



InSight V-IA FeLV 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.

FeLV Ag

Feline Leukaemia Virus (FeLV) is an infectious disease caused by the feline leukaemia virus, which mainly affects felines. The virus weakens a cat's immune system, making it more susceptible to other diseases and can cause serious health problems such as anaemia and lymphoma.

Comparison Items

InSight V-IA:

Test Item – FeLV Ag

Sample Type – Fresh Feline Plasma

Quantity of Samples – 50 Tests

PCR:

Test Item – FeLV Ag

Sample Type – Fresh Feline Plasma

Quantity of Samples – 50 Tests

Results

FeLV Ag		PCR		
		Positive	Negative	Total
InSight V-IA	Positive	9	0	9
	Negative	1	40	41
	Total	10	40	50

Positive Coincidence Rate	90%
Negative Coincidence Rate	100%
Total Coincidence Rate	98%

Sample	PCR (CT)	InSight V-IA (µg/mL)
1	Negative	15.14 (Negative)
2	Negative	13.67 (Negative)
3	Negative	12.85 (Negative)
4	Negative	13.66 (Negative)
5	Negative	22.08 (Negative)
6	CT 14.07 (Positive)	209.24 (Positive)
7	Negative	25.87 (Negative)
8	Negative	22.55 (Negative)
9	Negative	23.88 (Negative)

10	Negative	11.72 (Negative)
11	CT 35.07 (Positive)	26.25 (Negative)
12	Negative	16.50 (Negative)
13	Negative	14.31 (Negative)
14	Negative	13.23 (Negative)
15	Negative	15.54 (Negative)
16	CT 20.51 (Positive)	158.77 (Positive)
17	Negative	34.85 (Negative)
18	Negative	35.42 (Negative)
19	CT 35.45 (Positive)	66.21 (Positive)
20	Negative	24.20 (Negative)
21	Negative	21.58 (Negative)
22	CT 25.41 (Positive)	127.98 (Positive)
23	Negative	13.88 (Negative)
24	CT 23.10 (Positive)	138.2 (Positive)
25	Negative	21.87 (Negative)
26	Negative	13.88 (Negative)
27	CT 19.25 (Positive)	169.44 (Positive)
28	Negative	22.55 (Negative)
29	Negative	16.66 (Negative)
30	Negative	25.40 (Negative)
31	Negative	22.65 (Negative)
32	Negative	21.88 (Negative)
33	CT 19.10 (Positive)	169.65 (Positive)
34	Negative	21.01 (Negative)
35	Negative	11.54 (Negative)
36	Negative	21.68 (Negative)
37	Negative	11.53 (Negative)
38	CT 13.20 (Positive)	222.24 (Positive)
39	Negative	13.69 (Negative)
40	Negative	21.33 (Negative)
41	Negative	15.15 (Negative)
42	Negative	17.26 (Negative)
43	Negative	18.28 (Negative)
44	Negative	19.32 (Negative)
45	Negative	26.31 (Negative)
46	Negative	18.94 (Negative)
47	Negative	16.52 (Negative)
48	CT 29.30 (Positive)	104.32 (Positive)
49	Negative	15.96 (Negative)
50	Negative	16.78 (Negative)

Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
40 µg/mL	41.89	36.38	39.42	39.96	38.37	43.76	36.54	37.24	40.91	36.65	39.11	-2.22%
80 µg/mL	81.81	84.93	75.98	84.6	86.96	74.38	80.04	84.98	82.75	82.69	81.91	2.39%
240 µg/mL	238.05	221.7	261.63	238.35	241.1	223.05	224.77	253.68	238.25	219.71	236.03	-1.65%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight V-IA FeLV 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.