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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 18653-2025

Replacing GB/T 18653-2002

Methods for the isolation and identification of Campylobacter fetus

胎儿弯曲杆菌的分离鉴定方法

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Table of Contents

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 replaces GB/T 18653-2002 "Isolation and Identification Methods of Campylobacter fetus". Compared with GB/T 18653-2002, except for...

Aside from structural adjustments and editorial changes, the main technical changes are as

follows.

- The scope has been changed (see Chapter 1, Chapter 1 of the 2002 edition);

- Abbreviations have been added (see Chapter 4);

- The instruments, reagents, and materials have been changed (see Chapters 5 and 6, 2.1 and 2.2 of the 2002 edition);

- Biosafety measures have been added (see Chapter 7);

- The testing procedures have been changed (see Chapter 8, 2002 edition, pp. 2.4, 2.5);

- A PCR identification method has been added (see Chapter 12);

- A real-time fluorescence PCR identification method has been added (see Chapter 13);

- Mass spectrometry identification methods have been added (see Chapter 14);

- The culture media and reagents and their preparation methods have been changed (see Appendix A, Appendix A of the 2002 edition).

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: Nanjing Agricultural University, Shanghai Customs Animal and Plant Quarantine Technology Center, and China Animal Health and Epidemiology Center.

Pathology Center, China Pharmaceutical University, Qingdao Marine Science and Technology Museum.

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The release history of this document and the document it replaces is as follows.

- First published in 2002 as GB/T 18653-2002;

- This is the first revision.

Introduction

Spores and capsules constitute the microaerophilic bacterium, exhibiting weak or no growth under strictly anaerobic conditions. Campylobacter fetus is divided into three subspecies,

namely...

Infection with Campylobacter fetus subspecies often causes sporadic abortions, while infection in cattle with Campylobacter fetus venerealis subspecies can lead to infertility, premature embryonic death, and...

Miscarriage results in significant economic losses. Human infection with Campylobacter fetus subsp. fetus is rare, generally occurring in pregnant women or immunocompromised individuals.

Depending on the site of infection, it can lead to a variety of complications.

1 Scope

This document applies to samples such as smegma and semen from male animals, vaginal mucus from female animals, and liver, lung, and stomach contents of aborted placentas and fetuses.

Isolation and identification of Campylobacter juvenilee.

2 Normative references

GB/T 6682

GB 19489

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.

5 Instruments and Equipment

5.1 Real-time PCR instrument. 5.2 PCR instrument.

5.3 DNA gel electrophoresis equipment.

5.4 High-speed refrigerated centrifuge (temperature controllable up to 4°C, centrifugation speed up to 12000g or more). 5.5 Autoclave.

5.6 Balance (sensitivity 0.01g, sensitivity 0.0001g).

5.7 Refrigerator (2°C~8°C, -20°C or below). 5.8 Vortex mixer.