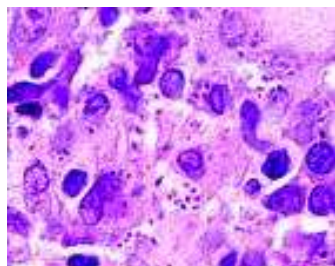


Leishmania infantum



Leishmania is the causative agent of leishmanioses. The many species of the genus *Leishmania* pathogenic to humans do not show morphological differences. They can be differentiated on the basis of biological criteria, laboratory analyzes the different clinical pictures and epidemiological facts (see tab.).

Leishmania are transmitted by female mosquitoes of the genera *Phlebotomus* and *Lutzomyia* („sandflies“), that occur in warmer regions of countries in Asia, Africa, Europe (Mediterranean countries) and Latin America. The amastigote stages of the parasite ingested by the insect with a blood meal are transformed in its intestine into slender, flagellate promastigote forms, which multiply and migrate back into the proboscis. When infected sandflies take another bloodmeal the promastigote forms are inoculated into a new host (humans or other vertebrates).

In the host the promastigotes quickly (within 12-14 hours) transform into amastigote stages, which then released in a process resembling exocytosis and can infect new cells. In cutaneous and mucocutaneous leishmanioses the parasites generally remain restricted to the skin or skin and mucosa. Cutaneous leishmanioses lesions may persist for long periods, but tend to heal spontaneously, whereas a greater tendency to destructive changes is seen in mucocutaneous leishmanioses infections. By contrast in visceral leishmanioses the organism can invade the entire mononuclear phagocytic system in various organs (spleen, liver, lymph, nodes, bone marrow, blood monocytes etc.), causing infections that are normally lethal without treatment.

Species	Disease	Symptoms	Mechanism of infection
<i>Leishmania infantum</i> <i>Leishmania donovani</i>	Visceral leishmanioses (Kala-azar)	fever, splenomegaly, hypergammaglobulinemia, progressive anemia, leucopenia etc.	Transmission by female mosquitoes of the genera <i>Phlebotomus</i> (Old World) and <i>Lutzomyia</i> (New World), known as “sandflies”.
<i>Leishmania major</i>	cutaneous leishmanioses (oriental sore)	papules, vessels and nodes	
<i>Leishmania brasiliensis</i>	mucocutaneous leishmanioses	skin changes similar to oriental sore. Some forms tend to spread to mucosa and cause severe tissue destruction.	
<i>Leishmania mexicana</i>	cutaneous leishmanioses	chronic lesions similar to leprosy	

Infections may be diagnosed by:

Microscopy: determination of the pathogen in coloured Giemsa-stained smears

Serology: determination of specific antibodies based on the ELISA-technique

NovaLisa™ *Leishmania infantum* IgG ELISA:

The NovaLisa™ *Leishmania infantum* IgG ELISA is intended for the qualitative determination of IgG-class antibodies against *Leishmania infantum* in human serum or plasma (citrate).

Antigens:

Purified Leishmania antigens

Specific performance characteristics:

	Intraassay			Interassay			Sensitivity %	Specificity %
	n	Mean	CV %	n	Mean	CV %		
IgG	7	1,609	7,4	4	0,735	5,9	91	85

Order information:

ELISA	Number of determinations	Product number
Leishmania infantum IgG	96	LEIG0310