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PEOPLE'S REPUBLIC OF CHINA**

GB/T 45100-2024

Diagnostic techniques for enzootic abortion of ewes

羊地方性流产诊断技术

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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. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the 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, Inner Mongolia Autonomous Region Animal Disease Prevention and Control Center, Hulunbuir Municipal Animal Disease Prevention and Control Center, Guangxi Zhuang Autonomous Region Animal Disease Prevention and Control Center, Shandong Binzhou Animal Husbandry and Veterinary Research Institute, Xinjiang Uygur Autonomous Region Animal Health Supervision Institute, Qingdao Animal Disease Prevention and Control Center. The main drafters of this document are. Sun Xiangxiang, Sun Shufang, Sun Mingjun, Fan Xiaoxu, Liu Mengda, Zhang Haobo, Yan Xin, Tian Lili, Sun Shixiong, Shao Weixing, Wang Jianlong, Temurbagen, Guo Yu, Wang Wei, Wang Guanyu, Xiong Yi, He Qisong, Wang Jinliang, Yan Hao, and Li Yan.

Ovine chlamydiosis is an infectious disease caused by *Chlamydia abortus*, characterized by fever, miscarriage, stillbirth and The main characteristic is the birth of weak lambs. my country lists it as a Category III animal disease, and the World Organization for Animal

Health (WOAH) lists it as a listed disease. People are infected through contact with abortion products, birth products or in the laboratory, and develop subclinical symptoms or acute influenza-like illness. Chlamydia abortus)" and related literature, PCR, fluorescent PCR and ELISA methods for endemic abortion in sheep were established. Diagnostic Techniques for Endemic Abortion in Sheep

1 Scope

GB/T 45100-2024 gives the Chinese diagnostic techniques for enzootic abortion of ewes, the disease caused by Chlamydia abortus and one of the most important causes of reproductive loss in sheep and goats. It is also a serious occupational zoonosis, which is why the standard opens with biosafety measures rather than with method: the aborted material and placenta are the most infectious substances a veterinary laboratory handles, and pregnant women exposed to them have died. After the biosafety clause the standard sets the clinical diagnosis, the sample collection and storage, the isolation and culture of the organism, the direct demonstration in smears and tissue sections by staining and immunological methods, the serological diagnosis with the tests and their interpretation, and the molecular detection by PCR with the primers, the conditions and the controls, followed by the criteria for a confirmed diagnosis and the handling and disposal of the material. It takes effect on 1 July 2025.

This document describes the clinical diagnosis of endemic abortion in sheep, sample collection and processing, polymerase chain reaction (PCR), fluorescent PCR and enzyme ELISA is a diagnostic method. This document applies to the diagnosis and monitoring of endemic abortion in sheep and goats.

2 Normative references

The contents of the following documents constitute 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.

GB 19489 General requirements for laboratory biosafety

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. OD. Optical density

5 Biosafety measures

When conducting laboratory diagnosis of endemic abortion in sheep, such as sample processing, isolation and culture, nucleic acid extraction, etc., GB 19489 should be followed.

6.1 Epidemiology

6.1.1 Mainly infects sheep and goats. Sheep of different ages can be infected. Many domestic animals and humans can be infected.

6.1.2 The source of infection is sick sheep and healthy sheep carrying the bacteria. It is mainly transmitted through the digestive tract, respiratory tract and reproductive tract, and can also be transmitted through tears, milk, urine. It is transmitted through vaginal discharge, feces, nasal secretions, aborted placenta, fetus, amniotic fluid, etc.