



InSight Canine-IA CDV Ag Evaluation
vs. PCR

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.

CDV Ag

Canine distemper is a common and highly contagious viral infectious disease. Its pathogen is canine distemper virus, which mainly passes through respiratory tract infections. Infected dogs usually have biphasic fever, rhinitis, severe digestive tract disorders and respiratory tract inflammation. The fatality rate is very high.

Comparison Items

InSight Canine-IA:

Test Item – CDV Ag

Sample Type – Fresh Canine Nasopharyngeal Secretions, Saliva or Ocular Secretions

Quantity of Samples – 40 Tests

PCR:

Test Item – CDV Ag

Sample Type – Fresh Canine Nasopharyngeal Secretions, Saliva or Ocular Secretions

Quantity of Samples – 40 Tests

Results

CDV Ag		PCR		
		Positive	Negative	Total
InSight Canine-IA	Positive	18	0	18
	Negative	2	20	22
	Total	20	20	40

Positive Coincidence Rate	90%
Negative Coincidence Rate	100%
Total Coincidence Rate	95%

Sample	PCR (CT)	InSight Canine-IA (ng/mL)
1	CT34.32 (Positive)	25.64 (Positive)
2	CT33.56 (Positive)	26.31 (Positive)
3	CT37.50 (Weak Positive)	19.36 (Negative)
4	CT36.83 (Weak Positive)	22.19 (Positive)
5	CT35.50 (Weak Positive)	25.46 (Positive)
6	CT16.52 (Positive)	106.11 (Positive)
7	CT21.55 (Positive)	53.53 (Positive)
8	CT26.78 (Positive)	52.90 (Positive)

9	CT21.12 (Positive)	56.15 (Positive)
10	CT36.55 (Weak Positive)	19.32 (Negative)
11	CT29.12 (Positive)	30.25 (Positive)
12	CT27.95 (Positive)	34.84 (Positive)
13	CT36.56 (Weak Positive)	21.80 (Positive)
14	CT20.10 (Positive)	63.23 (Positive)
15	CT23.62 (Positive)	54.20 (Positive)
16	CT31.50 (Positive)	30.81 (Positive)
17	CT27.94 (Positive)	51.56 (Positive)
18	CT30.65 (Positive)	40.88 (Positive)
19	CT22.11 (Positive)	52.65 (Positive)
20	(Negative)	10.14 (Negative)
21	(Negative)	1.36 (Negative)
22	(Negative)	0.68 (Negative)
23	(Negative)	2.66 (Negative)
24	(Negative)	1.54 (Negative)
25	(Negative)	0.98 (Negative)
26	(Negative)	1.53 (Negative)
27	(Negative)	2.74 (Negative)
28	(Negative)	1.05 (Negative)
29	(Negative)	1.95 (Negative)
30	(Negative)	2.64 (Negative)
31	(Negative)	1.94 (Negative)
32	(Negative)	1.99 (Negative)
33	(Negative)	0.68 (Negative)
34	(Negative)	0.88 (Negative)
35	(Negative)	1.20 (Negative)
36	(Negative)	1.08 (Negative)
37	(Negative)	0.82 (Negative)
38	(Negative)	0.54 (Negative)
39	(Negative)	1.65 (Negative)
40	(Negative)	0.33 (Negative)

Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
5.0 ng/mL	5.4	5.46	4.59	5.34	5.18	5.36	4.78	5.11	4.75	5.43	5.14	2.80%
25 ng/mL	25.9	26.4	24.7	26.5	27.1	24.7	26.4	26.5	27.1	24.9	26.02	4.08%
70 ng/mL	68.8	65.4	74.8	72.9	68.5	75.4	70.1	74.6	75.8	74.9	72.12	3.03%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight Canine-IA CDV Ag Rapid Quantitative Test Kit and a PCR is as high as 95%, indicating that the InSight Canine-IA reagent is comparable to the PCR.