



InSight Canine-IA CPV 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.

CPV Ag

After infection, the virus can attack intestinal epithelial cells and cardiomyocytes. Symptoms are mainly manifested as gastrointestinal diseases and myocarditis. For puppies, symptoms are mostly myocarditis. After the onset of the disease, the mortality rate is high. The epidemic is often explosive, it can infect dogs of different ages, genders and breeds.

Comparison Items

InSight Canine-IA:

Test Item – CPV Ag

Sample Type – Fresh Canine Faeces

Quantity of Samples – 40 Tests

PCR:

Test Item – CPV Ag

Sample Type – Fresh Canine Faeces

Quantity of Samples – 40 Tests

Results

CPV Ag		PCR		
		Positive	Negative	Total
InSight Canine-IA	Positive	13	1	14
	Negative	1	25	26
	Total	14	26	40

Positive Coincidence Rate	93%
Negative Coincidence Rate	96%
Total Coincidence Rate	95%

Sample	PCR (CT)	InSight Canine-IA (ng/mL)
1	(Negative)	23.40 (Negative)
2	(Negative)	38.29 (Negative)
3	CT26.56 (Positive)	451.26 (Positive)
4	CT30.74 (Positive)	374.51 (Positive)
5	(Negative)	56.54 (Negative)
6	(Negative)	41.48 (Negative)
7	(Negative)	44.75 (Negative)
8	(Negative)	28.68 (Negative)

9	CT34.11 (Weak Positive)	178.67 (Positive)
10	CT35.45 (Weak Positive)	180.23 (Positive)
11	CT9.35 (Positive)	4257.14 (Positive)
12	CT17.14 (Positive)	2740.83 (Positive)
13	(Negative)	45.24 (Negative)
14	CT20.20 (Positive)	1588.57 (Positive)
15	(Negative)	46.49 (Negative)
16	(Negative)	58.12 (Negative)
17	CT8.25 (Positive)	3995.40 (Positive)
18	CT13.05 (Positive)	2651.54 (Positive)
19	(Negative)	66.78 (Positive)
20	(Negative)	38.33 (Negative)
21	CT33.00 (Weak Positive)	251.01 (Positive)
22	CT25.06 (Positive)	568.38 (Positive)
23	CT28.01 (Positive)	358.42 (Positive)
24	(Negative)	24.55 (Negative)
25	(Negative)	48.66 (Negative)
26	CT24.69 (Positive)	556.58 (Positive)
27	(Negative)	57.23 (Negative)
28	(Negative)	52.29 (Negative)
29	(Negative)	34.20 (Negative)
30	(Negative)	58.24 (Negative)
31	(Negative)	55.07 (Negative)
32	(Negative)	51.75 (Negative)
33	(Negative)	45.77 (Negative)
34	CT35.67 (Weak Positive)	46.43 (Negative)
35	(Negative)	43.50 (Negative)
36	(Negative)	44.54 (Negative)
37	(Negative)	56.87 (Negative)
38	(Negative)	56.12 (Negative)
39	(Negative)	23.87 (Negative)
40	(Negative)	44.11 (Negative)

Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
25 ng/mL	25.76	24.8	21.11	25.56	24.15	20.54	25.16	22.8	24.42	22.41	23.671	-5.00%
200 ng/mL	190.6	218.57	219.91	226.58	236.32	204.88	235.83	172.61	191.9	225.63	212.283	6.00%
3500 ng/mL	3754.61	3430.62	3439.11	4026.57	3843.96	4060.13	3864.98	3339.04	3022.1	3862.4	3664.352	4.70%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight Canine-IA CPV 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.