



## Neospora caninum PCR

*Neospora caninum*, an apicomplexan protozoan parasite, affects mostly cattle where it may result in abortions. These may take the form of sporadic or low-level endemic abortion, or epidemic “abortion storms” which can affect a large proportion of at-risk (i.e. in-calf) cows and cause large economic losses.

The PCR is most suitable for abortion investigations to detect *N. caninum* DNA in the brain or stomach contents of an aborted fetus. This test is *not* used to detect organisms in the blood of animals in the early stages of infection.

A “detected” result indicates animals are infected with *N. caninum* but will not necessarily distinguish acute from chronic subclinical encysted infection. A “not detected” result indicates that *N. caninum* DNA was undetectable in the sample and in most cases this means that clinical signs are unrelated to infection with neospora. However, the organism may be present at levels below the detection limit of the assay or not present in the sample submitted and examined.

Use the PCR result in combination with IFAT and the clinical signs for investigating the neospora status of individual animals. The IFAT is the most appropriate assay for individual abortion diagnoses in the dam, as titres are elevated around the time of abortion and then quickly decline within a matter of weeks. In the dam, an IFAT titre of  $\geq 1/600$  is indicative of an association between the abortion and *N. caninum* infection. For investigation of reproductive disease in groups use the *N. caninum* ELISA.



Species:  
Bovine, ovine



Specimen:  
Fresh (or formalin fixed) brain and/or stomach contents from aborted fetus



Container:  
Sterile Container



Collection Protocol:  
Post-mortem collection of foetal samples. Collect brain even if it appears autolysed.