



NEOSPORA CANINUM ELISA KIT

BIO K 192/2 - BIO K 192/5

For serum or milk (Bovine) - double well

Neospora caninum is a protozoon that was originally described as a parasite in dogs, in which it causes myositis and encephalitis. Bovine neosporosis is now recognised as a major cause of spontaneous abortion in cattle. It is highly suspected on 20% of the farms with repeated abortions and a cow that is seropositive for *Neospora caninum* has a threefold greater risk of aborting than a cow that is *Neospora*-negative. *Neospora caninum* is responsible for 21% of spontaneous abortions occurring in an individual animal. This percentage rises to 33% for the herd as a whole. Vertical transmission is the rule (at least 80% of the calves born to seropositive cows are infected). Serotesting before the calf's first colostrum intake will reveal prenatal infection.

Use of the kit

The kit is designed to follow serological status of sera or milks

Reliable Results

The use of monoclonal antibody as conjugate ensures excellent specificity and very reliable results.

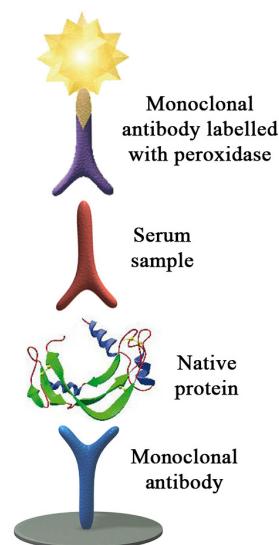
The use of monoclonal antibodies to purify SRS2 from *Neospora caninum* protein on the plate also makes it possible to obtain an excellent specificity

Ease-of-Use

Minimal hands-on-time
Room temperature incubation
Results available in 140 minutes for single or batch testing

EIA Procedure

- 1- Microplate coated with monoclonal antibody and *Neospora caninum* purified SRS2 protein.
- 2- Add samples and positive control.
Incubate 1 hour at 21°C+/-3°C.
Wash
- 3- Add conjugate.
Incubate 1 hour at 21°C+/-3°C.
Wash
- 4- Add chromogen (TMB).
Wait 10 minutes
Add stop solution. Read at 450 nm

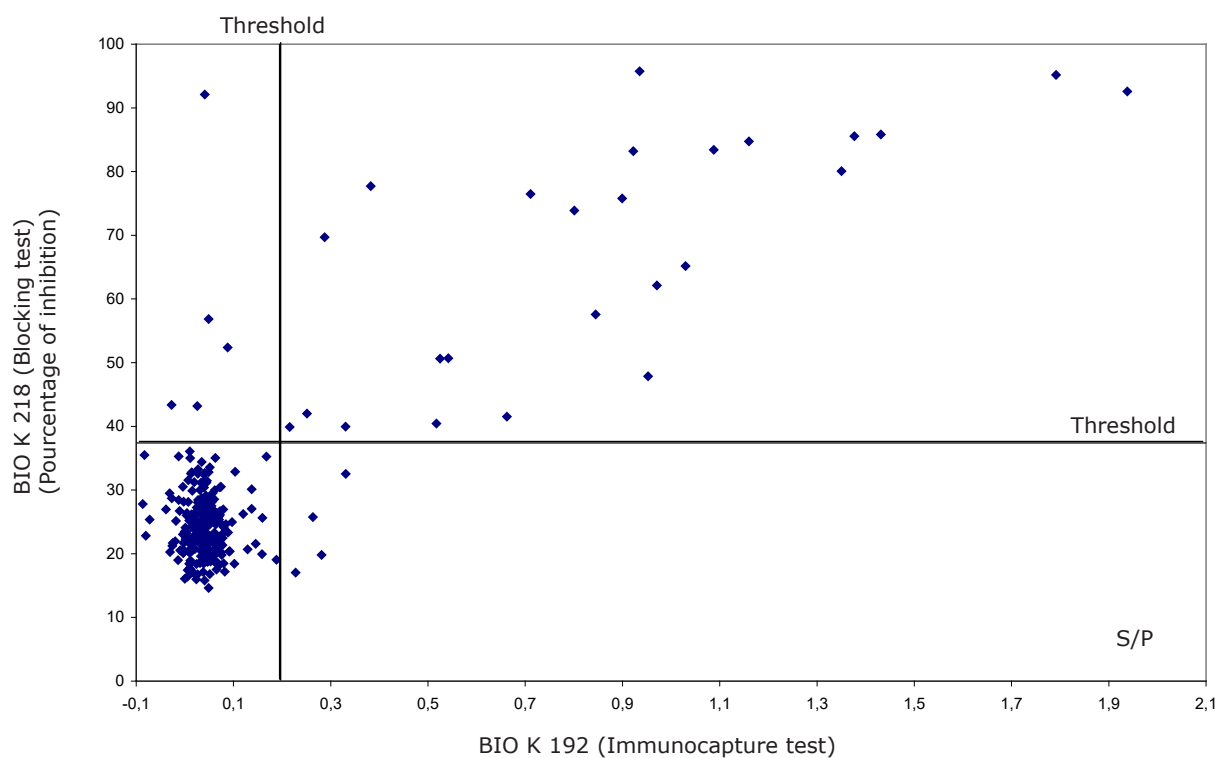




Kit performance

The performance of the BIO K 192 kit (immunocapture test) was compared with BIO K 218 ELISA kit (blocking test) test on 270 blood serum samples. The results of these comparisons are shown in Graph 1. 1 corresponds to the value obtained with the kit's positive reference serum (S/P).

Graph 1



BIO K 218

BIO K 192		-	+	
	-	236	5	241
	+	4	25	29
		240	30	270

Concordance between the two tests: Kappa = 0.83

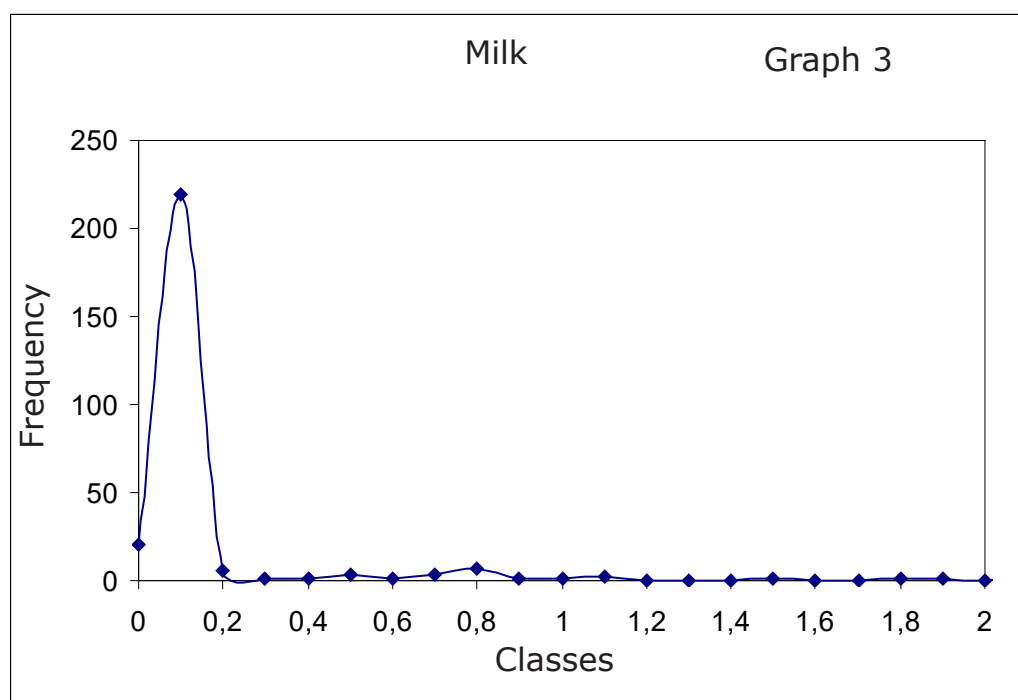
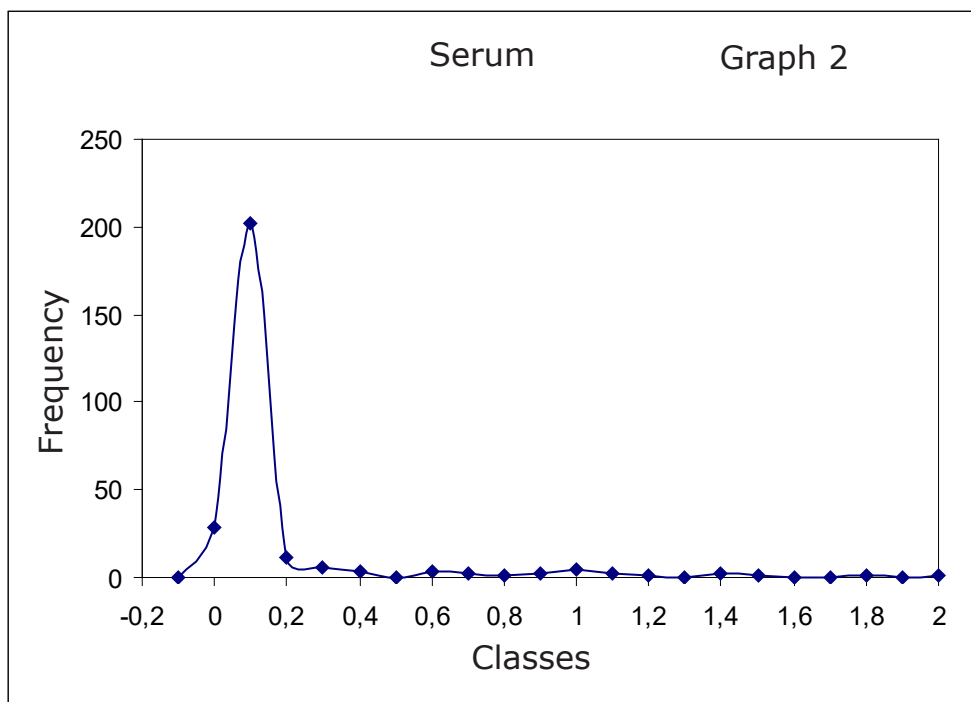
The concordance between the two tests is considered excellent.

Landis et Koch, The measurement of observer agreement for categorical data
Biometrics 1977, 33, 159-74



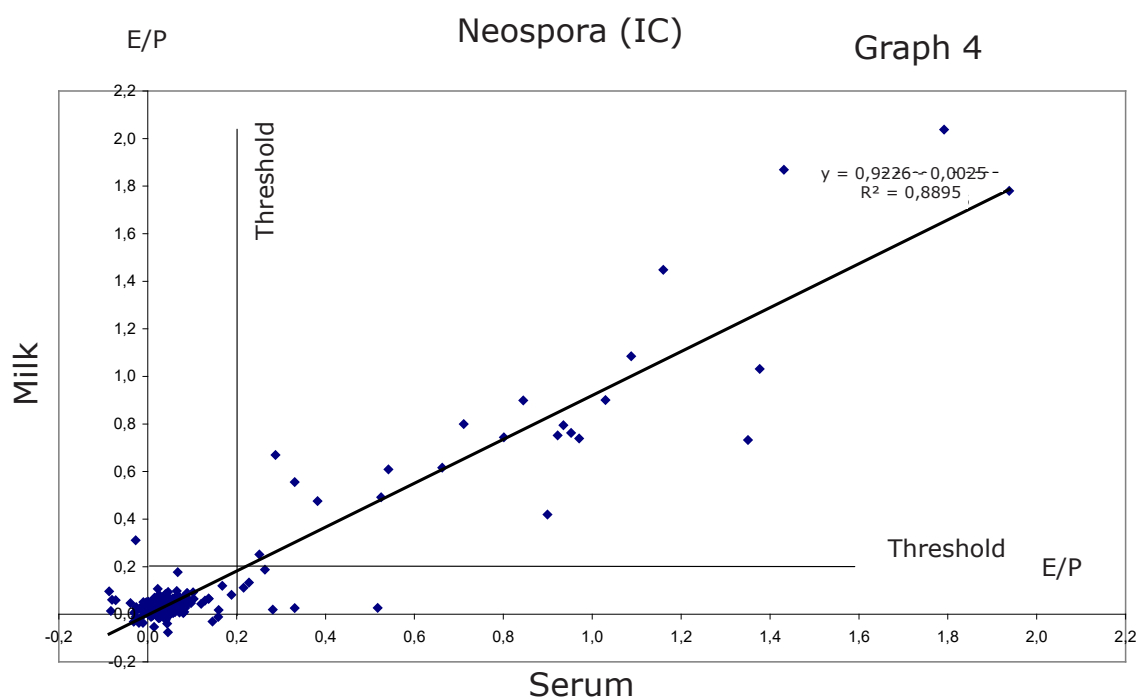


269 serum and 269 milk samples taken from the same animals were tested using the BIO K 192 kit. These samples came from twenty-seven Belgian farms. Their optical density readings were divided by the optimal density reading for the kit's reference serum (S/P). Frequency histograms were then plotted for the blood sera (Graph 2) and milk samples (Graph 3).





The frequency histograms generated for the 269 milk and 269 blood serum samples reveal that the thresholds must be set preferentially at 20% of the kit's reference serum's signal. Graph 4 shows the correlation between the serological findings yielded by the blood sera and those yielded by the milk samples.



Milks

Sera		-	+	
	-	239	1	240
	+	6	23	29
		245	24	269

Concordance between the two tests: Kappa = 0.85

The concordance between the two tests is considered excellent.

Landis et Koch, The measurement of observer agreement for categorical data
Biometrics 1977, 33, 159-74



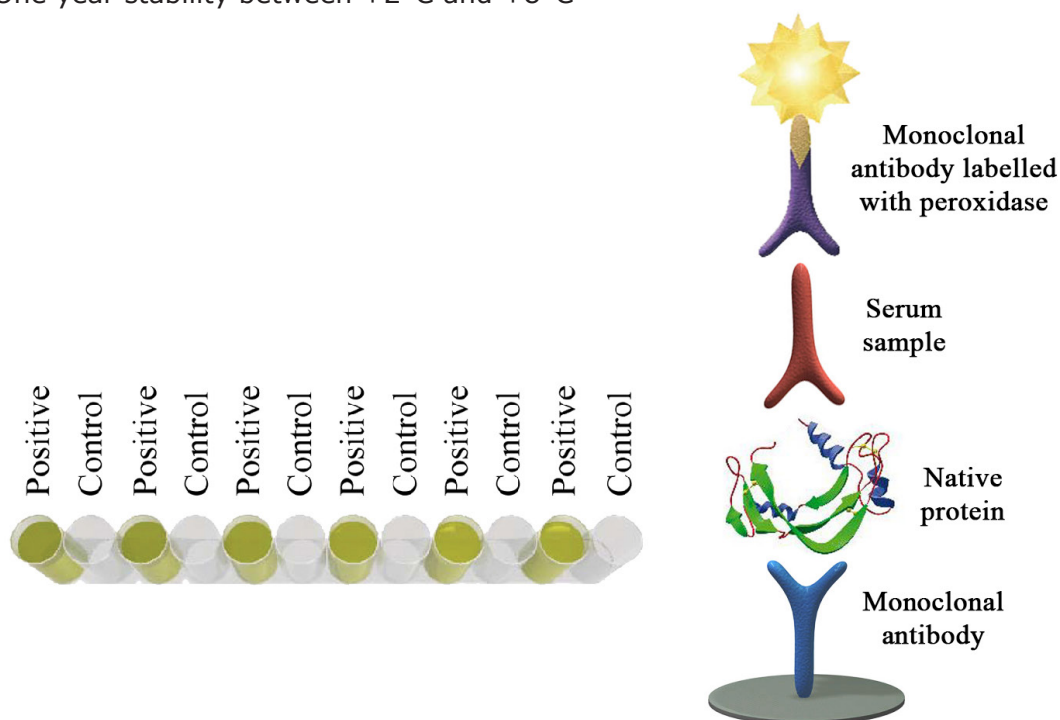


Composition of the kit

BIO-X *NEOSPORA CANINUM* ELISA KIT : BIO K 192

	BIO K 192/2	BIO K 192/5
Microplates	2 (96 tests)	5 (240 tests)
Washing solution	1 X 100 ml (20 X)	1 X 250 ml (20 X)
Dilution buffer	1 X 50 ml (5 X)	1 X 100 ml (5 X)
Conjugate	1 X 0.5 ml (50 X)	1 X 1.4 ml (50 X)
Positive serum	1 X 0.5 ml (1 X)	1 X 0.5 ml (1 X)
Single component TMB	1 X 25 ml (1 X)	1 X 55 ml (1 X)
Stopping solution	1 X 15 ml (1 X)	1 X 30 ml (1 X)

One year stability between +2°C and +8°C



Bibliography

Anti-*Neospora caninum* antibodies in milk in relation to production losses in dairy cattle.
González-Warleta M, Castro-Hermida JA, Carro-Corral C, Mezo M.
Prev Vet Med. 2011 Aug 1;101(1-2):58-64. Epub 2011 Jun 6.

