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

GB/T 18646-2025

Replacing GB/T 18646-2018

Diagnostic techniques for animal brucellosis

动物布鲁氏菌病诊断技术

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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 is required. This

document replaces GB/T 18646-2018 "Diagnostic techniques for animal brucellosis". Compared with GB/T 18646-2018, except for the structure In addition to adjustments and editorial changes, the main technical changes are as follows:

- a) The "Scope" has been changed (see Chapter 1, Chapter 1 of the.2018 edition);
- b) Changed "Clinical Diagnosis" and added content on epidemiology, clinical symptoms and pathological changes (see Chapter 5, 4.1,.2018 edition). 4.2, 4.3);
- c) Added "real-time fluorescence PCR method" and "fluorescence RAA method" (see
- d) Change "Brucella Bruce-Ladder detection method" to "Multiplex PCR method" (see 7.5, 4.13 of the.2018 version);
- e) Added the standardization content of RBT, SAT, CFT, iELISA, cELISA and FPA methods in immunological diagnostic methods (see Chapter 8);
- f) Changed the "Red tiger plate agglutination test (RBT)" (see 8.2, 4.4 of the.2018 edition), "Indirect ELISA antibody detection method (iELISA)" (see 8.5, 4.8 of the.2018 edition), "competitive ELISA antibody detection method (cELISA)" (see 8.6,.2018 4.9 of the.2011 edition);
- g) Added "Fluorescence polarization assay (FPA)" and "Immunochromatographic assay (ICA)" (see

8.7 and 8.9). 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/TC 181). This document was drafted by: China Animal Health and Epidemiology Center, China Veterinary Drug Administration, China Animal Disease Prevention and Control Center Center, Harbin Veterinary Research Institute of Chinese Academy of Agricultural Sciences, Chinese Center for Disease Control and Prevention, Xinjiang Production and Construction Corps Animal Husbandry and Veterinary Work General Office Liaoning Provincial Animal Disease Prevention and Control Center, Inner Mongolia Autonomous Region Animal Disease Prevention and Control Center, Shanghai Animal Disease Prevention and Control Center Center, Henan Provincial Animal Disease Prevention and Control Center, Chongqing Municipal Animal Disease Prevention and Control Center, Zhejiang Provincial Animal Disease Prevention and Control Center, Qingdao Animal Disease Prevention and Control Center. The main drafters of this document are. Sun Shufang, Li Junping, Shao Weixing, Sun Mingjun, Jiang Hai, Nan Wenlong, Tian Lili, Fan Xiaoxu, Yan Xin, Sun Yu, Hu Sen, Li Yan, Zhu Liangquan, Wang Jianlong, Yan Ruoqian, Zhang Cunrui, Li Yan, Gu Guibo, Zhao Hongjin, Dong Chunxia, Zhao Lingyan, Guo Yu, Sun Xiangxiang, Liu Mengda, Zhang Haobo, Sun Shixiong, and Li Jiaqi. The previous versions of this document and the

documents it replaces are as follows: --First published in.2002 as GB/T 18646-2002 and first revised in.2018; --This is the second revision.

1 Scope

GB/T 18646-2025 is the Chinese national standard on diagnostic techniques for animal brucellosis, in the field of health care technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 May 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 December 2025. Classification: ICS 11.220, CCS B41. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document describes the clinical, etiological and immunological diagnostic methods for animal brucellosis and provides a comprehensive Meet the judgment requirements. This document is applicable to the monitoring of the freedom of herds and individual animals for brucellosis, implementation of eradication programmes, confirmation of suspected or clinical cases, and diagnosis, population prevalence monitoring, etc.

Note. Appendix A lists in detail the selection of detection methods in different fields.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

NY/T 541 Technical Specification for Collection, Storage and Transportation of Veterinary Diagnostic Samples

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. cELISA. Competitive Enzyme Linked Immunosorbent Assay CFT. Complement Fixation Test Ct. Cycle Threshold DNA. Deoxyribonucleic Acid FPA. Fluorescence Polarisation Assay HRP. Horseradish Peroxidase

iELISA. Indirect Enzyme Linked Immunosorbent Assay LPS. Lipopolysaccharide OD value.
Optical Density PCR. Polymerase Chain Reaction RAA. Recombinase Aided Amplification
RBT. Rose Bengal Test SAT. Serum Agglutination Test SDS. Sodium dodecyl sulfate

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