



InSight V-IA T4 Evaluation  
vs. IDEXX T4

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.

#### **T4**

The evaluation of thyroid function is mainly to determine the concentration of basal serum thyroxine. The basal serum T4 concentration is the sum of protein bound and free T4 in the blood circulation. Test results below the normal range indicate hypothyroidism while test results above the normal range indicate hyperthyroidism. Hypothyroidism is common in dogs and hyperthyroidism is common in cats.

#### **Comparison Items**

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

Test Item – T4

Sample Type – Fresh Canine and Feline Serum

Quantity of Samples – 50 Tests

##### **IDEXX:**

Test Item – T4

Sample Type – Fresh Canine and Feline Serum

Quantity of Samples – 50 Tests

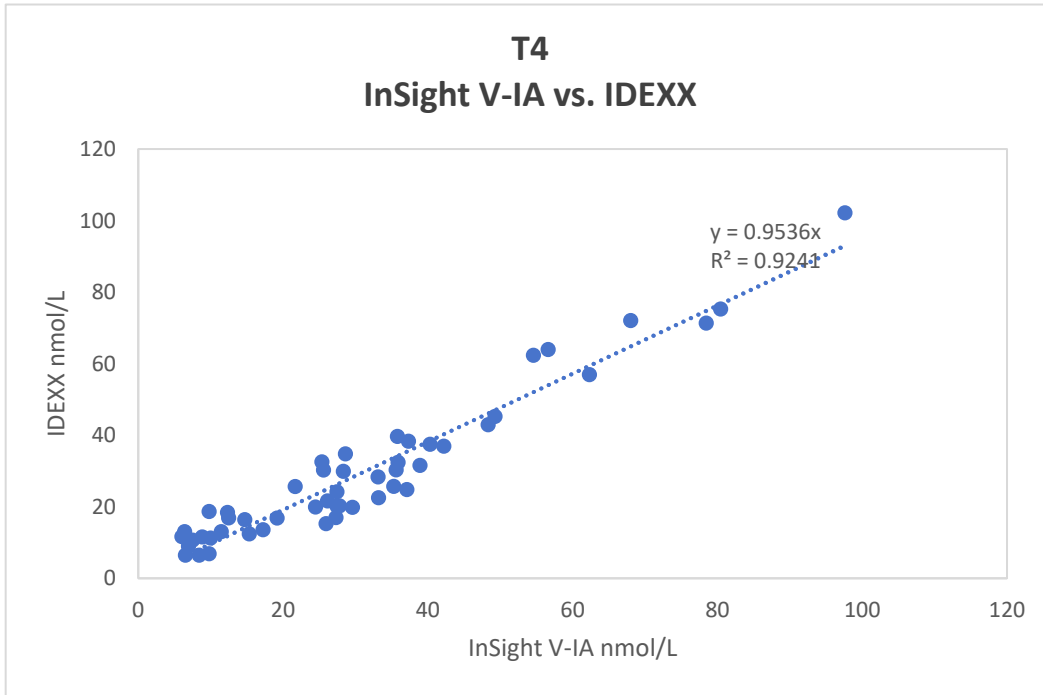
#### **Results**

T4		IDEXX		
		Positive	Negative	Total
InSight V-IA	Positive	14	3	17
	Negative	2	31	33
	Total	16	34	50

Positive Coincidence Rate	88%
Negative Coincidence Rate	91%
Total Coincidence Rate	90%

Sample	Sample Type	IDEXX (nmol/L)	InSight V-IA (nmol/L)
1	Canine Serum	40	35.82
2	Canine Serum	33	25.4
3	Canine Serum	25	37.12
4	Canine Serum	35	28.64
5	Canine Serum	7	9.82
6	Canine Serum	11	10.02
7	Canine Serum	12	8.85
8	Canine Serum	11	7.53

9	Canine Serum	30	25.61
10	Canine Serum	13	11.5
11	Canine Serum	17	12.5
12	Canine Serum	37	42.23
13	Canine Serum	6	6.53
14	Canine Serum	31	38.94
15	Canine Serum	15	25.97
16	Canine Serum	6	8.45
17	Canine Serum	30	28.36
18	Canine Serum	20	24.51
19	Canine Serum	18	12.35
20	Canine Serum	9	6.97
21	Canine Serum	19	9.81
22	Canine Serum	26	21.7
23	Canine Serum	32	35.92
24	Canine Serum	12	6.05
25	Canine Serum	17	27.34
26	Feline Serum	14	17.27
27	Feline Serum	102	97.64
28	Feline Serum	45	49.3
29	Feline Serum	72	68.05
30	Feline Serum	22	26.17
31	Feline Serum	75	80.47
32	Feline Serum	20	27.47
33	Feline Serum	12	15.36
34	Feline Serum	64	56.65
35	Feline Serum	22	33.21
36	Feline Serum	30	35.64
37	Feline Serum	62	54.6
38	Feline Serum	17	19.21
39	Feline Serum	71	78.48
40	Feline Serum	13	6.44
41	Feline Serum	16	14.74
42	Feline Serum	20	27.82
43	Feline Serum	24	27.47
44	Feline Serum	28	33.15
45	Feline Serum	37	40.34
46	Feline Serum	26	35.31
47	Feline Serum	57	62.35
48	Feline Serum	38	37.36
49	Feline Serum	43	48.36
50	Feline Serum	20	29.61



Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
8 nmol/L	7.84	8.08	7.41	8.75	7.06	7.73	9.51	8.29	8.74	9.38	8.279	3%
26 nmol/L	24.07	24.58	26.04	28.13	24.55	23.31	23.54	25.63	23.06	24.54	24.745	-5%
90 nmol/L	90.36	88.96	82.53	87.79	86.22	92.12	95.59	85.1	99.11	84.42	89.22	-1%

**Conclusion**

Based on comparative analysis, the total coincidence rate of InSight V-IA T4 Rapid Quantitative Test Kit and IDEXX Catalyst Total T4 Test Kit is as high as 90%, indicating that the InSight V-IA reagent is comparable to the IDEXX quantitative reagent.