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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 27621-2024

Replacing GB/T 27621-2011

Diagnostic techniques for equine rhinopneumonitis

马鼻肺炎诊断技术

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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 27621-2011 "PCR detection method for equine rhinopneumovirus".

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Deleted the PCR test for EHV (see Chapter 7 of the 2011 edition);

- Added clinical diagnosis (see Chapter 5);

- Added sample collection, processing and storage (see Chapter 6);

- Added real-time fluorescence PCR (see Chapter 7);

- Changed virus isolation and identification (see Chapter 8, Chapter 6 of the 2011 edition);

- Added micro-serum neutralization test (see Chapter 9);

- Added EHV-1/4 universal antibody indirect ELISA (see Chapter 10);

- Added indirect ELISA for EHV-1/4 typing and identification (see Chapter 11).

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).

This document was drafted by: Shanghai Customs Animal and Plant and Food Inspection and Quarantine Technical Center, Qingdao Customs Technical Center, Xinjiang Agricultural University, Jiangsu Vocational College of Agriculture and Animal Husbandry Science and Technology, Guangzhou Customs Technology Center.

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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 27621-2011;

- This is the first revision.

Introduction

According to the definition of Equinerhi- It is endemic in the horse population. EHV-1 infection is listed in the WOAH list.

Herpes simplex virus type 1 and herpes simplex virus type 4 belong to the genus Varicella virus of the alpha subfamily of the Herpesviridae family.

Shaped or irregularly spherical, with a diameter of 120nm~200nm, it contains an icosahedral nucleocapsid.

The main symptoms of EHV-1 infection in horses are upper respiratory tract infection, abortion, neonatal death and neurological symptoms; EHV-4 only infects horses and causes Respiratory symptoms include fever, lethargy, anorexia, mandibular lymphadenopathy, and copious serous and mucopurulent nasal discharge.

The diagnostic techniques for equine rhinopneumothorax include clinical diagnosis, etiological detection and serological detection methods.

The revision of this document refers to the relevant contents of the Handbook of Diagnostic Tests and Vaccines for Terrestrial Animals (WOAH) and combines relevant technical New research results.

1 Scope

This document describes the clinical diagnosis, sample collection and processing, and real-time fluorescence PCR, viral Methods of separation and identification, microserum neutralization test, and indirect ELISA.

This document is applicable to the diagnosis and monitoring of EHV-1 infection and EHV-4 infection.

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. BHK-21.Baby Hamster Kidney-21 CPE. Cytopathic Effect Ct value. Cycle Threshold E-derm. Equine-dermisCel equine dermal fibroblast cell line EHV-1.Equine Herpesvirus-1 EHV-4.Equine Herpesvirus-4 MDBK.Bovine Kidney Cells OD value. Optical Density RK-13.Rabbit Kidney Cell Line (RabbitKidneyCel) TE.TE buffer (Tris-EDTA)