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

GB/T 21101-2025

Replacing GB/T 21101-2007

Determination of porcine-derived material in feeds

饲料中猪源性成分的测定

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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.

This document replaces GB/T 21101-2007 "Qualitative detection method of porcine-derived ingredients in animal feed - PCR method" and Compared with GB/T 21101-2007, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope of application and detection limit have been changed (see Chapter 1, Chapter 1 of the 2007 edition);
- b) The term and definition of "polymerase chain reaction" have been deleted (see 3.1 of the 2007 edition);
- c) Added abbreviations (see Chapter 4);
- d) Added real-time fluorescent polymerase chain reaction method (see Chapter 5);
- e) The sample has been changed (see 6.4, Chapter 7 of the 2007 edition);
- f) The result determination and presentation have been changed (see 6.6, Chapter 9 of the 2007 edition);
- g) The laboratory pollution prevention and control measures have been modified (see Chapter 7, Chapter 10 of the 2007 edition);
- h) Waste disposal has been modified (see Chapter 8, Chapter 11 of the 2007 edition).

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 is proposed and coordinated by the National Feed Industry Standardization Technical Committee (SAC/TC76).

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2007 as GB/T 21101-2007;
- This is the first revision.

1 Scope

This document describes the real-time fluorescent polymerase chain reaction (RT-PCR) and polymerase chain reaction (PCR) methods for the determination of porcine-derived ingredients in feed.

(PCR) qualitative detection method.

The real-time fluorescence PCR method in this document is applicable to compound feed, concentrated feed, concentrate supplement, compound premix feed, feed raw materials and mixed Qualitative detection of porcine-derived ingredients in compound feed additives. PCR method is suitable for the qualitative detection of porcine-derived ingredients in animal-derived feed raw materials. Detection.

The detection limit for this document is 0.1%.

2 Normative references

GB/T 6682

GB/T 19495.3-2004

GB/T 20195

GB/T 27403-2008

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. bp. base pair Ct. cycle threshold

5.1 Principle

Primers and probes were designed based on the specific sequence of porcine beta-actin gene, and real-time fluorescence PCR was used for amplification.

The fluorescent signal and Ct value generated in the reaction can realize the qualitative detection of porcine-derived components.