



InSight V-IA FCoV Ag Evaluation
vs. PCR

The InSight V-IA is an easy to use Veterinary Immunoassay Analyser providing accurate and reliable results in 3-15 minutes. The InSight V-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 V-IA.

FCoV Ag

Feline enteric coronavirus disease is a kind of intestinal transmission disease of cats caused by enterocoronavirus, which belongs to Coronaviridae. Coronaviridae may cause dehydration and the fatality rate is low. It mainly causes enteritis in young cats. Weak resistance to external physical and chemical factors, most disinfectants can inactivate it.

Comparison Items

InSight V-IA:

Test Item – FCoV Ag

Sample Type – Fresh Feline Faeces

Quantity of Samples – 40 Tests

PCR:

Test Item – FCoV Ag

Sample Type – Fresh Feline Faeces

Quantity of Samples – 40 Tests

Results

FCoV Ag		PCR		
		Positive	Negative	Total
InSight V-IA	Positive	15	1	16
	Negative	0	24	24
	Total	15	25	40

Positive Coincidence Rate	100%
Negative Coincidence Rate	96%
Total Coincidence Rate	98%

Sample	PCR (CT)	InSight V-IA (ug/mL)
1	CT6.01 (Positive)	15.87 (Positive)
2	CT15.53 (Positive)	8.25 (Positive)
3	CT18.68 (Positive)	7.24 (Positive)
4	CT22.44 (Positive)	9.99 (Positive)
5	CT29.26 (Positive)	7.86 (Positive)
6	CT30.07 (Positive)	6.45 (Positive)
7	CT33.09 (Weak Positive)	6.97 (Positive)
8	CT36.57 (Weak Positive)	5.13 (Weak Positive)

9	CT30.13 (Positive)	6.85 (Positive)
10	CT30.96 (Positive)	6.49 (Positive)
11	CT25.74 (Positive)	5.34 (Positive)
12	CT36.02 (Weak Positive)	4.82 (Positive)
13	CT34.57 (Weak Positive)	4.25 (Positive)
14	CT21.53 (Positive)	5.97 (Positive)
15	CT34.15 (Weak Positive)	5.63 (Positive)
16	(Negative)	1.22 (Negative)
17	(Negative)	0.58 (Negative)
18	(Negative)	3.05 (Negative)
19	(Negative)	3.73 (Negative)
20	(Negative)	3.55 (Negative)
21	(Negative)	2.05 (Negative)
22	(Negative)	1.84 (Negative)
23	(Negative)	1.58 (Negative)
24	(Negative)	1.12 (Negative)
25	(Negative)	1.06 (Negative)
26	(Negative)	1.22 (Negative)
27	(Negative)	0.58 (Negative)
28	(Negative)	2.99 (Negative)
29	(Negative)	1.28 (Negative)
30	(Negative)	0.74 (Negative)
31	(Negative)	4.65 (Positive)
32	(Negative)	3.88 (Negative)
33	(Negative)	1.46 (Negative)
34	(Negative)	1.41 (Negative)
35	(Negative)	1.97 (Negative)
36	(Negative)	2.24 (Negative)
37	(Negative)	0.65 (Negative)
38	(Negative)	0.37 (Negative)
39	(Negative)	1.46 (Negative)
40	(Negative)	1.41 (Negative)

Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
3 ug/ml	2.74	2.92	3.26	2.91	2.89	3.49	2.9	3.36	3.48	2.69	3.064	2.13%
15 ug/ml	15.6	13.05	14.47	16.8	15.48	17.8	17.58	16.29	14.9	17.92	15.989	6.59%
30 ug/ml	28.88	28.06	29.37	27.76	29.07	29.77	26.84	29.64	26.55	29.15	28.509	-4.97%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight V-IA FCoV Ag Rapid Quantitative Test Kit and a PCR is as high as 98%, indicating that the InSight V-IA reagent is comparable to the PCR.