

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

SN/T 4537.2-2016

Replacing SN/T 2057-2008

Commercial kit method--Chloramphenicol--Test method ?

商品化试剂盒检测方法 氯霉素 方法二

(English Translation)

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Foreword

SN/T 4537 "Commercial kit detection method chloramphenicol" is divided into three parts.

---SN/T 4537.1. Method 1;

---SN/T 4537.2. Method 2;

---SN/T 4537.3. Method three.

This part is the second part of SN/T 4537.

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

This part replaces SN/T 2058-2008 "Method for determination of chloramphenicol residues in import and export royal jelly" by enzyme-linked immunosorbent assay, Compared with SN/T 2058-2008, the main technical changes are as follows.

--- Part of the name from the "Import and export royal jelly in the determination of chloramphenicol residues in the enzyme-linked immunoassay" was changed to "Commodity kit check Method for measuring chloramphenicol method II.

--- Add the evaluation results of the kit to the appendix.

1 Scope

This part of SN/T 4537 specifies an enzyme-linked immunosorbent assay for the determination of chloramphenicol residues in royal jelly and lyophilized powder.

This section applies to the screening and determination of chloramphenicol residues in royal jelly and lyophilized powder.

2 Normative references

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

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

GB/T 6682 Analytical laboratory water specifications and test methods SN/T 2775
Commercialized Food Testing Kit Evaluation Method

3 Method summary

This standard uses trichloroacetic acid to precipitate the protein of royal jelly and extract chloramphenicol from royal jelly, and then purify it with a solid phase extraction column. Microplate Medium-coated sheep anti-rabbit IgG antibody, specific antibody (rabbit anti-chloramphenicol antibody), enzyme labeled chloramphenicol, standard or sample After the extract, the specific antibody binds to the coated sheep anti-rabbit IgG antibody, and the free chloramphenicol and the enzyme labeled chloramphenicol compete with each other.

Specific antibody binding. Unbound chloramphenicol and enzyme-labeled chloramphenicol were removed by washing, then the substrate was added for color development, and the absorbance was measured by a microplate reader.

The luminosity is based on the absorbance and the chloramphenicol content in the sample.

4 Reagents and materials

All reagents were of analytical grade except water, and the water was the first grade water specified in GB/T 6682.

4.1

Chloramphenicol test kit.

This kit was evaluated by the Expert Committee of the National Certification and Quarantine Committee for the Evaluation of Commercialized Foods in accordance with SN/T 2775. Specific evaluation See Appendix A. The kit consists of the following.

- a) 96-well plates pre-coated with antibodies. 12 x 8 wells.
- b) Chloramphenicol standard solutions. 0.025 ng/mL, 0.05 ng/mL, 0.1 ng/mL, 0.2 ng/mL, 0.5 ng/mL, 2 ng/mL and 100 ng/mL.
- c) Recombinant/zero standard buffer.
- d) Chloramphenicolase label lyophilized powder. chloramphenicol can be formulated with recombinant/zero standard buffer according to the instructions in the chloramphenicol kit Marker solution.
- e) Anti-chloramphenicol antibody lyophilized powder. According to the instructions in the chloramphenicol kit, it can be formulated with anti-chloramphenicol antibiotics using recombinant/zero standard buffer.

Body solution.

f) Substrate TMB solution.