

Curdlan

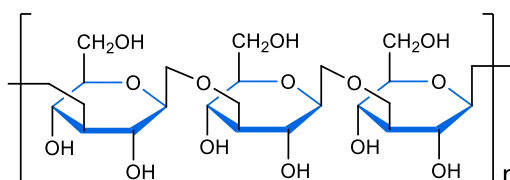
Catalog Number: C-CURDLAN-2G **Quantity:** 2 g
C-CURDLAN-5G **Quantity:** 5 g

Synonyms: Poly β -(1,3)-glucan, poly(1 \rightarrow 3)- β -D-glucan

CAS Number: 54724-00-4

Source: *Alcaligenes faecalis* var. myxogenes

Product Description: Curdlan, mostly produced by *Agrobacterium* species and *Alcaligenes faecalis*, is a high molecular weight linear (1,3)- β -D-glucan¹. It is a pathogen-associated molecular-pattern (PAMP) recognized by the C-type lectin receptor dectin-1. Activation of dectin-1 results in signaling transduction, production of cytokines, and eventually activation of immune system².



Specifications:

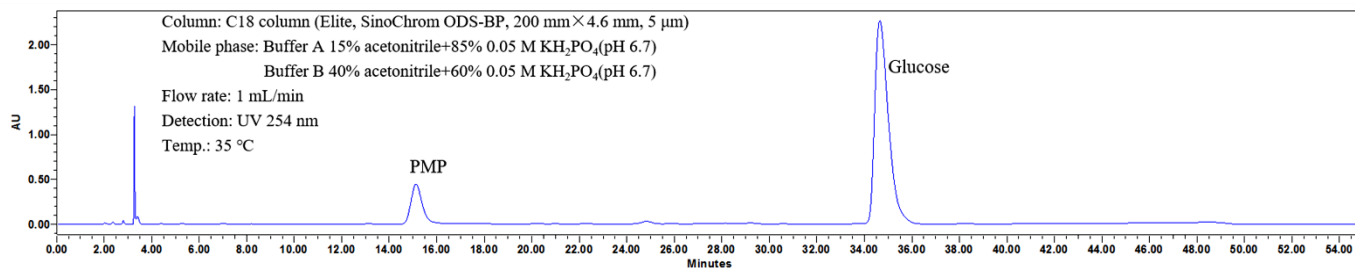
Total carbohydrate Content	>96%	Phenol-sulfuric acid method ³
Monosaccharide Composition (Glucose)	\geq 99%	HPLC as PMP derivative ⁴
Structure Analysis	Pass	¹ H- and ¹³ C-NMR spectra
Solubility, 5 mg/mL, 0.5 M NaOH	Clear, Colorless to faint yellow	
Appearance	White to off white powder	

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.

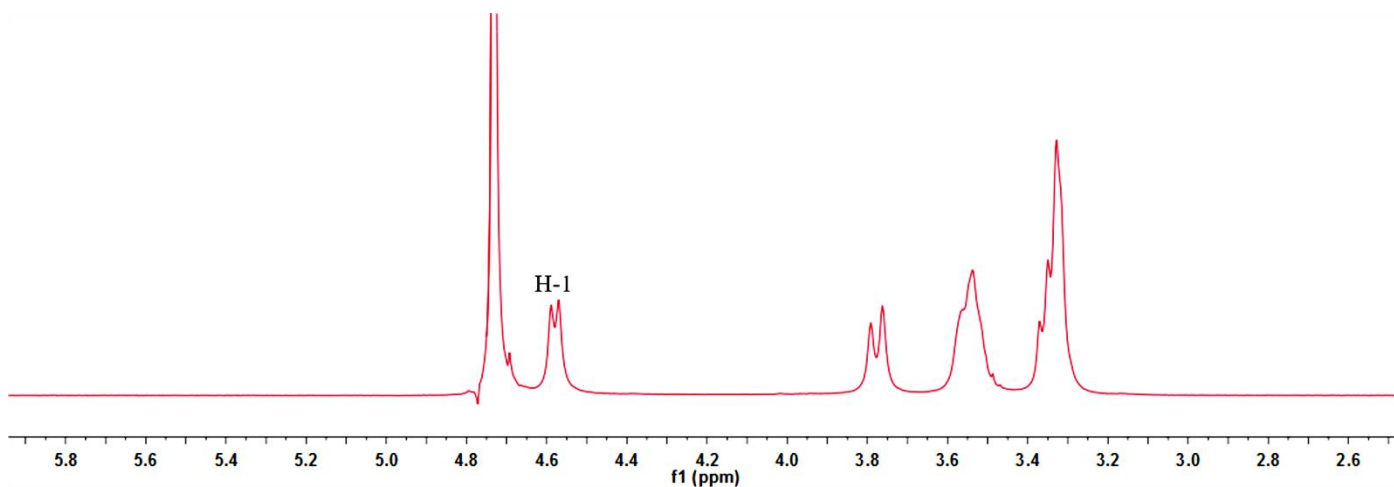
Related Products:

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
Low-Molecular-Weight Konjac Glucomannan	C-LKGM
Hyaluronic Acid Sodium	C-HA

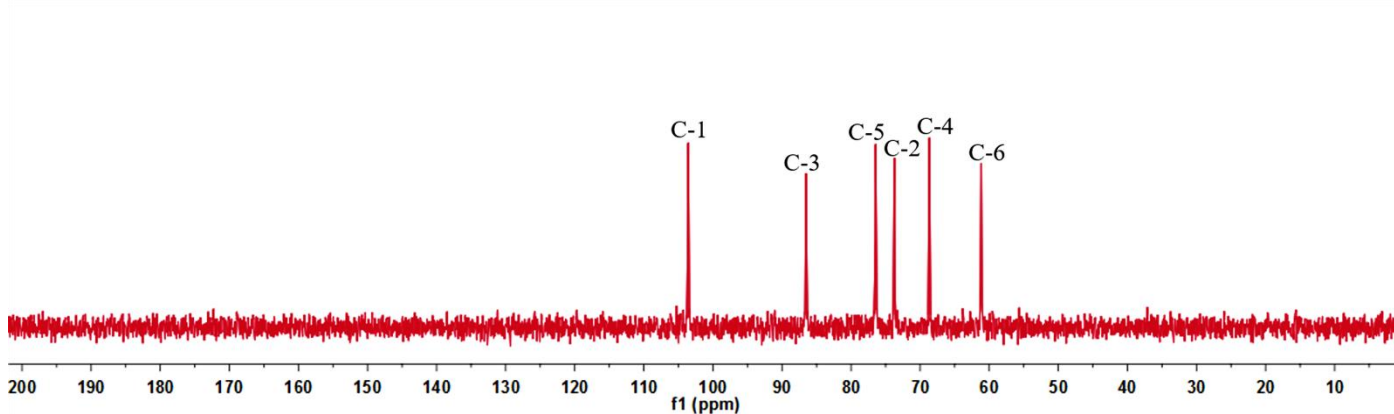
1. Monosaccharide composition analysis of curdlan by HPLC after PMP-derivation



2. The ¹H-NMR spectrum of curdlan



3. The ¹³C-NMR spectrum of curdlan



References:

1. Shih, I.L., *et al.*, *Biochemical Engineering Journal*, **43**(1): p. 33-40 (2009).
2. Kankkunen, P., *et al.*, *J Immunol*, **184**(11): p. 6335-42 (2010).
3. Nielsen, S.S., *Phenol-Sulfuric Acid Method for Total Carbohydrates*. 2010: Springer US. 39-44.
4. Fu, D. and R.A. O'Neill, *Analytical Biochemistry*, **227**(2): p. 377-384 (1995).