



InSight V-IA CDV/CPV/ICH Ab Evaluation
vs. Biogal CDV/CPV/ICH Ab

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.

CDV/CPV/ICH Ab

Antibody refers to the protective protein produced by the body due to the stimulation of antigens. It is not the vaccine itself that fights the virus, but the antibodies that the vaccine stimulates the body to produce. Dogs will produce corresponding antibodies after vaccination, and only when the antibody level is sufficient (the antibody titre reaches a certain value) do they have the ability to resist the virus.

1. After the puppy is born, the best time for initial vaccination can be determined according to the antibody titre.
2. After 2-3 weeks of vaccination, the effect of vaccination can be interpreted according to the antibody titre, so as to confirm the success of vaccination.
3. When the dog is suffering from canine distemper virus disease, according to the antibody titre, the vet can judge the degree of the disease of the dog, and formulate a reasonable treatment and prognosis plan.

Comparison Items

InSight V-IA:

Test Item – CDV/CPV/ICH Ab

Sample Type – Fresh Canine Clinical Samples

Quantity of Samples – 50 Tests

Biogal:

Test Item – CDV/CPV/ICH Ab

Sample Type – Fresh Canine Clinical Samples

Quantity of Samples – 50 Tests

Results

CDV Ab		Biogal		
		Positive	Negative	Total
InSight V-IA	Positive	36	0	36
	Negative	1	13	14
	Total	37	13	50

Positive Coincidence Rate	97%
Negative Coincidence Rate	100%
Total Coincidence Rate	98%

CPV Ab		Biogal		
		Positive	Negative	Total
InSight V-IA	Positive	42	0	42
	Negative	2	6	8
	Total	44	6	50

Positive Coincidence Rate	95%
Negative Coincidence Rate	100%
Total Coincidence Rate	96%

ICH Ab		Biogal		
		Positive	Negative	Total
InSight V-IA	Positive	43	0	43
	Negative	2	5	7
	Total	45	5	50

Positive Coincidence Rate	95%
Negative Coincidence Rate	100%
Total Coincidence Rate	96%

Sample	Biogal			InSight V-IA (U)		
	CDV Ab	CPV Ab	ICH Ab	CDV Ab	CPV Ab	ICH Ab
1	S2 (Weak Positive)	S5 (High Positive)	S4 (Positive)	56.32 (Positive)	512.79 (High Positive)	107.29 (Positive)
2	S3 (Positive)	S4 (Positive)	S4.5 (Positive)	194.84 (Positive)	110.22 (Positive)	140.7 (Positive)
3	S3.5 (Positive)	S4 (Positive)	S3.5(Positive)	178.75 (Positive)	100.05 (Positive)	101.33 (Positive)
4	S1 (Positive)	S4.5 (Positive)	S4.5 (Positive)	54.58 (Positive)	196.52 (Positive)	188.18 (Positive)
5	S3 (Positive)	S4 (Positive)	S4 (Positive)	24.54 (Negative)	118.18 (Positive)	135.09 (Positive)
6	S3 (Positive)	S4 (Positive)	S4.5 (Positive)	158.67 (Positive)	104.55 (Positive)	185.65 (Positive)
7	S3 (Positive)	S4.5 (Positive)	S4.5 (Positive)	184.4 (Positive)	121.42 (Positive)	191.59 (Positive)
8	S3.5 (Positive)	S5 (High Positive)	S4.5 (Positive)	165.64 (Positive)	514.53 (High Positive)	182.88 (Positive)
9	S1.5 (Positive)	S4.5 (Positive)	S4.5 (Positive)	52.64 (Positive)	163.83 (Positive)	161.69 (Positive)
10	S1 (Positive)	S0 (Negative)	S1 (Positive)	66.21 (Positive)	5.98 (Negative)	65.35 (Positive)
11	S0 (Negative)	S0 (Negative)	S1 (Positive)	13.27 (Negative)	6.47 (Negative)	75.11 (Positive)
12	S0 (Negative)	S3 (Positive)	S0 (Negative)	13.95 (Negative)	134.84 (Positive)	10.95 (Negative)
13	S0 (Negative)	S0 (Negative)	S0 (Negative)	14.66 (Negative)	6.84 (Negative)	12.73 (Negative)
14	S0 (Negative)	S0 (Negative)	S0 (Negative)	13.59 (Negative)	10.65 (Negative)	18.55 (Negative)
15	S2 (Weak Positive)	S3 (Positive)	S1 (Positive)	59.61 (Positive)	115.71 (Positive)	74.06 (Positive)
16	S2 (Weak Positive)	S4 (Positive)	S2 (Weak Positive)	68.27 (Positive)	145.63 (Positive)	81.99 (Positive)
17	S2 (Weak Positive)	S2 (Weak Positive)	S2 (Weak Positive)	77.84 (Positive)	56.11 (Positive)	70.59 (Positive)
18	S2 (Weak Positive)	S2 (Weak Positive)	S2 (Weak Positive)	69.42 (Positive)	69.26 (Positive)	65.82 (Positive)
19	S3 (Positive)	S4 (Positive)	S4 (Positive)	109.94 (Positive)	100.09 (Positive)	105.76 (Positive)
20	S0 (Negative)	S3 (Positive)	S1 (Positive)	12.74 (Negative)	118.11 (Positive)	61.48 (Positive)
21	S0 (Negative)	S4 (Positive)	S0 (Negative)	11.68 (Negative)	142.75 (Positive)	16.63 (Negative)
22	S1 (Positive)	S3 (Positive)	S3 (Positive)	120.48 (Positive)	20.98 (Negative)	114.21 (Positive)
23	S0 (Negative)	S4 (Positive)	S4 (Positive)	12.57 (Negative)	100.83 (Positive)	127.83 (Positive)
24	S0 (Negative)	S4 (Positive)	S4 (Positive)	15.64 (Negative)	105.46 (Positive)	135.21 (Positive)
25	S0 (Negative)	S4 (Positive)	S0 (Negative)	18.76 (Negative)	114.19 (Positive)	21.92 (Negative)
26	S0 (Negative)	S3 (Positive)	S2 (Weak Positive)	20.94 (Negative)	165.79 (Positive)	62.55 (Positive)

27	S0 (Negative)	S4 (Positive)	S4 (Positive)	16.77 (Negative)	132.16 (Positive)	154.27 (Positive)
28	S0 (Negative)	S3 (Positive)	S3.5 (Positive)	15.97 (Negative)	18.43 (Negative)	117.36 (Positive)
29	S2 (Weak Positive)	S4 (Positive)	S2 (Weak Positive)	68.37 (Positive)	131.07 (Positive)	21.95 (Negative)
30	S1 (Positive)	S4 (Positive)	S4 (Positive)	85.64 (Positive)	126.87 (Positive)	129.73 (Positive)
31	S1 (Positive)	S4.5 (Positive)	S3 (Positive)	74.84 (Positive)	194.28 (Positive)	105.34 (Positive)
32	S0 (Negative)	S3 (Positive)	S2 (Weak Positive)	17.43 (Negative)	109.87 (Positive)	78.87 (Positive)
33	S2 (Weak Positive)	S4 (Positive)	S2 (Weak Positive)	76.58 (Positive)	107.48 (Positive)	87.2 (Positive)
34	S3 (Positive)	S3 (Positive)	S4.5 (Positive)	155.62 (Positive)	177.78 (Positive)	167.64 (Positive)
35	S3 (Positive)	S0 (Negative)	S4 (Positive)	165.75 (Positive)	12.03 (Negative)	131.85 (Positive)
36	S3 (Positive)	S4.5 (Positive)	S4.5 (Positive)	131.67 (Positive)	158.6 (Positive)	187.34 (Positive)
37	S2 (Weak Positive)	S5 (High Positive)	S5 (High Positive)	61.94 (Positive)	511.65 (High Positive)	221.26 (Positive)
38	S1 (Positive)	S0 (Negative)	S4 (Positive)	69.62 (Positive)	10.9 (Negative)	19.95 (Negative)
39	S3 (Positive)	S2 (Weak Positive)	S4.5 (Positive)	162.56 (Positive)	67.44 (Positive)	174.21 (Positive)
40	S4 (Positive)	S4 (Positive)	S4 (Positive)	112.59 (Positive)	115.56 (Positive)	140.45 (Positive)
41	S5 (High pos.)	S4 (Positive)	S3 (Positive)	512.55 (High Positive)	125.64 (Positive)	129.12 (Positive)
42	S5 (High pos.)	S5 (High Positive)	S5 (High Positive)	521.45 (High Positive)	556.14 (High Positive)	250.16 (Positive)
43	S3 (Positive)	S3 (Positive)	S4.5 (Positive)	184.97 (Positive)	116.55 (Positive)	190.55 (Positive)
44	S6 (High pos.)	S6 (High Positive)	S6 (High Positive)	558.55 (High Positive)	505.12 (High Positive)	512.01 (High Positive)
45	S3.5 (Positive)	S3.5 (Positive)	S4 (Positive)	299.25 (Positive)	127.45 (Positive)	66.74 (Positive)
46	S3 (Positive)	S3 (Positive)	S4.5 (Positive)	245.55 (Positive)	178.48 (Positive)	154.45 (Positive)
47	S1 (Positive)	S3 (Positive)	S4 (Positive)	94.14 (Positive)	158.17 (Positive)	158.85 (Positive)
48	S5 (High Positive)	S5 (High Positive)	S5 (High Positive)	505.45 (High Positive)	538.14 (High Positive)	541.45 (High Positive)
49	S6 (High Positive)	S5 (High Positive)	S5.5 (High Positive)	500.14 (High Positive)	554.55 (High Positive)	651.15 (High Positive)
50	S4 (Positive)	S4.5 (Positive)	S5 (High Positive)	156.23 (Positive)	194.41 (Positive)	551.26 (High Positive)

CDV Ab Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
20U	17.07	25.18	22.19	22.14	22.72	16.81	18.39	22.72	26.32	17.56	21.11	5.55%
75U	62.44	76.46	79.27	63.26	74.4	67.65	74.69	72.39	81.57	77.99	73.012	-2.65%
200U	202.41	190.99	187.23	225.94	186.11	229.45	222.96	183.81	223.18	227.14	207.922	3.96%

CPV Ab Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
25U	26.22	25.46	18.09	24.06	27.87	27.41	23.43	18.79	19.81	21.15	23.229	-7.08%
80U	80.53	81.83	81.7	68.84	70.06	73.52	75.77	82.47	83.64	69.04	76.74	-4.08%
250U	287.56	282.24	279.99	289.95	237.86	265.75	240.57	255.14	248.94	274.54	266.254	6.50%

ICH Ab Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
14.8U	15.59	13.28	13.38	15.33	13.95	13.18	13.59	14.19	15.33	13.32	14.114	-4.64%
66U	68.35	72.8	62.9	66.04	68.41	69.61	71.25	74.93	65.73	65.11	68.513	3.81%
190U	181.65	200.97	226.49	211.74	207.18	190.24	172.73	204.37	213.1	197.79	200.626	5.59%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight V-IA CDV/CPV/ICH Ab Rapid Quantitative Test Kit and Biogal CDV/CPV/ICH Ab Rapid Quantitative Test is high (CDV Ab compliance rate is 98%, CPV Ab compliance rate is 96% and ICH Ab compliance rate is 96%), indicating that the InSight V-IA reagent is comparable to the Biogal reagent.