

ICS 11.220
CCS B 41



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 22332-2025

Replacing GB/T 22332-2008

Diagnostic techniques for duck virus enteritis

鸭病毒性肠炎诊断技术

Issued on: August 29, 2025

Implemented on: March 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents". Drafting.

This document replaces GB/T 22332-2008 "Diagnostic Techniques for Duck Viral Enteritis". Compared with GB/T 22332-2008, except for structural adjustments...

Aside from integration and editorial changes, the main technical changes are as follows.

- Abbreviations have been added (see Chapter 4);
- The requirements for clinical diagnosis have been changed (see Chapter 5, Chapter 2 of

the 2008 edition);

- The requirements for sample collection, preservation, and processing have been revised (see Chapter 6, Chapter 3 of the 2008 edition);
- The requirements for virus isolation and identification have been changed (see Chapter 7, Chapter 3 of the 2008 edition);
- A neutralization test has been added (see Chapter 8);
- Direct immunofluorescence assay has been added (see Chapter 9);
- An indirect ELISA method has been added (see Chapter 10);
- The requirements for PCR methods have been changed (see Chapter 11, Chapter 4 of the 2008 edition);
- Added a PCR method for differentiating vaccine strains from wild-type strains (see Chapter 12);
- Added a quantitative real-time PCR method (including methods for differentiating between vaccine strains and wild-type strains) (see Chapter 13);
- Added a comprehensive assessment of diagnostic results (see Chapter 14).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no 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: China Animal Health and Epidemiology Center, Zhejiang Academy of Agricultural Sciences, and Poultry Research Institute of Shandong Academy of Agricultural Sciences.

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The release history of this document and the document it replaces is as follows.

- First published in 2008 as GB/T 22332-2008;
- This is the first revision.

Introduction

Duck viral enteritis (DVE), also known as duck plague, is caused by herpesvirus A.

Marek's virus (MDV) is an acute, febrile, and contagious disease of ducks, geese, and swans (order Anseriformes) caused by duck herpesvirus type 1 (DAVV1).

The pathogen is duck herpesvirus type 1, also known as duck enteritis virus (DEV) or duck plague virus (DPV).

And DVE virus (DVEV). This disease is characterized by high fever, vascular damage leading to tissue and body cavity bleeding, rash-like lesions of the digestive tract mucosa, and lymphatic organs.

It is characterized by lesions and degenerative changes in parenchymal organs. This disease spreads rapidly, with high morbidity and mortality rates, seriously threatening the duck farming industry.

The virus poses a potential threat to wild waterfowl. No other birds, mammals, or humans have been reported to be infected. The pathogen has only one serotype.

Different strains of the virus vary in pathogenicity. Currently, prevention and control mainly rely on attenuated live vaccines.

The diagnosis of this disease comprehensively considers clinical diagnosis, etiological diagnosis, serological diagnosis, and molecular biological diagnosis. (As a herpesviridae family) DEVs are prone to genome recombination and mutation; therefore, multiple target genes should be considered when differentiating between vaccine strains and wild-type strains for diagnosis. Line distinction.

1 Scope

This document describes the clinical diagnosis and virus isolation and identification, neutralization test, direct immunofluorescence, and indirect enzyme-linked immunosorbent assay (ELISA) for duck viral enteritis.

Laboratory diagnostic tests including ELISA, polymerase chain reaction (PCR), differential diagnosis between vaccine strains and wild-type strains using PCR, and quantitative real-time PCR are also included. Breakdown method.

This document applies to the diagnosis, detection, monitoring, and epidemiological investigation of duck viral enteritis.

2 Normative references

NY/T 541

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4 Abbreviations

The following abbreviations apply to this document. CPE. Cytopathic Effect DEV. Duck Enteritis Virus DVE. Duck Viral Enteritis

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