



InSight V-IA FPV 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.

### **FPV Ag**

Feline parvovirus infection is also known as feline distemper, feline infectious enteritis and feline panleukocytosis. It is a highly contagious infectious viral disease that mainly occurs in young cats under one year old. The clinical symptoms are fever, leukopenia, vomiting and haemorrhagic enteritis. It is the most common and very dangerous infectious disease in domestic cats.

### **Comparison Items**

#### **InSight V-IA:**

Test Item – FPV Ag

Sample Type – Fresh Feline Faeces

Quantity of Samples – 40 Tests

#### **PCR:**

Test Item – FPV Ag

Sample Type – Fresh Feline Faeces

Quantity of Samples – 40 Tests

### **Results**

FPV Ag		PCR		
		Positive	Negative	Total
InSight V-IA	Positive	20	0	20
	Negative	2	18	20
	Total	22	18	40

Positive Coincidence Rate	91%
Negative Coincidence Rate	100%
Total Coincidence Rate	95%

Sample	PCR (CT)	InSight V-IA (ug/mL)
1	CT24.17 (Positive)	358.41 (Positive)
2	CT15.24 (Positive)	584.24 (Positive)
3	CT35.09 (Weak Positive)	16.36 (Negative)
4	(Negative)	9.89 (Negative)
5	(Negative)	6.38 (Negative)
6	(Negative)	5.33 (Negative)
7	(Negative)	8.13 (Negative)
8	CT18.23 (Positive)	525.90 (Positive)

9	(Negative)	11.12 (Negative)
10	(Negative)	2.28 (Negative)
11	CT16.81 (Positive)	643.27 (Positive)
12	CT15.22 (Positive)	712.48 (Positive)
13	(Negative)	5.35 (Negative)
14	(Negative)	6.59 (Negative)
15	CT30.52 (Positive)	53.7 (Positive)
16	(Negative)	13.24 (Negative)
17	CT29.46 (Positive)	127.63 (Positive)
18	CT32.11 (Weak Positive)	70.70 (Positive)
19	CT35.61 (Weak Positive)	16.45 (Negative)
20	CT31.24 (Positive)	65.76 (Positive)
21	(Negative)	6.84 (Negative)
22	CT31.20 (Positive)	68.90 (Positive)
23	CT36.21 (Weak Positive)	24.05 (Positive)
24	(Negative)	6.09 (Negative)
25	(Negative)	3.60 (Negative)
26	(Negative)	4.52 (Negative)
27	CT23.09 (Positive)	347.63 (Positive)
28	CT21.24 (Positive)	110.79 (Positive)
29	CT29.50 (Positive)	82.84 (Positive)
30	CT31.14 (Positive)	68.90 (Positive)
31	CT32.05 (Weak Positive)	34.05 (Positive)
32	CT11.21 (Positive)	502.24 (Positive)
33	(Negative)	9.35 (Negative)
34	(Negative)	5.69 (Negative)
35	CT37.21 (Weak Positive)	24.73 (Positive)
36	CT38.21 (Weak Positive)	22.78 (Positive)
37	CT29.78 (Positive)	67.92 (Positive)
38	(Negative)	13.28 (Negative)
39	(Negative)	5.76 (Negative)
40	(Negative)	6.87 (Negative)

Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
10 ug/ml	10.11	9.3	9.43	8.73	8.13	10.81	8.36	9.79	9.48	9.23	9.34	-7.70%
50 ug/ml	49.81	52.63	49.55	55	50.15	53.94	54.01	52.22	47.73	52.99	51.80	5.98%
300 ug/ml	275.12	267	305.85	323.54	321.86	293.5	328.08	309.05	341.44	315.44	308.09	5.15%

### Conclusion

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