

# SNAP 4Dx

## What is the IDEXX SNAP 4Dx Plus Test?

The IDEXX SNAP 4Dx Plus Test is a rapid screening test for evidence of infection with selected common canine vector-borne agents. It uses ELISA technology to detect:

- *Dirofilaria immitis* (heartworm) antigen
- *Ehrlichia* (*Ehrlichia canis* & *Ehrlichia ewingii*) antibodies
- *Anaplasma* (*Anaplasma phagocytophilum* & *Anaplasma platys*) antibodies
- *Borrelia burgdoferi* sensu lato (Lyme disease) antibodies

This is a qualitative test (i.e. gives a positive or negative result) so the actual quantity of antibody or antigen detected is not determined; but results can inform planning of further investigation.

## Sample requirements

Serum – minimum 0.5ml

## Turnaround time

Typically same working day as receipt

## Additional notes

A positive antibody result indicates exposure and subsequent seroconversion to *Ehrlichia*, *Anaplasma*, or *Borrelia* – but not necessarily clinical disease due to these organisms.

If heartworm infection is suspected, a heartworm screen should be performed, which combines the heartworm antigen test in the SNAP 4Dx Plus with a modified Knott's test for microfilariae (as false negative results can occur with the heartworm antigen test alone).

Information on these diseases and their manifestations in dogs can be found in separate fact sheets on the Acarus Infectious Disease PCRs page.

NB: the IDEXX SNAP 4Dx Plus test is optimised for dogs, not cats, so this test is not validated for use in cats.



## Reception Hours

Mon-Fri 9am - 5pm

## Contact Us

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However, it is reported to be non-species-specific and some researchers have successfully used it to detect cat antibodies against *Anaplasma* spp. (DOI: 10.1177/2055116917753804) and *Borrelia burgdorferi* (DOI: 10.1177/1040638715593598). It has also been used to detect *Dirofilaria immitis* antigen in cats, but these are less likely to be positive due to the lower worm burden.

***Last reviewed July 2021 by Emi Barker***

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