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SN

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

SN/T 1777.1-2006

**Determination of macrolide residues in animal original food.
Part 1: Radio-receptor assay method**

动物源性食品中大环内酯残留测定方法 第1部分：放射受体分析法
(English Translation)

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Foreword

SN/T 1777 "Determination of macrolide antibiotic residues in animal-derived foods" is divided into two parts.

--- Part 1. Radioreceptor analysis;

--- Part 2. High performance liquid chromatography tandem mass spectrometry.

This part is the first part of SN/T 1777.

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

This section drafted by. Zhejiang Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China.

1 Scope

This section of SN/T 1777 specifies radioreceptor analysis of macrolide antibiotic residues in meat tissues, viscera and aquatic products.

(CharmII) method.

This section applies to the determination of macrolide antibiotic residues in meat tissues, viscera and aquatic products.

2 Normative references

The terms in the following documents become the provisions of this section by reference to this part of SN/T 1777. All dated references the document, all subsequent amendments (not including the contents of the errata) or revisions do not apply to this section, however, encouragement is based on this section.

The parties to the agreement study whether the latest versions of these documents can be used. For undated references, the latest edition applies to this section.

GB/T 6682 Analytical laboratory water specifications and test methods

3.1 Preparation of samples

A representative sample is taken from all the samples, and a sample of not less than 1000 g is shrunk by a quarter method, and the fat is removed, thoroughly mixed, and mixed.

Divide into two parts, put in a clean container, seal and mark.

Fat is an interfering substance and should be removed as much as possible. the preparation process should ensure that the meat is not contaminated by microorganisms before extraction.

3.2 Storage of samples

Store samples at $-20^{\circ}\text{C} \sim -18^{\circ}\text{C}$, fresh or frozen tissue samples (except viscera) can be stored at $2^{\circ}\text{C} \sim 6^{\circ}\text{C}$ 72h.

4.1 Principle

The Radiation Receptor Analysis (CharmII) method is based on the binding of drug functional groups to microbial receptor sites.

A common functional group of a class of antibiotics is associated. This specificity of the application of the receptor allows for multi-residue analysis of a certain class of antibiotics. This party in the method, the macrolide residues remaining in the sample are extracted and diluted to compete with the $[^{14}\text{C}]$ -labeled erythromycin for binding to specific receptor sites. point. After a certain temperature reaction, centrifuge to separate unbound macrolides, and finally add scintillation to determine $[^{14}\text{C}]$ decay.

The beta particle radioactivity is counted as cpm (countperminute). The measured cpm value is determined by the amount of macrolide antibiotic residues in the sample.

Inverse ratio.

4.2 Reagents and materials

Unless otherwise stated, the reagents used are of excellent grade and the water is the first grade water specified in GB/T 6682.

4.2.1

Macrolide test kit.

a) Tissue negative control concentrated dry powder. dry powder is stored at $2^{\circ}\text{C} \sim 6^{\circ}\text{C}$, when used, concentrated dry powder is labeled as negative on the label the prepared solution can be stored in a refrigerator or ice bath at $2^{\circ}\text{C} \sim 6^{\circ}\text{C}$ for 48 h. If not used for a long time or estimated within 2d After use, all or part of the solution can be stored in a refrigerator below -15°C , and thawed when used. The thawed solution is in