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**Determination of Lycium barbarum polysaccharides in
wolfberry and interrelated product-Ion chromatography method**

枸杞及其制品中枸杞多糖的测定 离子色谱法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the China National Institute of Standardization.

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Determination of Lycium barbarum Polysaccharides in Lycium barbarum and Its Products
Ion chromatography

1 Scope

This document describes the ion chromatography method for the determination of Lycium barbarum polysaccharides in Lycium barbarum and its product, Lycium barbarum puree.

This document is applicable to the determination of Lycium barbarum polysaccharide content in Lycium barbarum mature fruits of various varieties and Lycium barbarum products made through drying and processing.

The determination of the content of Lycium barbarum polysaccharides in other Lycium barbarum products can also refer to this method.

2 Normative references

GB/T 6682

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Polysaccharides with galactose, arabinose, glucose, rhamnose, xylose, mannose, galacturonic acid, glucuronic acid, etc. as monosaccharide units Sugar is a high molecular compound formed by dehydration condensation and glycosidic bond polymerization.

4 Principles

The sample was purified by ethanol and extracted by water reflux to obtain Lycium barbarum polysaccharide, which was then digested with trifluoroacetic acid and the product was separated by anion chromatography column.

The content of Lycium barbarum polysaccharides in the sample was calculated based on the peak area of each monosaccharide by chromatographic determination and external standard method.

5 Reagents and Materials

Unless otherwise specified, only analytical grade reagents were used.

5.1 Water. GB/T 6682, Grade 1.

5.2 Galactose (C₆H₁₂O₆, CAS No.. 59-23-4). purity $\geq$ 98%.

5.3 Arabinose (C₅H₁₀O₅, CAS No.. 5328-37-0). purity $\geq$ 98%.

5.4 Glucose (C₆H₁₂O₆, CAS No.. 50-99-7). purity $\geq$ 98%.

5.5 Rhamnose (C₆H₁₄O₆, CAS No.. 10030-85-0). purity $\geq$ 98%.

5.6 Xylose (C₅H₁₀O₅, CAS No.. 58-86-6). purity $\geq$ 98%.

5.7 Mannose (C₆H₁₂O₆, CAS No.. 3458-28-4). purity $\geq$ 98%.

5.8 Galacturonic acid (C₆H₁₀O₇, CAS No.. 14982-50-4). purity $\geq$ 98%.