

ICS 11.220
CCS B 41



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

GB/T 46337-2025

**Diagnostics for animal infection with severe acute respiratory
syndrome coronavirus 2**

动物新型冠状病毒感染诊断技术

Issued on: October 5, 2025

Implemented on: May 1, 2026

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

Table of Contents

1.Scope	1
2 Normative References	1
3.Terms and Definitions	1
4.Abbreviations	1
5.Biosafety Requirements	1
6.Clinical diagnosis	2
7.Sample collection, processing, and preservation	2
8.Fluorescent RT-PCR	4
9.Virus isolation and identification	5

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. 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 the China Animal Health and Epidemiology Center and the Institute of Viral Disease Prevention and Control, Chinese Center for Disease Control and Prevention. The main drafters of this document are. Wang Kaicheng, Tan Wenjie, Pan Junhui, Huang Baoying, Wei Shimeng, Qi Qian, Wang Suchun, Li Yang, Sui Jinyu, and Zhou Kaiyu. Li Chao, Liu Hualei, Kang Jingli.

This genus *Virus* is a single-stranded, positive-sense RNA virus with an envelope. Its genome size is approximately 30 kb, and the virus particles are spherical or ellipsoidal in shape, with a diameter of The range is 60nm to 140nm. As of 2024, at least 36 countries had reported cases of SARS-CoV-2 infection in animals, including dogs, cats, minks, tigers, lions, white-tailed deer, and large wild boars. Orangutans, snow leopards, and hippos, among others. In addition to the animals naturally infected, studies have found that animals such as rabbits and foxes can also be artificially infected with SARS-CoV-2. SARS-CoV-2 may mutate after infecting animals, leading to an expansion of the virus's host spectrum and increasing the difficulty of SARS-CoV-2 prevention and control. This document, formulated based on the current status and harm of SARS-CoV-2 infection in animals, can

be used for SARS-CoV-2 infection in various animals. The diagnosis. Diagnostic techniques for animal novel coronavirus infection

1 Scope

GB/T 46337-2025 is the Chinese national standard covering detecting SARS-CoV-2 in animals - the sampling from the species that are susceptible, the RT-PCR and its targets, the antibody tests and their cross-reaction with the other animal coronaviruses, and the interpretation and reporting. Mink, deer and hamsters have all sustained transmission, which is why animal surveillance matters. First edition, under the Ministry of Agriculture and Rural Affairs. In force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026.

This document specifies the clinical diagnosis, sample collection, processing and preservation, fluorescent RT-PCR, and virus identification procedures for animal infection with the novel coronavirus. Technical requirements for methods such as identification. This document applies to the diagnosis, quarantine, detection, monitoring, and epidemiological investigation of novel coronavirus infection in animals.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 6682 Specifications and test methods for water used in analytical laboratories

GB 19489 General Requirements for Laboratory Biosafety

NY/T 541 Technical Specifications for Veterinary Diagnostic Sample Collection, Preservation and Transportation

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
Ct value. CycleThreshold FBS. Fetal Bovine Serum RNA. Ribonucleic acid
(RibonucleicAcid)

5. Biosafety Requirements When conducting detection and diagnosis of novel coronavirus infection in animals, sample collection and processing, nucleic acid extraction, and virus isolation and identification, etc., should be carried out in accordance with...