CCS X04

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 22982-2008

Determination of metronidazole, ronidazole, dimetridazole residues in milk and milk powder - LC-MS-MS method

牛奶和奶粉中甲硝唑、洛硝哒唑、二甲硝唑及其代谢物残留量的测定 液相色谱-串联质谱法

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Foreword

The Standard Appendix A, Appendix B is an informative annex. This standard is proposed and managed by the State Administration of Quality Supervision Inspection and Quarantine of People's Republic of China. This standard was drafted. People's Republic of China Exit Inspection and Quarantine Qinhuangdao, Hebei People's Republic of China Entry-Exit Inspection and Quarantine Bureau. The main drafters of this standard. Wang Fengchi, Yilian Feng, Guo Chunhai, paragraph Wenzhong, Chenrui Chun, Lv Hongying, Doucai Yun, Mayu Song, Pang Guofang. Milk and milk powder metronidazole, Ronidazole, Determination of two metronidazole and its metabolites residues Liquid chromatography - tandem mass spectrometry

1 Scope

GB/T 22982-2008 is the Chinese national standard on determination of metronidazole, ronidazole, dimetridazole residues in milk and milk powder - lc-ms-ms method. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 December 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2009. Classification: ICS (ICS) , CCS X04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the milk and milk powder metronidazole, Ronidazole, two of metronidazole and its metabolites residues by high performance liquid chromatography - tandem Mass spectrometry. This standard applies to milk and milk powder metronidazole, Ronidazole, two of metronidazole and its metabolites residues measured and confirmed. The standard method detection limit. milk metronidazole, Ronidazole, two metronidazole 0.5μg/kg, hydroxy metronidazole 1μg/kg, 1-methyl-2-hydroxymethyl-5-nitroimidazole was 2.5μg/kg; milk metronidazole, Ronidazole, two metronidazole 2.5μg/kg, hydroxy

metronidazole Oxazole was 5μg/kg, 1- methyl-2-hydroxymethyl-5-nitroimidazole was 12.5μg/kg.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 6379.1 measurement methods and results of Accuracy (trueness and precision) - Part 1. General principles and definitions (GB/T 6379.1- 2004, ISO 5725-1.1994, IDT)

GB/T 6379.2 measurement methods and results of Accuracy (trueness and precision) - Part 2. Determine the standard measurement method to repeat Of the basic methods of reproduction (GB/T 6379.2-2004, ISO 5725-2.1994, IDT)

GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008,

ISO 3696, 1987, MOD) Principle

3 With acetonitrile - ethyl acetate extract the analyte in the sample, the cationic solid phase extraction (SPE), high performance liquid chromatography - tandem mass spectrometry, within Standard method.

4 Reagents and materials

Unless otherwise stated, all reagents HPLC grade water to a water GB/T 6682 regulations.

4.1 acetonitrile.

4.2 ethyl acetate.

4.5 acetic acid.

4.7 anhydrous sodium sulfate, AR. After burning 650 °C 4h, placed in the dryer set aside.

4.8 ammonia - acetonitrile (1 + 19). amount of 5mL ammonia with acetonitrile and dilute to 100mL.

4.9 Standard. metronidazole (metronidazole, CAS. 13182-89-3), Ronidazole (ronidazole, CAS. 7681-76-7), dimethyl Metronidazole (dimetridazole, CAS. 551-92-8), hydroxy metronidazole (metronidazole-OH, CAS. 7681-76-7), 1- methyl-2-hydroxymethyl Imidazole-5-nitro (hydroxydimetridazole, CAS. 936-05-0), deuterated Ronidazole (RNZ-D3), deuterated hydroxy metronidazole (MZNOH-D2) and deuterated-hydroxymethyl-1-methyl-5-nitroimidazole (HMMNI-D3). 98% or greater purity.