europe, with a high level of protection.

Why use serology for diagnosis?

Parasite detection do not always correlate with an active infection. In animals, **serology is the preferred method for diagnosis**, even during the early stages of the disease. Several studies have correlated antibody titres with the prognosis and disease grade of an infected animal, giving more valuable information than the antigen detection itself.

DISEASE*	SIGNS	Antibody titre
STAGE I Mild	Papular dermatitis or localized lymphadenomegaly	Negative-Low
STAGE II Moderate	Cutaneous lesions, ulcerations, generalized lymphadenomegaly	Low-High
STAGE III Severe	Stage I, II signs + immune-complex deposition signs	Medium-High
≥STAGE IV Very severe	Stage III signs + pulmonary thromboembolism, nephrotic syndrome, end stage renal disease	Medium-High

*Classification done according to Leishvet guides



INgezim® Leishma CROM

Gold Standard Diagnostics Madrid, in collaboration with University of Marburg, have developed a new antibody detection test employing an improved recombinant multi-epitope antigen of *Leishmania infantum* for the sensitive and specific detection of canine visceral leishmaniasis in different endemic areas.

Features of INgezim® Leishma CROM:

- **High specificity (no cross-reaction)** with *Trypanosoma brucei*, *Babesia canis*, *Giardia duodenalis*, *Dirofilaria repens*, *Toxocara canis*, *Ehrlichia canis*, *Ancylostoma caninum* and *Anaplasma*.
- **High sensitivity** (94.2%) and **specificity** (98.3%) when compared to Immunofluorescence test (IFT) and maintained in different geographical regions (Europe and Brazil).
- **No cross-reaction** with **vaccinated** animals, allowing the serological differentiation of infected and vaccinated animals.
- **Easy to use** and **stable** results under adverse conditions.
- The assay can be used with whole blood, minimizing sample processing.

Ordering details

INgezim® Leishma CROM	10 units kit	15.LSH.K41/10
	30 units kit	15.LSH.K41/30

Bibliography

- Mahdavi R, Shams-Eldin H, Witt S, Latz A, Heinz D, Taboada A.F, Aira C, Hübner M.P, Sukyte D, Visekruna A, Teixeira H, Abass E and Steinhoff U. Development of a novel ELISA and lateral flow test system for improved serodiagnosis of visceral Leishmaniasis in different endemic areas. Microbiology Spectrum, 2023.