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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 14927.1-2008

Replacing GB/T 14927.1-2001

Laboratory animals - Methods for biochemical markers of inbred mice and rats

实验动物 近交系小鼠、大鼠生化标记检测法

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Table of Contents

Foreword

GB/T 14927 is divided into two parts.

--- Part 1 as "experimental animals inbred mice, rats and biochemical assay mark";

--- Part 2 as "experimental animals inbred mice, rats immunolabeling assay." This section GB/T Part of 114.927. Since the implementation of this section instead of GB/T 14927.1-2001 "animal inbred mice, rats and biochemical markers detected method". This part of the main technical differences compared with the GB/T 14927.1-2001 as follows:

a) schematic diagram based on the results of electrophoresis mouse, rat biochemical marker detection method inbred lines on the increase electrophoresis pattern;

b) Adjustment of inbred mice, rats and biochemical markers of biochemical detection method of loci, mice increased peptidase -3 (pep3) bits Point, rat Added serum alkaline phosphatase (Alp) and hemoglobin (Hbb) two biochemical sites;

c) on the part of solution formulation adjustments. This section of the Appendix A, Appendix B, Appendix C and Appendix D is an informative annex. This part of the National Standardization Technical Committee of experimental animals and focal points. This section drafted by: National Standardization Technical Committee of experimental animals. The main drafters of this section. Xing Ruichang, Liu bicyclic, Yuebing Fei, Bao Shimin, Zhang Lianfeng. This part of the standard replaces the previous editions are.

--- GB/T 14927.1-1994, GB/T 14927.1-2001. Animal inbred mice, Biochemical marker assay in rats

1 Scope

GB/T 14927.1-2008 is the Chinese national standard on laboratory animals - methods for biochemical markers of inbred mice and rats, in the field of agriculture. 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 10 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 March 2009. Classification: ICS 65.020.30, CCS B44. 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 section GB/T 14927 specifies the inbred mice, rats detect biochemical markers of cellulose acetate membrane (plate, dura mater) electric Swimming methods and criteria. This section applies to inbred strains of mice and rats no.

2 Terms and definitions

The following terms and definitions apply

GB/T 14927 in this section.

2.1 It showed that the genetic characteristics and the use of biochemical methods to identify the mark. In a small, rat for a number of isoenzymes and heterogeneous proteins.

2.2 Various inbred summarizing multiple genetic markers and biochemical phenotype data, reflecting the genetic features of the various strains to some extent.

2.3 Having the same status relative positions of genes on homologous chromosomes. Inbred animal mating most of the sites through successive kin They have homozygosity. Within a line between any progeny produced by mating individuals also homozygous.

2.4 A inbred strains all individuals genetically homologous. Therefore, in the same line of skin between individuals and any tumor transplantation Not be regarded as alien and exclusion. Such as inbred animal genes to detect genotypes of different individuals within a line exactly.

2.5 Whole inbred animals, each line is genetically unique performance in a wide range of features, such as genetic and biochemical Overview Appearance and the like. Most inbred strains can be distinguished from each other through their respective biochemical genetic profile.

3 PRINCIPLE OF THE METHOD

In mice and rats, there are some isozymes and isoforms with proteins. It can be carried in accordance with their specific electric charge different field Electrophoretic method to distinguish them, and that is a protein genotype phenotype infer its type according to electrophoresis, to establish genetic variety inbred Profile, quality monitoring them regularly.

4 Equipment and Materials

4.1 Atmospheric electrophoresis (0 ~ 600V).

4.2 cellulose acetate membrane (plate, dura mater) electrophoresis tank.

4.3 Electrophoresis spotting devices.

4.4 cellulose acetate membrane (7cm x 9cm).