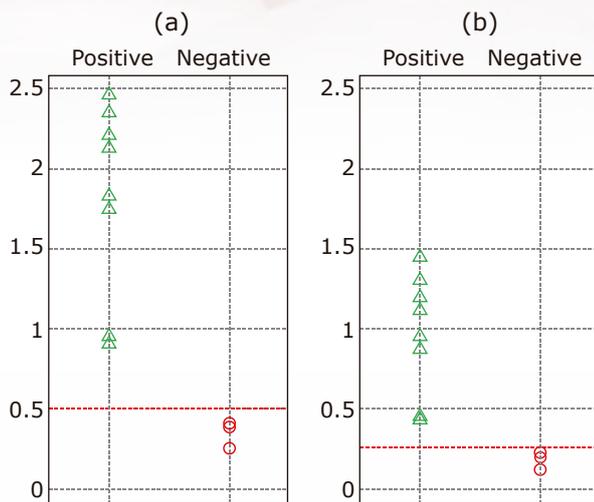


Recombinant antigen K39 for *Leishmania infantum*

Leishmaniasis is a disease caused by protozoan parasites transmitted through the bites of infected sandflies like *Phlebotomus* and *Lutzomya*. This parasite belongs to the genus *Leishmania* and the *Trypanosomatidae* family. This disease, due to its zoonotic nature can affect to humans and dogs, being transmitted by wild animals as asymptomatic reservoirs. Leishmaniosis causes different clinical manifestations ranging from self-healing cutaneous lesions (CL), mucosal lesions (MCL) to fatal visceral infections (VL).

The protein **K39** is a repetitive immunodominant epitope in a kinesin-related protein that is highly conserved among viscerotropic leishmania species. It has been described that a rK39 ELISA is sensitive and specific for serodiagnosis of human and canine VL (Scalone *et al.*, Vet Parasitol. 2002, 104(4):275-85).

Rekom Biotech has developed the kinesin protein K39 as a recombinant antigen **RAG0061**. It has been evaluated by performing an 'in house' ELISA assay, with with several positive and negative human sera, obtaining the following result:



Scatter charts of absorbance values in sera from *Leishmania* infected patients and healthy controls for IgG antibodies. The test results were plotted as optical densities at 450/620 nm. The cutoff line for positive diagnosis is drawn at a value that equals the sum of the mean and two times the standard deviation for healthy samples, obtaining a value of 0.4946 for a dilution 1:20,000 of the anti-human IgG HRP (a) and a cut-off of 0.2542 for a dilution 1:50,000 of the anti-human IgG HRP (b).



REFERENCE	ANTIGEN	APPLICATION	PACK SIZE
RAG0061	K39	ELISA, DAS-ELISA, CLIA, LF	0.1 mg to 1 mg; bulk

K39 is also available as a mono-biotinylated antigen (RAG0039)



Rekom Biotech's recombinant antigen K39 (RAG0061) has a 86% success rate in evaluations for the development of a commercial diagnostic assay.