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

GB/T 14926.20-2026

Replacing GB/T 14926.20-2001

**Laboratory animals - Method for the examination of ectromelia
virus**

实验动物 鼠痘病毒检测方法

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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 is Part 20 of GB/T 14926. GB/T 14926 has already published the following parts.

- Detection method for Salmonella in laboratory animals (GB/T 14926.1);
- Detection method for Yersinia in laboratory animals (GB/T 14926.3);
- Detection Method for Pathogenic Fungi in Laboratory Animal Skin (GB/T 14926.4);
- Detection method for Pasteurella multocida in laboratory animals (GB/T 14926.5);
- Detection method for Bordetella bronchiseptica in laboratory animals (GB/T 14926.6);
- Methods for the detection of mycoplasma in laboratory animals (GB/T 14926.8);
- Detection method for Corynebacterium glutamicum in laboratory animals (GB/T 14926.9);
- Detection method for Tyzer pathogens in laboratory animals (GB/T 14926.10);
- Detection method for Escherichia coli O115a,c.K(B) in laboratory animals (GB/T 14926.11);
- Detection method for Pasteurella pneumophila in laboratory animals (GB/T 14926.12);
- Detection method for Klebsiella pneumoniae in laboratory animals (GB/T 14926.13);
- Detection method for Staphylococcus aureus in laboratory animals (GB/T 14926.14);

1 Scope

GB/T 14926.20-2026 is the Chinese national standard covering detecting ectromelia virus, mousepox. Mousepox can destroy a mouse colony outright and has closed research facilities; it is one of the infections a barrier unit exists to keep out. The method fixes the sampling, the detection technique and its controls, and the interpretation. It replaces GB/T

14926.20-2001, one of the parts of GB/T 14926 revised together in this batch. It was issued on 28 January 2026 and has been in force since 1 May 2026, replacing GB/T 14926.20-2001. The document is under the responsibility of the Ministry of Science and Technology. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document describes the detection method for mousepox virus (Ectromeliavirus, ECT). This document applies to the detection of mousepox virus in laboratory animals, or in samples derived from laboratory inoculum or environmental samples from laboratory animals. Toxin detection.

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 14926.50 Enzyme-linked immunosorbent assay (ELISA) for laboratory animals

GB/T 14926.51 Laboratory animal immunoenzyme test

GB/T 14926.52 Immunofluorescence assay for laboratory animals

GB/T 14926.55 Immunoenzymatic Histochemistry of Laboratory Animals

GB 19489 General Requirements for Laboratory Biosafety

GB/T 19495.2 Technical Requirements for Laboratories Testing Genetically Modified Products

3 Terms and Definitions

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

4.Principles Enzyme-linked immunosorbent assay (ELISA)/immunoenzyme assay (IEA). ECT antigen is used to detect ECT antibodies in mouse serum. Both assays... The antigen-antibody complex formed can bind to the corresponding enzyme-labeled secondary antibody. Under the catalysis of the enzyme, the substrate reacts to produce a colored substance. The intensity of the reaction is directly proportional to the amount of ECT antibody present in the serum being tested. Immunofluorescence assay (IFA). ECT antigen is used to detect ECT antibodies in mouse serum. The antigen-antibody complex formed by the two can react with... The corresponding fluorescein-labeled secondary antibody binds and, under ultraviolet or blue-violet light irradiation, emits visible fluorescence, which can be

observed under a fluorescence microscope. The results of determining the presence or absence and strength of [something]. Immunoenzyme histochemistry (IH). This method uses a known ECT-specific antibody to react with the antigen to be tested in the specimen. If the antigen to be tested is specific... The corresponding antigen-antibody complex is formed by the interaction of the antigen and the corresponding secondary antibody. This antigen-antibody complex retains its antigenic activity and can bind to the corresponding secondary antibody. The enzyme binds to its own enzyme and produces a color reaction upon encountering the enzyme substrate. The result is determined under a regular microscope based on the color reaction. Nucleic acid detection. Based on the conserved sequence gene of mousepox virus, a pair of specific primers and a specific probe sequence were designed and synthesized, and samples were extracted. The mousepox virus DNA in this study was amplified using real-time quantitative PCR (qPCR) to amplify the template DNA. The results were then analyzed based on the qPCR detection results. The result determines whether the sample contains viral nucleic acid components.