



InSight V-IA fCys C Evaluation
vs. Dianotech fCys C

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.

fCys C

Cystatin C, a protein belonging to the cysteine protease inhibitor family, is produced by all nucleated cells at a constant rate and is an ideal endogenous indicator, with its concentration in the blood almost entirely dependent on GFR. It is filtered freely by the kidney and decomposes after absorption in the proximal tubule. In fact, unless the proximal tubule is injured, it does not return to the bloodstream. In nephrology, this endogenous substance is regarded as a marker of renal excretory function and is more sensitive than creatinine.

Comparison Items

InSight V-IA:

Test Item – fCys C

Sample Type – Fresh Feline Clinical Samples

Quantity of Samples – 45 Tests

Dianotech:

Test Item – fCys C

Sample Type – Fresh Feline Clinical Samples

Quantity of Samples – 45 Tests

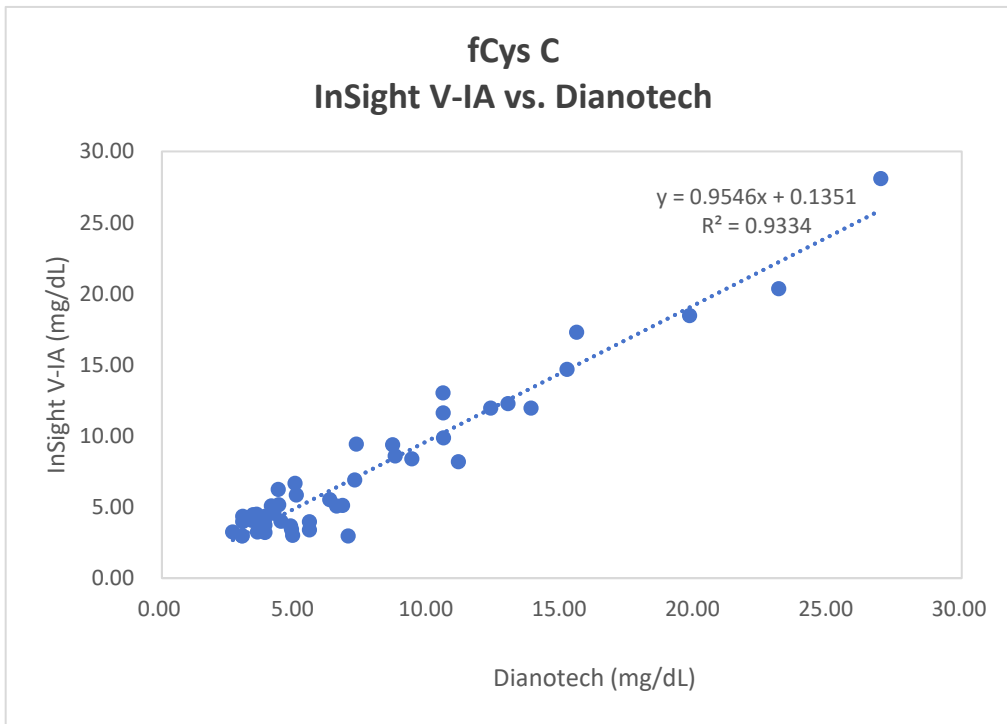
Results

fCys C		Dianotech		
		Positive	Negative	Total
InSight V-IA	Positive	16	0	16
	Negative	1	28	29
	Total	17	28	45

Positive Coincidence Rate	94%
Negative Coincidence Rate	100%
Total Coincidence Rate	98%

Sample	Dianotech (mg/dL)	InSight V-IA (mg/dL)
1	4.83	3.66
2	23.14	20.34
3	5.00	6.65
4	4.37	6.22
5	3.38	4.05
6	6.78	5.10

7	10.56	11.60
8	5.54	3.95
9	5.54	3.38
10	11.13	8.17
11	3.87	3.71
12	3.87	3.20
13	7.24	6.89
14	12.34	11.94
15	6.99	2.95
16	4.87	3.41
17	3.43	4.45
18	7.30	9.41
19	3.04	4.33
20	4.11	5.07
21	3.88	4.33
22	3.04	3.96
23	15.20	14.67
24	10.55	13.01
25	6.30	5.50
26	3.56	4.48
27	4.21	4.55
28	3.01	2.97
29	9.38	8.37
30	8.66	9.37
31	4.47	3.99
32	10.57	9.85
33	4.39	5.14
34	4.91	3.00
35	5.05	5.83
36	8.76	8.58
37	13.85	11.94
38	12.99	12.26
39	3.02	2.95
40	26.97	28.08
41	6.56	5.05
42	2.66	3.23
43	15.56	17.27
44	19.80	18.44
45	3.59	3.23



Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
5 mg/dL	5	4.57	5.32	5.47	5.13	4.86	5.47	4.4	5.4	5.39	5.101	2%
8 mg/dL	7.5	7.99	7.71	7.26	7.51	8.93	7.09	8.07	8.27	7.52	7.785	-3%
15 mg/dL	14.78	12.66	13.9	13.78	13.38	13.18	13.41	14.45	12.91	15.14	13.759	-8%

Conclusion

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