

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

SN/T 3306.9-2017

**Loop-mediated isothermal amplification detection method at
frontier port. Part 9: Mycobacterium tuberculosis**

国境口岸环介导恒温扩增(LAMP)检测方法 第9部分：结核分枝杆菌

(English Translation)

Issued on: May 12, 2017

Implemented on: December 1, 2017

**Issued by: The General Administration of Quality Supervision, Inspection
and Quarantine**

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Foreword

SN/T 3306 "Land of Atmospheric Port mediated Constant Temperature Amplification (LAMP) Detection Method" is divided into 14 parts.

- Part 1. *Yersinia pestis*;
- Part 2. Toxin producing *Vibrio cholerae*;
- Part 3. *Shigella*;
- Part 4. *Legionella pneumophila*;
- Part 5. *Brucella*;
- Part 6. Yellow fever virus;
- Part 7. Monkeypox virus;
- Part 8. Chikungunya virus;
- Part 9. *Mycobacterium tuberculosis*;
- Part 10. *Bacillus anthracis*;
- Part 11. *Vibrio parahaemolyticus*;
- Part 12. *Campylobacter jejuni*;
- Part 13. *Plasmodium*;
- Part 14. *E. coli* 0157.H7.

This part is the ninth part of SN/T 3306.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

1 Scope

This part of SN/T 3306 specifies the ring-mediated thermoregulatory nucleus of *M. tuberculosis* in the sputum samples of suspected infectious diseases at border ports.

Acid amplification (LAMP) method.

This section applies to the screening and detection of *Mycobacterium tuberculosis* at the border port.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6682 analytical laboratory water regulations and test methods GB 19489 General requirements for laboratory biosafety WS/T 230-2002 Application of Polymerase Chain Reaction (PCR) Technology in Clinical Diagnosis WS288 diagnostic criteria for tuberculosis (Weike Jiao Fa (2006) No. 15) "List of Pathogenic Microorganisms Infected by Humans"

3 Abbreviations

The following abbreviations apply to this document.

Betaine. Betaine.

Bst enzyme. BstDNA polymerase (large fragment) [BstDNA polymerase (large fragment)]

DNA. deoxyribonucleic acid dNTP. deoxyribonucleoside triphosphate EDTA.

ethylenediaminetetraacetic acid LAMP. loop-mediated isothermal amplification TritonX-100.

Polyethylene glycol octyl phenyl ether

4 Biosecurity measures and pollution prevention measures

The experimental operation and treatment shall be carried out according to the provisions of GB 19489 and the List of Pathogenic Microorganisms Infected by Humans.

Conducted by personnel.

Pollution prevention measures should be in accordance with WS/T 230.

5 Technical Overview

According to the specific virulence gene sequence of *Mycobacterium tuberculosis*, a pair of specific internal and external primers and circular primers were designed, and a total of 6

primers were used.