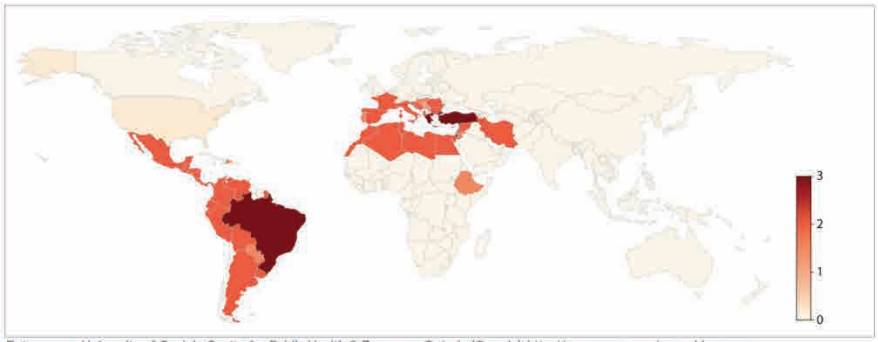
VetBlot Leishmania Lineblot

Leishmaniasis is a disease, caused by various species of Leishmania. The parasites can infect both, human and canines and is transmitted by sand flies. The resulting condition is known as visceral leishmaniasis.

Leishmaniasis is particularly common in Mediterranean basin (e. g. Italy, Spain and Portugal), the Balkans, central and southwest Asia, north and northwest China, north and sub-Saharan Africa and parts of Central and South America.

Status of canine leishmaniasis worldwide:



Data source: University of Guelph. Centre for Public Health & Zoonoses, Ontario (Canada). http://www.wormsandgermsblog.com

New method is available: The **Lineblot** is based on an immunoblot technique and allows the qualitative immuno-enzymatically determination of antibodies against Leishmania.

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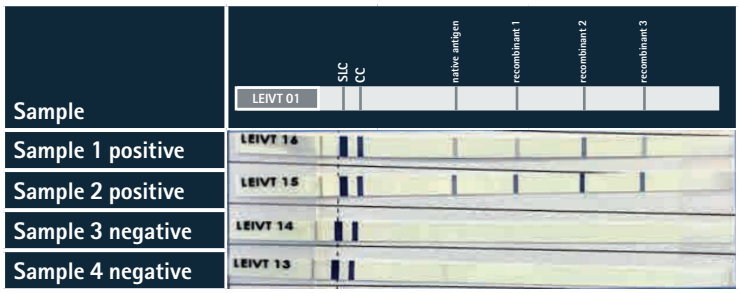
VetBlot Leishmania Lineblot

Standard ELISA Kits

The **Lineblot-principle** is based on an immunoblot technique and allows the quantitative immuno-enzymatically determination of antibodies against Leishmania. 1 native and 3 recombinant antigens of Leishmania are printed onto a nitrocellulose membrane.



ELISA / Lineblot	pos	neg	total
pos	40	1	41
neg	0	48	48
total	40	49	89

Sens.: 100% / Spec.: 97.96%

Benefits

- Due to the use of native and recombinant antigens, a **distinction** between healthy, vaccinated and infected dogs is possible
- Confirmatory testing to rule out **cross reactions**
- Potential for a **multiplex-method**, by printing antigens of different diseases or parasites on the membrane
- Easy to use (no complex equipment required, like a reader or incubator).
- Fast **optical analysis** of a sample.
- Fully automatable: also suited for higher sample numbers.
- High sensitivity (100%) and specificity (97.96%).
- Stable reproducibility.
- Internal controls on every test stripe.

Method

The stripes of membranes are incubated with diluted veterinary samples at room temperature. Leishmania specific antibodies from the sample will bind to their target antigens on the membrane. A horseradish peroxidase (HRP)-labelled conjugate will be used to detect the antigen-antibody-complex. The bound conjugate is visualized by the addition of a chromogenic substrate. After drying, the stripes can be evaluated.

Additional Products

- **VetLine Leishmania ELISA LEIVT0310**
- **INgezim Leishmania ELISA 15.LSH.K.1 and 15.LSH.K.1/10**
- **INgezim FAST ELISA 15.LSH.K.8/32**
- **INgezim Leishmania CROM rapid test 15.LSH.K.4/12 and 15.LSH.K.4/50**

Coming soon: a new lateral flow rapid test with optimized recombinant antigens

Bibliography:

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Mendoza Roldan J, et al. 2020. Leishmania infantum and Diroflaria immitis infections in Italy, 2009–2019: changing distribution patterns. Parasites Vectors, 13:193. https://doi.org/10.1186/s13071-020-04063-9

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