Rm 102, Bldg 21, 588 TianXiong Rd
Pudong New Area, Shanghai, 201318, China
Tel: +86 21 5801 0060
www.glyconovo.com Email: info@glyconovo.com

Product Data Sheet

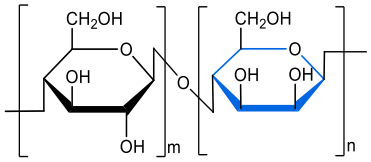
Low-Molecular-Weight Konjac Glucomannan

Catalog Number: **C-LMWKGM-100MG** **Quantity: 100 mg**
C-LMWKGM-300MG **Quantity: 300 mg**

CAS Number: 11078-31-2

Source: *Amorphophallus Konjac*

Product Description： Konjac glucomannan (KGM) is a neutral polysaccharide derived from the tuber of *Amorphophallus konjac*. It is composed of β-(1,4)-linked D-mannose and D-glucose with the ratio of 1.6 : 1, with about 1 glycosyl residue in 19 units being acetylated[1, 2]. Because of its excellent properties, such as thickening, gelatin, and biological compatibility, KGM has been widely used in food additives, pharmaceuticals, biotechnology, and the fine chemical industry[3]. And the derived low-molecular-weight konjac glucomannan has been found to have some special biological functions, such as prebiotics, drug carriers, immunoregulation[4, 5] and suppresses IgE production in mice B cells[6].



Specifications:

Total carbohydrate Content	⩾99%	Phenol-Sulfuric acid method[7]
Purity	⩾99%	High-performance gel permeation chromatography (HPGPC)
Monosaccharide Composition (Mannose: Glucose)	~60: 40	HPLC as PMP derivative[8]
Average Molecular Weight (M_w, Da)	3,000~4,000	HPGPC-MALLS
Structure Analysis	pass	^{1}H- and ^{13}C-NMR spectra
Solubility, 10 mg/mL, H_2O	Clear, Colorless to faint yellow	
Appearance	White powder	

Storage/Stability: Store at room temperature in a dry and dark place until opened. Following reconstitution, aliquot and freeze at -20°C to -80°C for long-term storage or refrigerate at 2°C - 8°C for short-term storage.

Related Products：

Product	Catalog Number
K5 Polysaccharide	C-K5PS
Chitosan	C-CHITOSAN
Heparin Sodium from Porcine Intestinal Mucosa	C-HEPPIM
Heparin Sodium from Bovine Lung	C-HEPBL
Curdlan	C-Curdlan
Hyaluronic Acid Sodium	C-HA

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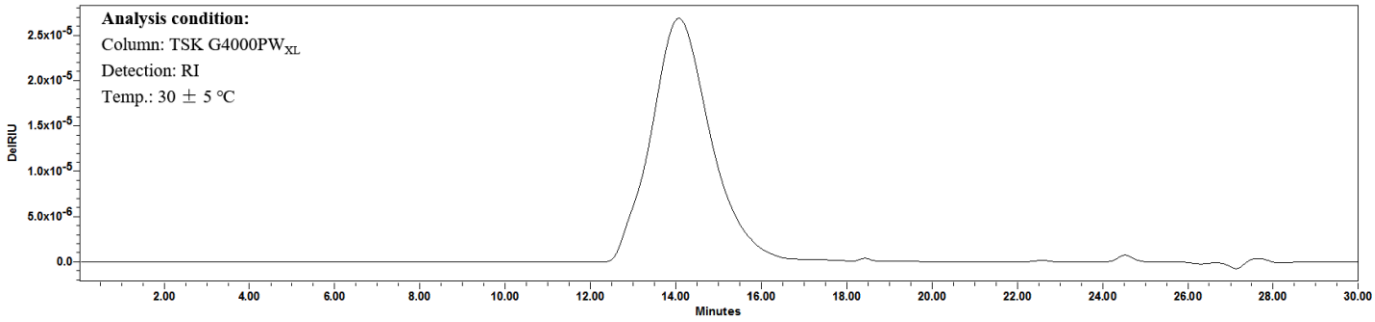
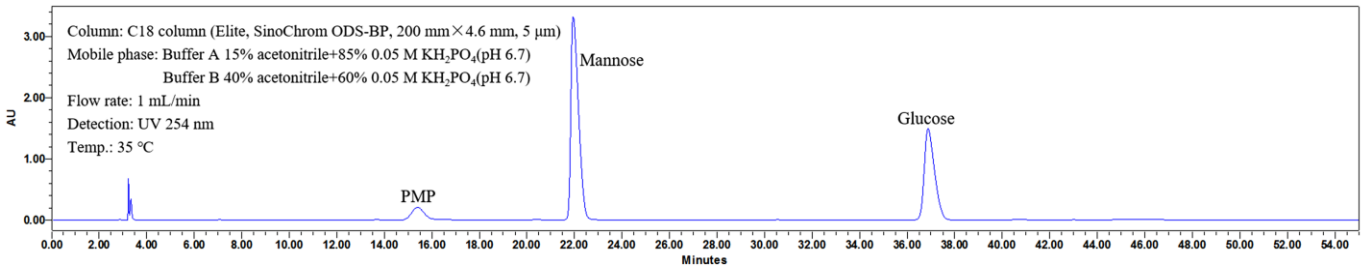
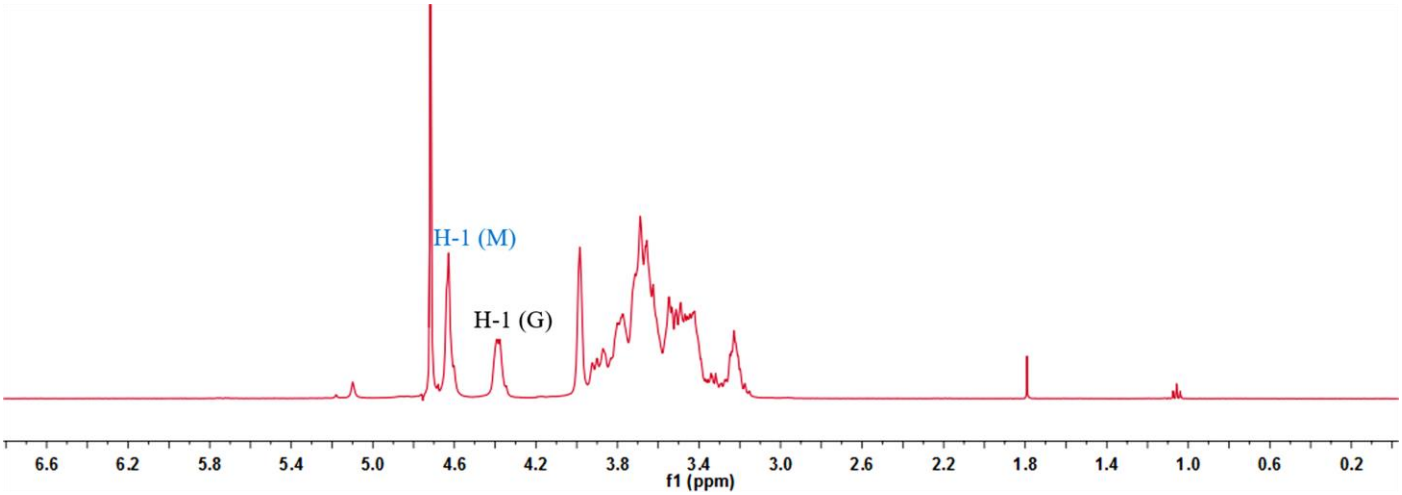
1. Purity analysis of low-molecular-weight konjac glucomannan by HPGPC



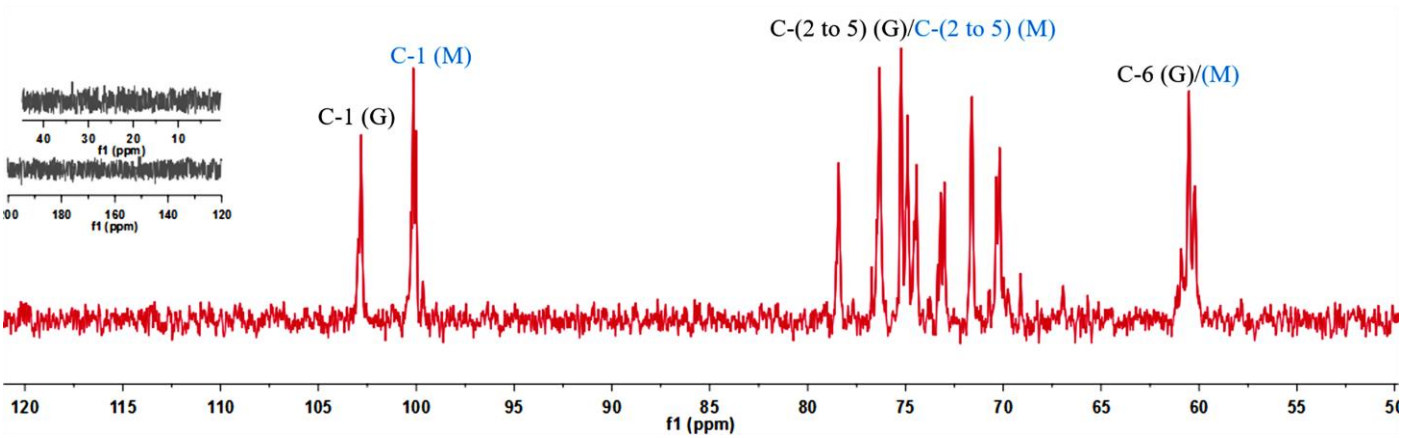
2. Monosaccharide composition analysis of low-molecular-weight konjac glucomannan



3. The ^{1}H-NMR spectrum of low-molecular-weight konjac glucomannan



4. The ^{13}C-NMR spectrum of low-molecular-weight konjac glucomannan[9]



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References:

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