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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 27533-2024

Replacing GB/T 27533-2011

Diagnostic techniques for canine parvovirus disease

犬细小病毒病诊断技术

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 27533-2011 "Diagnostic technology for canine parvovirus disease". Compared with GB/T 27533-2011, except for the structural adjustment, In addition to the integration and editorial changes, the main technical changes are as follows.

- Added abbreviations (see Chapter 4);

- Added biosafety measures (see Chapter 5);

- Added epidemiology (see 6.1);

- Added routine blood test (see 6.3);

- Added colloidal gold immunochromatography (see Chapter 8);

- Added fluorescence PCR (see Chapter 12);

- Added comprehensive judgment (see Chapter 13).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the Ministry of Agriculture and Rural Affairs of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Animal Health Standardization (SAC/TC181).

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2011 as GB/T 27533-2011;

- This is the first revision.

Introduction

An infectious disease of canines and mustelids. The main symptoms of the disease are severe vomiting, hemorrhagic enteritis, significant leukopenia, and myocarditis.

There are two types of symptoms, enteritis type and myocarditis type. More than 50% of clinical cases are mixed enteritis and myocarditis type. Animal diseases.

Canine parvovirus belongs to the Parvoviridae family and the genus Parvovirus. It is a non-enveloped single-stranded DNA Virus. The nucleotide homology of CPV with parvoviruses such as feline panleukopenia virus (FPLV) and mink enteritis virus (MEV) exceeds 98%. Gene sequence analysis of different isolates found that CPV is prone to produce new mutants through antigenic drift, and there are 4 subtypes.

CPV-2, CPV-2a, CPV-2b and CPV-2c. CPV can agglutinate the red blood cells of rhesus monkeys, hamsters, pigs, horses and cats, but cannot agglutinate the red blood cells of humans, cattle, Sheep, rabbit, mouse and chicken red blood cells, so hemagglutination specificity is also one of the reference indicators for identifying the virus. The disease is easily confused with canine distemper and canine coronavirus.

It is difficult to confuse it with other diseases such as viral infection and requires a combination of clinical diagnosis and laboratory testing for confirmation.

1 Scope

This document describes the clinical diagnosis of canine parvovirus disease, sample collection, processing and storage, colloidal gold immunochromatography, virus isolation Identification, hemagglutination and hemagglutination inhibition test, PCR, fluorescence PCR and other methods.

This document applies to the diagnosis and surveillance of canine parvovirus disease.

2 Normative references

GB/T 6682

GB 19489

NY/T 541

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Abbreviations

The following abbreviations apply to this document. BHQ. black hole quencher CPE. cytopathic effect Ct. cycle threshold FAM.6-carboxyfluorescein

5 Biosafety measures

The sample collection, processing and storage operations shall be carried out in accordance with the provisions of NY/T 541.