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PEOPLE'S REPUBLIC OF CHINA**

GB/T 21674-2025

Replacing GB/T 21674-2008

Diagnostic techniques for porcine circovirus disease

猪圆环病毒病诊断技术

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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 21674-2008 "Porcine circovirus polymerase chain reaction test method" and GB/T 34745-2017 "Porcine circovirus GB/T 35901-2018 "Porcine circovirus type 2 SYBRGreenI real-time fluorescence quantitative PCR detection method" Light PCR Detection Method" and GB/T 35910-2018 "Porcine circovirus type 2 blocking

ELISA antibody detection method".

GB/T 21674-2008 is the main standard, integrating the contents of GB/T 34745-2017, GB/T 35901-2018 and GB/T 35910-2018.

Compared with GB/T 21674-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Changed the scope (see Chapter 1, Chapter 1 of the 2008 edition);
- Deleted laboratory biosafety requirements (see Chapter 2 of the 2008 edition);
- Added abbreviations (see Chapter 4);
- Increased clinical diagnosis (see Chapter 5);
- Changed sample collection, storage and transportation (see Chapter 6, 4.1 of the 2008 edition);
- Added virus isolation and identification (see Chapter 7);
- Modified polymerase chain reaction (PCR) (see Chapter 8, Chapter 3, Chapter 4, and Chapter 5 of the 2008 edition);
- Added real-time polymerase chain reaction (Real-time PCR) (see Chapter 9);
- Added indirect enzyme-linked immunosorbent assay (indirect ELISA) (see Chapter 10);
- Added blocking enzyme-linked immunosorbent assay (blocking ELISA) (see Chapter 11);
- Added immunohistochemistry test (IHC) (see Chapter 12);
- Added comprehensive judgment (see Chapter 13);
- Added the preparation of solutions related to sample preservation, virus isolation and identification (see Appendix A);
- Changed the preparation of PCR and Real-time PCR related solutions (see Appendix B, Appendix A of the 2008 edition);
- Added the preparation of ELISA-related reagents (see Appendix D);
- Added the preparation of IHC related solutions (see Appendix F).

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 is 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 the documents replaced by this document are as follows.

- GB/T 21674-2008, first issued in 2008;
- GB/T 34745-2017, first issued in 2017;
- GB/T 35901-2018, first issued in 2018;
- GB/T 35910-2018, first issued in 2018.

Introduction

A general term for a series of diseases caused by porcine circovirus type 2 (PCV2sys-Respiratory and enteric diseases have been shown to be part of PCV2-SD. PCV2 belongs to the Circoviridae family, Circovirous single-stranded circular DNA virus, which can cause immunosuppression after infecting pigs and easily cause mixed infections with other viruses or bacteria PCV2 and Porcine Reproductive and Respiratory Syndrome Virus (Porcine Co-infection with pathogens such as Glaseria and Mycoplasma hyopneumoniae often induces or promotes the occurrence of PCVD. PCVD is widespread around the world.

The disease is prevalent and can occur in pigs of all ages and breeds, with piglets and sows being more seriously affected.

The characteristics of the disease are widespread and easy to cause immunosuppression, which has caused heavy economic losses to the pig industry.

In the "List of Animal Diseases", this disease is a Category III animal epidemic disease.

The diagnostic technology content of this document includes clinical diagnosis, etiological diagnosis and serological diagnosis, combined with the new research results of relevant technologies in China. Revision.

Diagnostic technology of porcine circovirus disease

1 Scope

This document describes the clinical diagnosis of porcine circovirus disease (PCVD), virus isolation and identification, polymerase chain reaction (PCR), real-time Real-time PCR, indirect enzyme-linked immunosorbent assay (ELISA), blocking enzyme-linked immunosorbent assay (blocking ELISA), immunohistochemistry (IHC) and other methods.

This document applies to the diagnosis, quarantine, detection, surveillance and epidemiological investigation of PCVD.

2 Normative references

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. AEC.3-Amino-9-Ethylcarbazole BSA. Bovine Serum Albumin DAB.Diaminobenzidine OD. Optical Density