

CANINE PARVOVIRUS DNA DETECTION IN CELL CULTURES AND FAECAL SAMPLES BY POLYMERASE CHAIN REACTION

Arūnas Stankevičius, Algirdas Šalomska,
Lietuvos veterinarijos institutas,
Instituto g. 2, LT-4230 Kaišiadorys, tel. 5 29 82

Summary. The polymerase chain reaction (PCR) was used to detect canine parvovirus DNA in cell cultures and faecal samples. 9 isolates from primary or secondary cell cultures and 10 faecal samples from diarrhetic dogs were examined by means of this method. Two pairs of primers were chosen, which allowed amplification of 594 bp and 1191 bp fragments within the VP2 capsid protein gene. The results indicate that canine parvovirus DNA can be detected even in a sample of a very low (3–4 log₂) virus HA titer. Rapid extraction of parvovirus DNA with the use of chelating resin (iminodiacetic acid) to get the same results as by standart phenol-chloroform extraction method.

Keywords: canine parvoviruses, polymerase chain reaction, virus isolates, faecal samples.