



InSight Canine-IA ANA Ab Evaluation
vs. IDEXX ANA Ab

The InSight Canine-IA is an easy to use Veterinary Immunoassay Analyser providing accurate and reliable results in 3-15 minutes. The InSight Canine-IA uses immunofluorescence technology for accurate results. A competitive binding assay is based upon the competition of labelled and unlabelled analytes for a limited number of antibody binding sites. Unbound antibodies and immunocomplexes migrate along the nitrocellulose membrane towards the test line. The unbound antibodies are then captured by antigens immobilised on the test line. The fluorescent signal intensity reflects the amount of analytes captured and is measured by the InSight Canine-IA.

ANA Ab

Anaplasma Phagocytophilum is a worldwide emerging zoonotic tick-borne pathogen transmitted by Ixodid ticks and naturally maintained in complex and incompletely assessed enzootic cycles. Canines granulocytic anaplasmosis is an acute febrile illness characterised by lethargy, loss of appetite, weight loss and musculoskeletal pain. Haematological and biochemistry profile modifications associated with this disease are unspecific and include thrombocytopenia, anaemia, morulae within neutrophils and increased liver enzymes activity. Coinfection with other tick-borne pathogens (TBPs) may occur, especially with Borrelia burgdorferi, complicating the clinical presentation, diagnosis and response to treatment.

Comparison Items

InSight Canine-IA:

Test Item – ANA Ab

Sample Type – Fresh Canine Clinical

Quantity of Samples – 45 Tests

IDEXX:

Test Item – ANA Ab

Sample Type – Fresh Canine Clinical

Quantity of Samples – 45 Tests

Results

ANA Ab		IDEXX		
		Positive	Negative	Total
InSight Canine-IA	Positive	15	0	15
	Negative	1	29	30
	Total	16	29	45

Positive Coincidence Rate	93.75%
Negative Coincidence Rate	100%
Total Coincidence Rate	96.8%

Reference Range of ANA Ab in Canine Blood

Detection Range: 0 – 300 U/mL

Reference Range:

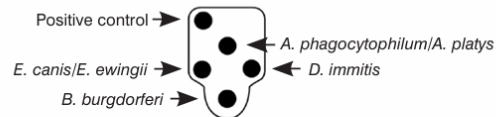
Signification	U/mL
Normal	<30U/mL
Previously infected or in the infected stage	30-300U/mL

IDEXX

Interpreting the test results

Positive result

Any color development in the sample spots indicates the presence of *Dirofilaria immitis* antigen, *A. phagocytophilum* antibody, *A. platys* antibody, *B. burgdorferi* antibody, *E. canis* antibody, or *E. ewingii* antibody in the sample.



Notes:

- The *A. phagocytophilum*/*A. platys* spot cannot differentiate between the two species: a positive result indicates presence of antibodies to *A. phagocytophilum* and/or *A. platys*.
- The *E. canis*/*E. ewingii* spot cannot differentiate between the two species: a positive result indicates presence of antibodies to *E. canis* and/or *E. ewingii*.
- In a low percentage of samples (0.027% as reported), interfering substances in the patient's blood can cause all spots on the device to react as positive. In this event, the sample should be re-assayed as plasma or serum to reduce the likelihood of interference.

Sample	IDEXX	InSight Canine-IA (U/mL)
1	Positive	137
2	Positive	98.39
3	Negative	7.63
4	Negative	9.52
5	Negative	7.54
6	Negative	5.08
7	Negative	8.61
8	Negative	8.57
9	Positive	50.23
10	Negative	5.14
11	Negative	17.18
12	Negative	7.82
13	Positive	87.36
14	Positive	71.65
15	Negative	8.24
16	Positive	63.08
17	Negative	8.14
18	Negative	7.45
19	Negative	7.42
20	Negative	6.86
21	Positive	37.62
22	Negative	11.75
23	Negative	7.8
24	Positive	62.59
25	Positive	56.25
26	Negative	16.57
27	Negative	7.38
28	Positive	27.98
29	Negative	8.93

30	Negative	6.39
31	Negative	7.53
32	Positive	32.41
33	Positive	35.62
34	Negative	6.89
35	Negative	18.21
36	Negative	6.07
37	Positive	65.94
38	Positive	47.16
39	Negative	10.35
40	Negative	9.47
41	Positive	45.82
42	Negative	15.8
43	Positive	87.91
44	Negative	11.11
45	Negative	13.79

Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
20 U/mL	20.62	21.37	18.57	18.53	20.83	20.71	20.27	18.79	18.64	20.41	19.874	-1%
80 U/mL	77.17	85.01	76.62	82.3	81.14	80.35	76.04	75.09	74.13	78.85	78.67	-2%
200 U/mL	210.34	227.95	210.08	217.16	220.9	202.04	185.89	204.08	188.56	222.12	208.912	4%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight Canine-IA ANA Ab Rapid Quantitative Test Kit and IDEXX SNAP* 4Dx* Plus Test (Heartworm Antigen-Anaplasma-Borrelia Burgdorferi Ehrlichia Antibody Test Kit) is as high as 96.8%, indicating that the InSight Canine-IA reagent is comparable to the IDEXX quantitative reagent.