

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

SN/T 2102.2-2008

**Polymerase chain reaction (PCR) for the detection of
food-borne pathogens. Part 2: Performance testing for thermal
cyclers**

**食源性病原体PCR检测技术规范 第2部分：PCR仪性能试验要求
(English Translation)**

Issued on: July 17, 2008

Implemented on: February 1, 2009

Issued by: General Administration of Customs

Table of Contents

- Foreword
- Introduction
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 PCR instrument installation

Foreword

SN/T 2102. "Foodborne pathogens PCR detection technology specifications" is divided into four parts.

--- Part 1. General requirements and definitions;

Part --- Article 2. PCR instrument performance test requirements;

--- Part 3. Qualitative detection methods for sample preparation requirements;

--- Part 4. Qualitative PCR amplification detection requirements.

This section SN/T 2102 Part 2.

This part identical with ISO/T S20836.2005 "Microbiology of food and animal feed to detect foodborne pathogens PCR PCR Instrument performance test requirements, "and made the following editorial changes.

--- On the "Preface" and "Introduction" has been modified;

--- On the "Normative references" description according to GB/T 1.1 requirements were modified;

--- The standard international standards with the corresponding national standards or industry standard alternative, such as. GB/T 27025 instead of ISO 17025;

--- The first A. Chapter 3 reagent concentration of expression to Chinese way of expression;

--- The "warning" to "security requirements, and placed into a standard end of the paragraph;

--- Deleted after the reference standard.

This section of the Appendices A and B are informative appendices.

This section proposed and managed by the National Certification and Accreditation

Administration Committee.

This part of the Chinese Academy of Inspection and Quarantine, Shanxi People's Republic of China Exit Inspection and Quarantine, People's Republic of China Shanghai Entry-Exit Inspection and Quarantine of Jilin People's Republic of China, People's Republic of China Guangdong Entry Inspection and Quarantine Bureau, People's Republic of China Shandong CIQ is responsible for drafting.

Introduction

Polymerase chain reaction (PCR) is a rapid, sensitive and specific advantages of the use of PCR technology for the detection of foodborne microbes party Method development in recent years very rapidly.

Currently, PCR instrument in the technical aspects have been perfect, but due to the impact of Perot Peltier effect and the production process, heating, cooling components with There is a certain life, the normal function of these components depends on their quality and proper use and maintenance. For this reason, be PCR instrument routine maintenance is still very necessary.

ISO/T S20836.2005, by the European Committee for Standardization (CEN) Technical Committee on Food Analysis level (CEN/T C275) Microbial Subcommittee (SC9) in accordance with ISO and CEN technical cooperation agreement with the United Food Products Technical Committee (ISO/T C34) Making.

This part identical with ISO/T S20836.2005, as "PCR detection of foodborne pathogens technical specifications" Part 2. It provides PCR instrument (including cooling/heating element) installation, use and maintenance of general principles. Information Appendix A and Appendix B provides PCR instrument Biochemical and physical performance test method.

SN/T 2102.2-2008/ISO/TS20836:2005 PCR detection of foodborne pathogens Technical Specifications Part 2. PCR instrument performance test requirements

1 Scope

This section SN/T 2102 established the PCR instrument installation, use and maintenance of the basic requirements, the provisions of the PCR Testing the Performance of Health and physical methods. Cooling/heating element PCR instrument has a specified life of its normal functioning depends not only on design Quality also depends on proper use and maintenance.

This section applies to the biochemical and physical performance test PCR instrument.

2 Normative references

The following documents contain provisions which, through reference SN/T 2102 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 27025 testing and calibration laboratories General requirements SN/T 2102.1
foodborne pathogens PCR Detection Technology Specification - Part 1. General
requirements and definitions

3 Terms and Definitions

SN/T 2102.1 and established the following terms and definitions apply to SN/T 2102 to the present section.

The reaction tube, the reaction solution was evaporated means preventing PCR instrument.

Temperature control device (such as a heating module) uniformity of temperature.

(Such as temperature-sensitive PCR reactions) Test procedures PCR instrument
performance by biochemical methods.

PCR instrument performance test procedures determined by physical methods.

The PCR result deviates from a predetermined temperature or chemical control program
which led to the PCR amplification of the effect of weakening the system.

PCR instrument porous plate in the actual temperature and the temperature of the sample
is displayed or regions prone position deviation.

4 PCR instrument installation

According to the manufacturer specification requirements should be installed at a suitable
temperature (5 °C ~ 40 °C) and humidity (RH ≤80%) Environment SN/T
2102.2-2008/ISO/TS20836:2005