

## Diagnosis of *Neospora caninum* Infection by PCR using Formalin-fixed, paraffin-embedded tissues

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*N. caninum* infections have been associated with neonatal paresis as well as abortion around the world. Bovine abortion induced by *N. caninum* was first reported in 1997 in Korea. Diagnosis of *N. caninum* infection is usually based on histopathology and immunohistochemical detection of organism. However, often the tissues having lesion suggestive of *N. caninum* infection were negative on immunohistochemistry.

Here we describe establishment of PCR-based diagnostic strategy for *N. caninum* infection using DNA extracted from paraffin blocks containing the lesion. PCR was able to amplify *N. caninum*-specific bands from the paraffin blocks containing at least moderate degree of inflammation. Compared to paraffin-blocks, DNA extracted from wet tissues were all negative on PCR. This PCR-based method can be practically applicable for rapid diagnosis of *N. caninum* infection with high specificity and sensitivity.