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

Heparin Sodium from Porcine Intestinal Mucosa

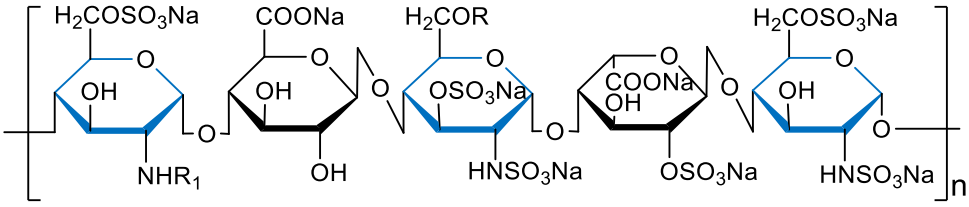
Catalog Number: **C-HEPPIM-100MG** **Quantity: 100 mg**
C-HEPPIM-250MG **Quantity: 250 mg**

Synonyms: Unfractionated heparin, Sodium heparin, Heparin sodium

CAS Number: 9041-08-1

Source: Porcine intestinal mucosa

Product Description： Heparin sodium is a kind of natural anticoagulant obtained from porcine intestinal mucosa widely used for biochemical and biological researches. Heparin is highly related to glycosaminoglycan comprised of disaccharide repeating units, which are D-glucosamine (GlcN)/L-Iduronic acid (IdoA) and GlcN/D-glucuronic acid (GlcA). These residues can be sulfated at different positions. Heparin can bind to various cytokines and growth factors to exert its biological functions[1-3].



R = H or SO_3Na R_1 = SO_3Na or $COCH_3$

Specifications:

Sulfur content	11-14%	$BaCl_2$-gelatin assay[4]
Purity	>98%	High-performance gel permeation chromatography (HPGPC)
Uronic acid	23-29%	*m*-hydroxyl diphenyl method[5]
Average Molecular Weight (M_w, Da)	~11,000-16,000	HPGPC-MALLS
Structure Analysis	Pass	^{1}H- and ^{13}C-NMR spectra
Solubility, 50 mg/mL, H_2O	Clear, Colorless to faint yellow	
Appearance	White to off white powder	

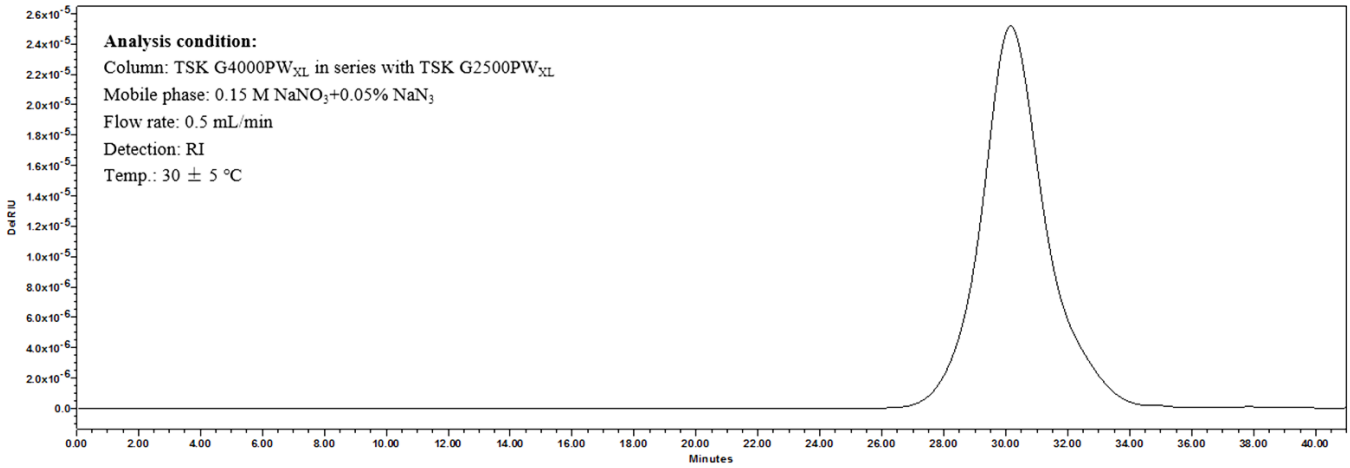
Storage/Stability: Store at room temperature in a dry and dark place until opened. Following reconstitution, aliquot and freeze at -20°C to -80°C for long-term storage or refrigerate at 2°C - 8°C for short-term storage.

Related Products：

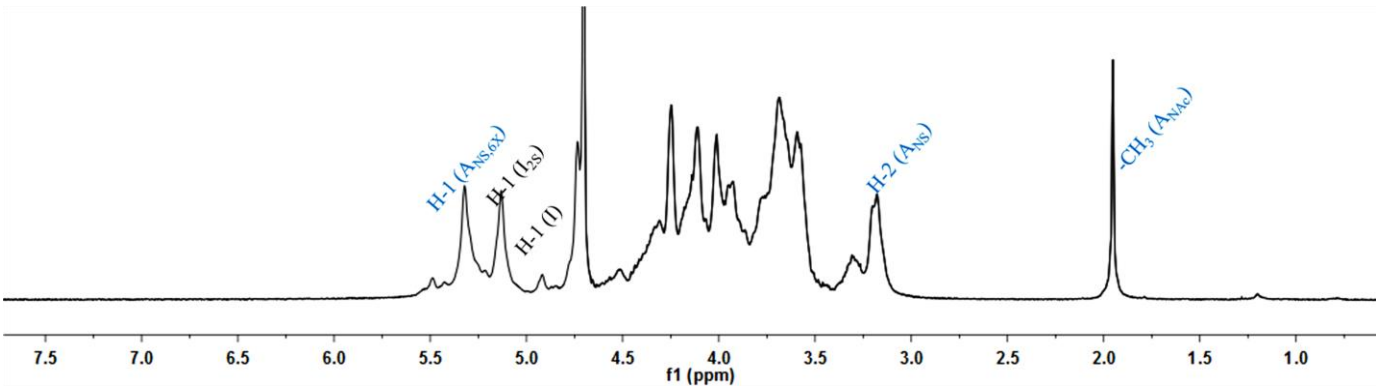
Product	Catalog Number
Heparin Sodium from Bovine Lung	C-HEPBL
Completely Desulfated Heparin	C-CDSHEP
2-*O*-Desulfated Heparin	C-2ODSHEP
6-*O*-Desulfated Heparin	C-6ODSHEP
N-Desulfated Heparin	C-NDSHEP
Completely Desulfated re *N*-Sulfated Heparin	C-CDSRNSHEP

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

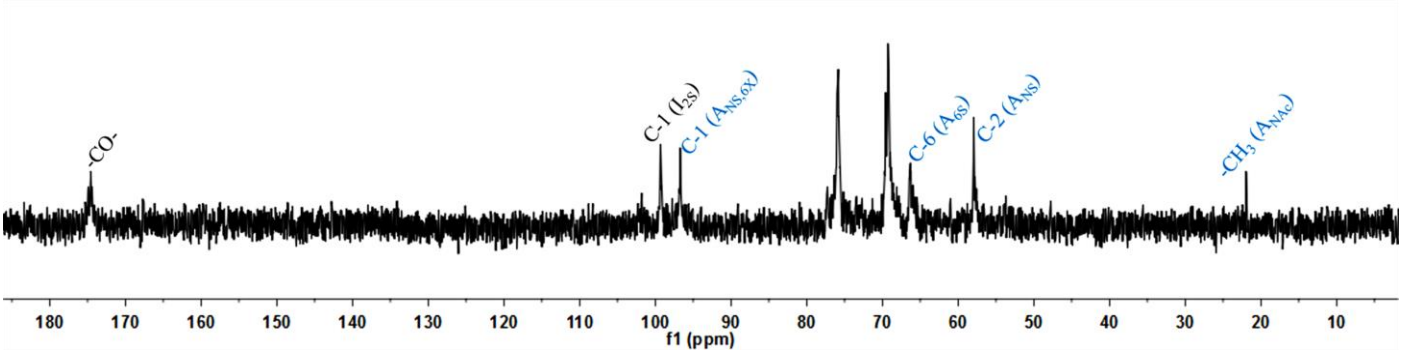
1. The purity analysis of heparin sodium from porcine intestinal mucosa



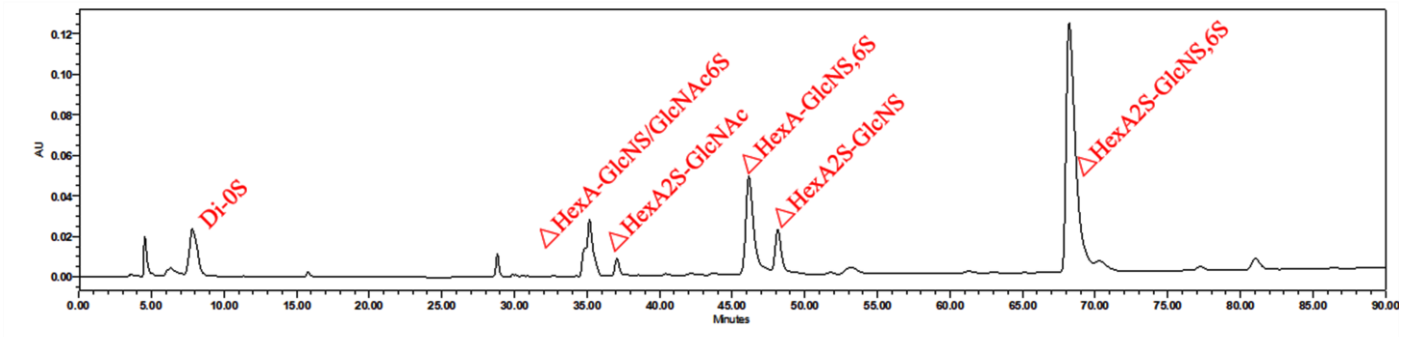
2. The ^{1}H-NMR spectrum of heparin sodium from porcine intestinal mucosa[6]



3. The ^{13}C-NMR spectrum of heparin sodium from porcine intestinal mucosa[7]



4. Unsaturated disaccharide analysis by SAX-HPLC



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

References：

1. Gordon, M.Y.*, et al. Nature*. **326**(6111): p. 403-5(1987).
2. Roberts, R.*, et al. Nature*. **332**(6162): p. 376-8(1988).
3. Lyon, M.*, et al. J Biol Chem*. **269**(15): p. 11216-23(1994).
4. Dodgson, K.S. and R.G. Price*. Biochem J*. **84**(1): p. 106(1962).
5. Blumenkrantz, N. and G. Asboehansen. *Analytical Biochemistry*. **54**(2): p. 484(1973).
6. Guerrini, M., A. Bisio, and G. Torri. *Seminars in Thrombosis & Hemostasis*. **27**(5): p. 473(2001).
7. Yates, E.A.*, et al. Carbohydrate Research*. **294**(294): p. 15(1996).