



InSight Canine-IA cCys C Evaluation
vs. Dianotech cCys C

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

cCys 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 Canine-IA:

Test Item – cCys C

Sample Type – Fresh Canine Clinical Samples

Quantity of Samples – 50 Tests

Dianotech:

Test Item – cCys C

Sample Type – Fresh Canine Clinical Samples

Quantity of Samples – 50 Tests

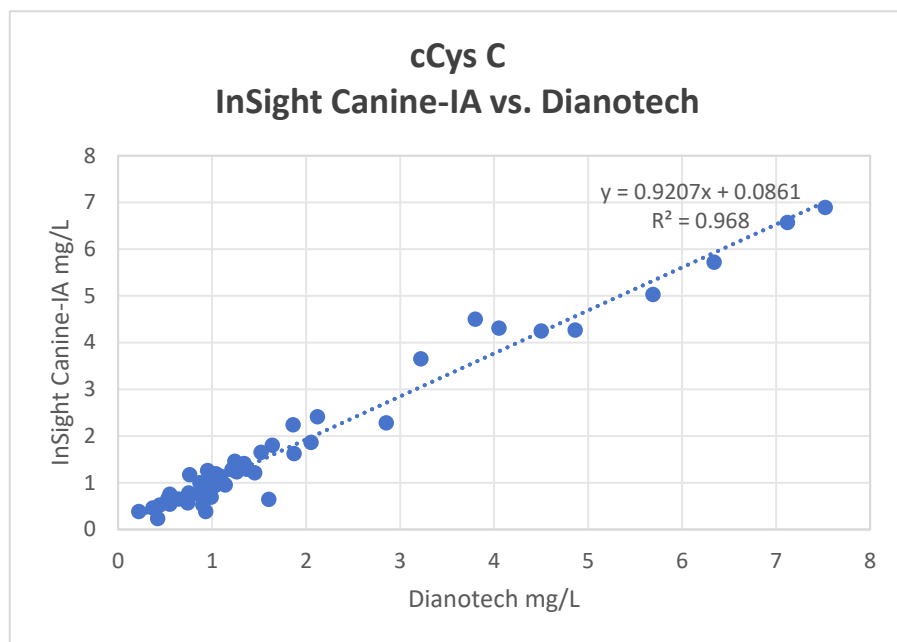
Results

cCys C		Dianotech		
		Positive	Negative	Total
InSight Canine-IA	Positive	22	1	23
	Negative	1	26	27
	Total	23	27	50

Positive Coincidence Rate	95.7%
Negative Coincidence Rate	96.3%
Total Coincidence Rate	96%

Sample	Dianotech (mg/L)	InSight Canine-IA (mg/L)
1	0.56	0.64
2	0.55	0.75
3	0.97	1.06
4	1.6	0.64
5	0.44	0.52
6	0.86	0.75

7	0.96	1.06
8	2.05	1.86
9	0.95	1.26
10	0.74	0.57
11	1.26	1.23
12	0.93	0.38
13	0.37	0.46
14	0.9	0.67
15	1.52	1.65
16	2.12	2.41
17	1.86	2.24
18	6.34	5.72
19	7.52	6.89
20	4.05	4.31
21	0.99	1.11
22	0.95	0.97
23	0.55	0.54
24	0.22	0.38
25	1.09	1.14
26	0.9	0.53
27	3.22	3.65
28	4.5	4.25
29	3.8	4.5
30	0.99	0.69
31	0.87	1.00
32	1.14	0.95
33	4.86	4.27
34	0.42	0.23
35	1.45	1.21
36	7.12	6.57
37	1.34	1.41
38	1.21	1.28
39	0.75	0.78
40	1.04	1.19
41	1.37	1.29
42	1.87	1.62
43	1.24	1.46
44	0.76	1.17
45	0.64	0.65
46	0.53	0.66
47	1.03	0.94
48	1.64	1.8
49	2.85	2.28
50	5.69	5.03



Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
0.7 mg/L	0.72	0.75	0.74	0.73	0.65	0.81	0.8	0.82	0.71	0.62	0.74	5.00%
2.0 mg/L	1.84	1.96	2.12	2.06	2.22	2.22	1.88	2.13	2.14	2.25	2.08	4.10%
6.3 mg/L	6.8	6.71	6.35	6.24	6.19	6.18	6.86	6.85	6.22	6.35	6.48	2.78%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight Canine-IA cCys C Rapid Quantitative Test Kit and Dianotech cCys C Test Kit is as high as 96%, indicating that the InSight Canine-IA reagent is comparable to the Dianotech reagent.