

ICS 11.220
CCS B 41



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

GB/T 47206-2026

Diagnostic techniques for bovine theileriosis

牛泰勒虫病诊断技术

Issued on: February 27, 2026

Implemented on: September 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.Clinical Diagnosis	1
6.Sample collection, preservation, and transportation	2
7.Microscopic examination 2 8.PCR detection	3
9.Indirect ELISA	5
16 Appendix G (Normative) Reagent Preparation for Indirect ELISA Methods	17

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: Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences; Hebei Agricultural University; Gansu Provincial Animal Disease Prevention and Control Center. Qinghai Provincial Animal Disease Prevention and Control Center, Ningxia Hui Autonomous Region Animal Disease Prevention and Control Center, Qinghai University, and Aodong Biotechnology (Shenzhen) Limited Liability Company, Xinjiang Production and Construction Corps Animal Husbandry and Veterinary Work Station, Langfang Municipal Bureau of Agriculture and Rural Affairs, and Longxi County Animal Disease Prevention and Control Center. The main drafters of this document are. Luo Jianxun, Liu Junlong, Liang Bin, Zhao Shuaiyang, Guan Guiquan, Yin Hong, Li Zhixin, Li Zhi, Li Wenjing, Li Yan, and Sun Yu. Li Jing, Li Ying, Zhang Li, Zhang Xu, Zhang Li, Zhang Yifu, Zou Lianbin, Fu Xincheng, Song Junpeng, Pi Mingwei, Du Baoyan, Ding Ning, Shi Yuanguo, Zhai Jianxin Li Yan.

This is a blood protozoan disease caused by red blood cells. Affected animals mainly present with high fever, anemia, swollen superficial lymph nodes, and emaciation, with acute onset. Infection leads to animal death. The pathogens causing this disease include

various *Theileridia* species; internationally, the main pathogen is *Theileira parvifolia*. *Theileria annulata* and the *Theileria orientalis*/*Theileria thuringiensis*/*Theileria buffalo* group (va), *Theileria annulata*, and *Theileria orientalis*/*Theileria thuringiensis*/*Theileria buffalo* group (va). The term "*Thylatoria orientalis*" is used internationally, but in my country it is commonly referred to as "*Thylatoria serrelli*". For ease of use, this article... The document refers to them collectively as *Theileria sergei*. The pathogens of bovine theileriasis in my country include *Theileria ringeri*, *Theileria sergei*, and *Theileria sinensis*. There are three types, among which *Theileria annulare* and *Theileria sergei* are the main pathogens causing bovine theileriasis. In my country, it is classified as a Class III animal disease. Diagnostic techniques for bovine *Theileria*

1 Scope

GB/T 47206-2026 is the Chinese national standard covering diagnosing theileriosis in cattle - a tick-borne protozoan that invades lymphocytes and red cells, identified in smears and lymph node aspirates and confirmed molecularly. The standard fixes the sampling, the laboratory methods - serological, microscopic and molecular as applicable - the interpretation of the results and the criteria for a confirmed diagnosis. First edition, in force since 1 September 2026, one of a group of animal disease diagnostic standards published together. It was issued on 27 February 2026 and has been in force since 1 September 2026, as a first edition. The document is under the responsibility of the Ministry of Agriculture and Rural Affairs. 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 clinical diagnosis of bovine *Theileria*, sample collection, preservation and transportation, as well as microscopic examination and polymerase chain reaction. Diagnostic methods include PCR and indirect enzyme-linked immunosorbent assay (indirect ELISA). This document applies to the detection, diagnosis, and epidemiological investigation of bovine *Theileria* infection.

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.

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. COB. Cytochrome b gene OD value. Optical Density TAE. Tris-hydroxymethylaminomethane-acetic acid-ethylenediaminetetraacetic acid electrophoresis buffer (TrisAcetate-EDTA Buffer) Taq. *Thermus aquaticus*

5.1 Epidemiology

5.1.1 It occurs most frequently from April to September, and is mainly spread in the distribution areas of *Haloxylon ammodendron* and *Haemaphysalis* ticks (see Figures A.1 and A.2 in Appendix A).