ICS 65.020.30
CCS B44

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 14926.47-2008

Replacing GB/T 14926.47-2001

Laboratory animal - Method for examination of shigella spp

实验动物 志贺菌检测方法

Issued on: December 3, 2008 **Implemented on: March 1, 2009**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China;
Standardization Administration of China

Table of Contents

Foreword

GB/T 14926 "experimental animals" a total of 54 parts, for different microbial and virus detection technology. This part of the implementation of the date of replacement GB/T 14926.47-2001 "experimental animal Shigella detection method". The main technical differences between this part and GB/T 14926.47-2001 are as follows:

a) the GB/T 14926.47-2001 "experimental animal Shigella detection method" part of the content has been revised and increased;

b) "5.2GN enrichment solution" was added to the original standard "5 medium and reagent", and the original standard "5.3S.S agar" was modified to "5.4XLD agar";

c) in the original standard "6 test procedures" increased the "GN enrichment solution (36 ± 1) °C culture 6h ~ 8h" this procedure;

d) "S.S agar" is modified to "XLD agar" in the original standard "6 test procedure";

e) the original standard "

7.2 isolation culture will be inoculated with MacConkey agar and S.S agar plate (36 ± 1) °C culture 18 ~ 24h. (36 ± 1) °C for 6h ~ 8h, and then transferred to McKenzie Agar And XLD agar plates, incubated at (36 ± 1) °C for 18 h ~ 24h ";

f) Original standard "

7.3.1 Colony characteristics Shigella form a colorless, transparent, rounded, flat or slightly convex on the MacConkey and S.S agar plates From the smooth, moist, edge neat, about 2mm in diameter colony. Shigella Shigella colony is generally larger, translucent, sometimes Resulting in flattened, irregular edges of the rough colonies. "Modified as"

7.3.1 Colony characteristics Shigella in MacConkey agar plate The formation of colorless,

convex, diameter 2mm ~ 3mm colony in the XLD agar plate to form a red, smooth, diameter 1mm ~ 2mm colonies. Shigella dysentery type 1 colonies formed on the above two media were compared to other Shigella colonies To be small ";

g) the original standard "

1 Scope

GB/T 14926.47-2008 is the Chinese national standard on laboratory animal - method for examination of shigella spp, 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 3 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.

7 operating procedures

7.1 Sampling Take the stool or anal swab specimens, see GB/T 14926.42 for sampling methods.

7.2 culture and culture (36 ± 1) °C was incubated for 6h ~ 8h, and the mixture was inoculated with MacConkey agar and XLD agar plate. 1) °C for 18h ~ 24h.

2 Normative reference documents

The terms of the following documents are the terms of this part by reference to this part of ISO /

IEC 1540. All references to the date , All subsequent amendments (excluding corrigenda) or revisions do not apply to this part, however, encouragement under this section The parties to the agreement study whether the latest version of these documents can be used. Any reference to a document that is not dated, the latest version of which applies to this section.

GB/T 14926.42 Bacteriological examination of experimental animals

GB/T 14926.43 Laboratory animals Bacteriological detection Staining methods, media and reagents

3 Principle

Shigella is a gram-negative gram-negative bacteria and has specific growth and biochemical characteristics on medium such as trisaccharide iron or disaccharide iron. Identification of Shigella by selective culture, biochemistry and serum test.

4 Major equipment and materials

Ordinary incubator.

5 Medium and reagents

5.1 Cary-Blair delivery medium. composition and preparation methods see GB/T 14926.43.

5.2 GN enrichment liquid. composition and preparation methods see GB/T 14926.43.

5.3 MacConkey agar. composition and preparation methods see GB/T 14926.43.

5.4 XLD agar. composition and preparation methods see GB/T 14926.43.

5.5 grams of disaccharide iron agar. composition and preparation methods see GB/T 14926.43.

5.6 trisaccharide agar. composition and preparation methods see GB/T 14926.43.

5.7 Citrus Citrate Medium. Ingredients and methods of preparation see GB/T 14926.43.

5.8 amino acid decarboxylase test medium. composition and preparation methods see GB/T 14926.43.

5.9 urea agar. composition and preparation methods see GB/T 14926.43.

5.10 semi-solid agar. composition and preparation methods see GB/T 14926.43.

5.11 sugar fermentation medium. composition and preparation methods see GB/T 14926.43.

5.12 potassium cyanide growth medium. composition and preparation methods see GB/T 14926.43.

5.13 glucose ammonium medium. composition and preparation methods see GB/T 14926.43.

5.14 Shigella multivalent diagnosis of serum.

7.3 Identification

7.3.1 Colony characteristics Shigella in the McKenzie agar plate on the formation of colorless, convex, diameter 2mm ~ 3mm colony in the XLD agar plate to form red Color, smooth, 1mm ~ 2mm in diameter colonies. Shigella dysentery type 1 in the above two kinds of bacteria on the formation of colonies than other Shiga Bacterial colonies to be small.

7.3.2 Cell characteristics Gram-negative bacilli, no flagellum, no spores.

7.3.3 Culture characteristics (36 ± 1) °C for 18h ~ 24h, the slope does not produce acid, the bottom of the acid does not produce gas, Hydrogen sulfide negative.

7.3.4 Dynamic semi-solid test negative.

7.3.5 Biochemical characteristics of the bacteria See Table 1. Table

1 Shigella biochemical reactions Biochemical test project to determine the results Glucosamine - Aescinate - Ornithine decarboxylase a - KCN growth - Biochemical test project to determine the results Lysine decarboxylase - Urea - Citrus Citrate - Salicin -

Note. "+" indicates positive, "-" indicates negative. aC group 13 and D group were positive.

7.3.6 serum slide agglutination test positive.

8 results report

Those who meet the above test results to make a positive report, do not meet the negative report. Biochemical reaction does not meet the strains, even if Can be associated with a certain Shigella type of serum agglutination, still can not be identified as Shigella genus culture.