



part of INDICAL

# Improving diagnostics

Highly efficient identification  
of significant companion  
animal pathogens



AFOSA has 20 years of experience developing and producing enzyme immunoassays for use in veterinary diagnostics, focusing on the detection of antibodies to parasitic and vector-transmitted pathogens.



## Ensure reliable and consistent results through harmonized protocols and reagents on low to high-throughput applications

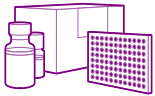
- Novel commercial ELISA portfolio, including Babesia and Sarcoptes assays
- High performing assays with very good sensitivity and specificity, validated by the German authorities (FLI)
- Harmonized protocols with user-friendly reagents and a flexible microplate and reagents system

### The AFOSA portfolio overview



AFOSA assay	ANAPLASMA ELISA DOG	BABESIA ELISA DOG	EHRlichIA ELISA DOG	LEISHMANIA ELISA DOG	SARCOPTES ELISA DOG	FCoV ELISA CAT
<b>Target</b>	<i>Anaplasma phagocytophilum</i> IgG antibodies	<i>Babesia canis infantum</i> IgG antibodies	<i>Ehrlichia canis</i> IgG antibodies	<i>Leishmania infantum</i> IgG antibodies	<i>Sarcoptes scabiei</i> IgG antibodies	Feline Coronavirus Type I & II IgG antibodies
<b>Technology</b>	Indirect ELISA	Indirect ELISA	Indirect ELISA	Indirect ELISA	Indirect ELISA	Indirect ELISA
<b>High performing assays</b>						
<b>Specificity</b>	97%	100%	99.2%	99.9%	94.6%	97.7%
<b>Sensitivity</b>	92.5%	96.3%	95.7%	88.4%	92.1%	96.5%
<b>Sample size (sera)</b>	154	287	696	50/30	113	651





## A reliable, high-performing ELISA portfolio

### AFOSA ANAPLASMA-ELISA DOG



#### High performing assays

Sensitivity	Specificity	Samples
92.5%	97%	154 sera

Detect *Anaplasma phagocytophilum* IgG antibodies in blood, serum and plasma samples from dogs 10 to 14 days post-infection (2 to 5 days after the morulae are detectable in dyed blood smears).

For screening before blood transfusion since cases of Anaplasma transmission through blood transfusions were reported.

The intended uses are to confirm the presence of *Anaplasma* antibodies in dogs with clinical signs and prior exposure to ticks in endemic areas

### AFOSA BABESIA-ELISA DOG



#### High performing assays

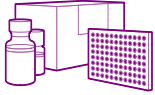
Sensitivity	Specificity	Samples
91.6%	95.4%	671 sera
96.3%	100%	287 sera

Detect *Babesia canis* IgG antibodies in dog blood serum or plasma samples 7 to 8 days after infection and 3 days after the first clinical symptoms.

For screening before blood transfusion since cases of Babesia transmission through blood transfusions were reported

The intended uses are to confirm the presence of *Babesia* antibodies in dogs with clinical signs and prior exposure to ticks in endemic areas .





## A reliable, high-performing ELISA portfolio

### AFOSA ERLICHIA-ELISA DOG



Detect *Ehrlichia canis* IgG antibodies in dog blood, serum and plasma samples between 7 and 28 days after initial infection.

#### High performing assays

Sensitivity	Specificity	Samples
95.7%	99.2%	696 sera

The intended uses are to confirm the presence of *Ehrlichia* antibodies in dogs with clinical signs and prior exposure to ticks in endemic areas, to screen after dog bite injuries/tick bites, and to screen dogs before mating.

### AFOSA LEISHMANIA-ELISA DOG



Detect *Leishmania infantum* IgG antibodies in dog blood, serum and plasma samples. Note that seroconversion can take 5 months on average and that dogs with clinical symptoms (anemia and hyperproteinemia) are more likely to be antibody positive.

#### High performing assays

Sensitivity	Specificity	Samples
88.4%	99.5%	80 sera

The intended use is to confirm the presence of *Leishmania* antibodies in dogs with clinical signs and prior exposure to sand flies in endemic areas. It is also recommended for routine screening as part of animal import testing.





## AFOSA SARCOPTES-ELISA DOG



Detect *Sarcoptes scabiei* var. *canis* IgG antibodies in dog blood, serum and plasma samples around 3 weeks after infection.

### High performing assays

Sensitivity	Specificity	Samples
92.1%	94.6%	113 sera

The intended use is as a differential diagnosis test because pruritus, a pathognomonic sign for *Sarcoptes* mange infection, is also associated with several other skin conditions.

## AFOSA FCoV-ELISA CAT



Detect Feline Coronavirus serotype I and II IgG antibodies in cat blood, serum and plasma samples. Note that the incubation period varies from weeks to months. In experimental infections, seroconversion occurred after 10 days.

### High performing assays

Sensitivity	Specificity	Samples
96.5%	97.7%	651 sera

The intended use is to confirm the presence of antibodies to FCoV in cats with or without clinical signs.





# Improve workflow efficiency to ensure consistent results

Test preparation

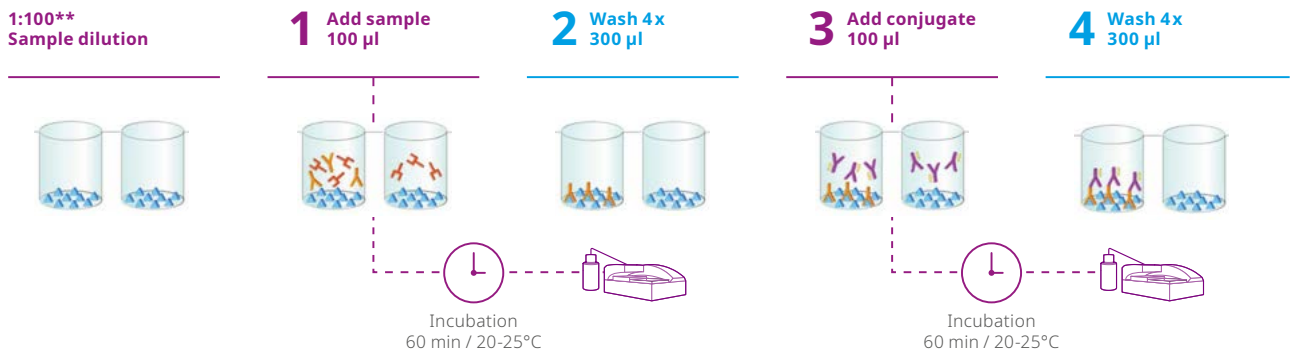
## User-friendly reagents:

Conjugate		Ready-to-use	Positive Control		Ready-to-use
Substrate		Ready-to-use	Negative Control		Ready-to-use
Stop Solution		Ready-to-use	Wash Buffer		Dilution 1:10

- Ready-to-use reagents\*
- Color-coded caps
- 18-months shelf life

Test protocol

## Harmonized and convenient protocol:



Test results

## Easy result interpretation:

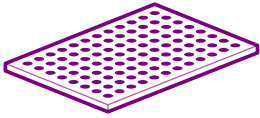
Test results interpretation	ANAPLASMA ELISA DOG	BABESIA ELISA DOG	EHRlichia ELISA DOG	LEISHMANIA ELISA DOG	SARCOPTES 2001 ELISA DOG	FCoV-ELISA CAT
<b>Negative</b>	TE < 8	TE < 14	TE < 14	TE < 7	TE < 10	TE < 34
<b>Inconclusive</b>	TE 8 – 11	TE 14 – 19	TE 14 – 29	TE 7 – 12	TE 10 – 15	TE 34 – 43
<b>Positive</b>	TE > 11	TE > 19	TE > 29	TE > 12	TE > 15	TE > 43

\* Except wash buffer 1:10

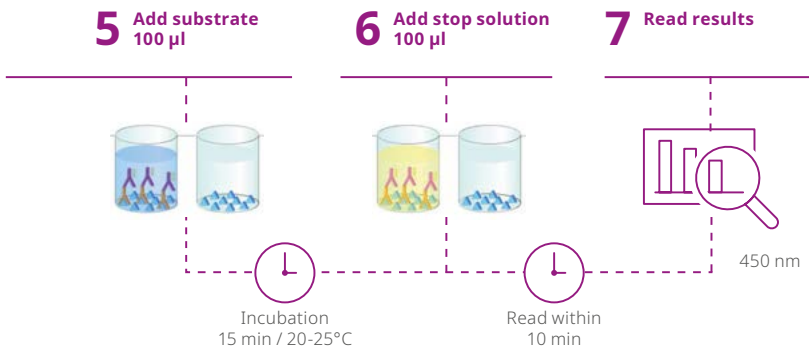
\*\* Except Leishmania ELISA sample dilution 1:300



Flexible system:



- Interchangeable reagents between assays
- Microplates with 12 individual strips of 8 wells



- A single protocol for all AFOSA ELISAs\*\*
- Validated for plasma or serum samples
- Unified 100 µl pipetting throughout protocol
- Tests performed at room temperature (18-25°C)
- Suitable for automated ELISA instruments

**Test validation**

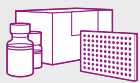
<b>Positive control :</b>	ODPC > 0.8 < 2.8
<b>Negative control :</b>	P < 20
<b>Null value</b>	OD < 0.1

Why choose AFOSA ELISA kits over IFA techniques?

Although IFA is considered standard for *Anaplasma*, *Ehrlichia* and *Babesia* detection, ELISA is preferred by referral laboratories because it provides:

- Consistent results while IFA result interpretation is operator dependent
- Lower running costs since it can be automated





A reliable, high-performing  
ELISA portfolio

- High-performing assays
- Validated assays



Improve workflow efficiency  
workflow to ensure consistent results

- User-friendly reagents
- Harmonized and convenient protocol
- Flexible system

## Ordering information<sup>‡</sup>

Pathogen investigated	Product	Technology	Cat. no. (number of ELISA plates)
<i>Anaplasma phagocytophilum</i> (Anaplasmosis)	ANAPLASMA-ELISA DOG	ELISA	AED-KIT (1)
<i>Babesia canis</i> (Babesiosis)	BABESIA-ELISA DOG	ELISA	BED-KIT (1)
<i>Ehrlichia canis</i> (Ehrlichiosis)	EHRlichIA-ELISA DOG	ELISA	EED-KIT (1)
Feline Coronavirus (Feline Infectious Peritonitis)	FCoV-ELISA CAT	ELISA	FEC-KIT (1)
<i>Leishmania infantum</i> (Leishmaniosis)	NEW! LEISHMANIA-ELISA DOG	ELISA	LED-KIT (1)
<i>Sarcoptes scabiei</i> var. <i>canis</i> (Sarcoptic Mange)	NEW! SARCOPTES-ELISA 2001® DOG	ELISA	SED-KIT (1)

<sup>‡</sup>Product availability/distribution: Outside the U.S. and Canada

## Get in touch with our experts!

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