



InSight V-IA C-RLN Evaluation
vs. Beiteshuang C-RLN

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.

C-RLN

Relaxin is a polypeptide hormone synthesised and secreted by the luteum and placenta during pregnancy that increases gradually as pregnancy progresses and decreases rapidly after delivery. Therefore, this hormone, as a kind of animal progesterone, is widely used in the auxiliary diagnosis of early pregnancy in animals. In dogs 20-30 days after pregnancy, the concentration of Relaxin in the blood increases rapidly. C-RLN is used in the diagnosis of early pregnancy in canines.

Comparison Items

InSight V-IA:

Test Item – C-RLN

Sample Type – Fresh Canine Serum

Quantity of Samples – 45 Tests

Beiteshuang:

Test Item – C-RLN

Sample Type – Fresh Canine Serum

Quantity of Samples – 45 Tests

Results

C-RLN		Beiteshuang		
		Positive	Negative	Total
InSight V-IA	Positive	35	0	35
	Negative	0	10	0
	Total	35	10	45

Positive Coincidence Rate	100%
Negative Coincidence Rate	100%
Total Coincidence Rate	100%

Sample	Gestation Days	Beiteshuang (+/-)	InSight V-IA (ng/mL)
1	45	+ (Positive)	5.69
2	47	+ (Positive)	7.52
3	50	+ (Positive)	10.04
4	20	- (Negative)	0.52
5	26	+ (Positive)	5.22
6	27	+ (Positive)	4.01
7	28	+ (Positive)	3.16

8	29	+ (Positive)	7.65
9	30	+ (Positive)	4.81
10	25	- (Negative)	0.15
11	20	- (Negative)	1.11
12	26	- (Negative)	2.11
13	50	+ (Positive)	21.09
14	55	+ (Positive)	35.8
15	54	+ (Positive)	47.34
16	31	+ (Positive)	5.09
17	31	+ (Positive)	5.08
18	32	+ (Positive)	3.89
19	33	+ (Positive)	3.5
20	28	- (Negative)	2.05
21	29	+ (Positive)	4.11
22	25	- (Negative)	0.81
23	26	+ (Positive)	4.77
24	28	+ (Positive)	5.30
25	20	- (Negative)	1.89
26	30	+ (Positive)	5.55
27	25	+ (Positive)	3.54
28	28	+ (Positive)	7.89
29	29	+ (Positive)	4.92
30	25	- (Negative)	1.48
31	26	+ (Positive)	6.90
32	27	+ (Positive)	5.01
33	28	+ (Positive)	8.50
34	29	+ (Positive)	7.45
35	30	+ (Positive)	10.02
36	25	+ (Positive)	6.2
37	25	+ (Positive)	5.40
38	20	- (Negative)	1.44
39	19	- (Negative)	0.55
40	30	+ (Positive)	7.04
41	35	+ (Positive)	10.16
42	25	+ (Positive)	8.04
43	30	+ (Positive)	5.56
44	30	+ (Positive)	6.54
45	30	+ (Positive)	5.65

Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
0.5 ng/mL	0.45	0.55	0.65	0.54	0.5	0.54	0.68	0.59	0.55	0.51	0.556	11.20%
3 ng/mL	3.12	3.02	3.21	3.45	3.22	3.24	3.25	3.27	3.14	3.12	3.204	6.80%
10 ng/mL	10.21	9.31	9.99	11.14	9.04	11.04	9.17	10.1	9.85	11.66	10.151	1.51%

Conclusion

Based on comparative analysis, the total coincidence rate of InSight V-IA C-RLN Rapid Quantitative Test Kit and Beiteshuang C-RLN Rapid Test is as high as 100%, indicating that the InSight V-IA reagent is comparable to the Vcheck quantitative reagent.