

ICS 11.220
CCS B 41

SN

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

SN/T 1247.2-2003

**Protocol of immunoperoxidase monolayer assay for porcine
reproductive and respiratory syndrome**

猪繁殖和呼吸综合征免疫过氧化物酶单层试验

(English Translation)

Issued on: May 28, 2003

Implemented on: December 1, 2003

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People Republic of China**

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Abbreviations
 - 3.1 AEC
 - 3.2 HPRO
 - 3.3 IPMA
 - 3.4 PRRS
- 4 Inspection and quarantine
 - 4.1 Principle
 - 4.2 Sampling
 - 4.3 Equipment and materials

Foreword

This standard is based on the World Organisation for Animal Health (OIE) "Diagnostic Tests and Vaccine Standards for Mammalian, Avian and Bee A and B Diseases" Book (Fourth Edition, 2000) Part III X. 12 content is written.

Appendix A, Appendix B and Appendix C of this standard are normative appendices.

This standard is proposed and managed by the National Certification and Accreditation Administration.

This standard was drafted. Liaoning Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China.

1 Scope

This standard specifies the method for the detection of antibodies to porcine reproductive and respiratory syndrome using the immunoperoxidase monolayer test.

This standard applies to epidemiological investigation, diagnosis, quarantine and epidemic monitoring of porcine reproductive and respiratory syndrome.

2 Normative references

The terms in the following documents become the terms of this standard by reference to this standard. All dated references, followed by all Modifications (not including errata content) or revisions do not apply to this standard, however, parties to agreements based on this standard are encouraged to study it is possible to use the latest version of these files? For undated references, the latest edition applies to this standard.

GB/T 6682-1992 Analytical laboratory water specifications and test methods

3 Abbreviations

The following abbreviations apply to this standard.

3.1 AEC

Aminoethyl carbazole.

3.2 HPRO

Horseradish peroxidase.

3.3 IPMA

Immunoperoxidase monolayer assay.

3.4 PRRS

Porcine reproductive and respiratory syndrome.

4.1 Principle

The immunoperoxidase monolayer test is to adsorb an antigen on a solid phase carrier, and add a sample to be tested to form an antigen-antibody complex.

The enzyme-labeled anti-antibody is colored with the participation of the substrate, and the result is determined by visual inspection with a naked eye or a spectrophotometer after the substrate is developed.

The principle of this standard is to culture cells inoculated with porcine reproductive and respiratory syndrome virus on 96-well cell culture plates.

Into a certain proportion of diluted serum to be tested, after the end of the reaction, add anti-porcine immunoglobulin antibody labeled with HPRO, after the reaction is completed, the substrate was added and the reaction results were examined.

4.2 Sampling

Collect the blood of the pig to be tested, separate the serum, the serum must be fresh, transparent, non-hemolyzed, non-polluting, and sealed in a sterile vial at 4 ° C or -20 ° C ~ -30 ° C refrigerator storage or cold storage conditions immediately sent for inspection. The serum to be tested was numbered uniformly before the test.

4.3.1 Instrumentation

- Micropipette;
- Heat box;
- Ordinary incubator and carbon dioxide incubator;
- Ordinary refrigerator and low temperature refrigerator;
- Inverted microscope;