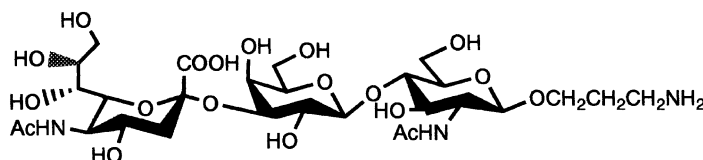


Chemoenzymatic synthesis of the sialyl- α -(2 $\rightarrow$ 3')-lactosamine trisaccharide with a 3-aminopropyl group as a spacer at the reducing end

Indrani Choudhury (Mukherjee), Norihiko Minoura, Hirotaka Uzawa

Laboratory of Advanced Bioelectronics, National Institute of Advanced Industrial Science and Technology (AIST), Central 5, 1-1-1 Higashi, Tsukuba, Ibaraki 305-8565, Japan

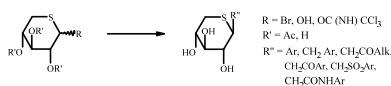


New 1-C-(5-thio-D-xylopyranosyl) derivatives as potential orally active venous antithrombotics

Laurent Mignon,^a Christophe Goichot,^a Philippe Ratel,^a Gérald Cagnin,^b Michel Baudry,^b Jean-Pierre Praly,^b Benaïssa Boubia,^a Véronique Barberousse^a

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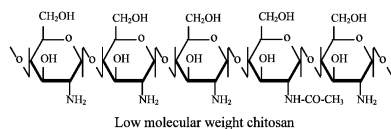


Low molecular weight chitosans—preparation by depolymerization with *Aspergillus niger* pectinase, and characterization

Farooqahamed S. Kittur, Acharya B. Vishu Kumar, Rudrapatnam N. Tharanathan

Department of Biochemistry and Nutrition, Central Food Technological Research Institute, Mysore 570013, India

Low molecular weight chitosans and a range GlcN-containing oligosaccharides were the depolymerized products derived from chitosan upon treatment with *A. niger* pectinase isozyme, which exhibited both pectinolytic and chitosanolytic activities. NMR data provided evidence for subtle changes in chitosan conformation, which resulted in change in solubility and functionality.



Structural features of a pectic arabinogalactan with immunological activity from the leaves of *Diospyros kaki*

Jinyou Duan, Xuesong Wang, Qun Dong, Ji-nian Fang, Xiaoyu Li

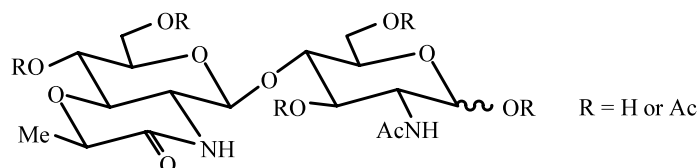
Department of Biotechnology, Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academy of Science, 294 Tai-Yuan Road, Shanghai 200031, PR China

The structure of a pectic heteroglycan from the leaves of *Diospyros kaki* has been investigated and shown to possess a backbone of the average disaccharide of [$\rightarrow$ 4)- α -GalAp-(1 $\rightarrow$ 2)- α -Rhap-(1 $\rightarrow$], with side chains of arabinogalactan and arabinoxylan via O-4 of Rhap. Immunological tests indicated that it could stimulate LPS-induced B lymphocyte proliferation. Structure-activity relationships are developed.

Synthesis and conformational analysis of the repeating units of bacterial spore peptidoglycan

Dina Keglević, Biserka Kojić-Prodić, Zrinka Banić Tomišić¹

Rudjer Bošković Institute, P.O. Box 180, Bijenička 54, HR-10002 Zagreb, Croatia



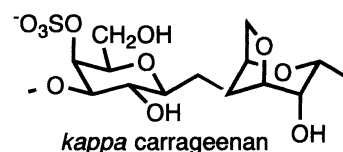
Chemical composition of carrageenan blends determined by IR spectroscopy combined with a PLS multivariate calibration method

E. Tojo,^a J. Prado^b

^aDepartment of Organic Chemistry, Facultad de Ciencias, University of Vigo, Marcosende, 36200-Vigo, Pontevedra, Spain

^bDepartment of Analytical Chemistry, Facultad de Ciencias, Universidad de Vigo, Marcosende, 36200-Vigo, Pontevedra, Spain

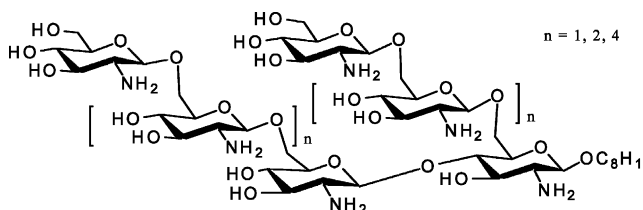
The content of *kappa*, *iota* and *lambda* carrageenan in mixtures is determined by application of FT-IR spectroscopy combined with PLS multivariate regression.



Synthesis of biantennary β -D-(1 $\rightarrow$ 6) glucosamine oligosaccharides

Feng Yang, Yuxia Hua, Yuguo Du

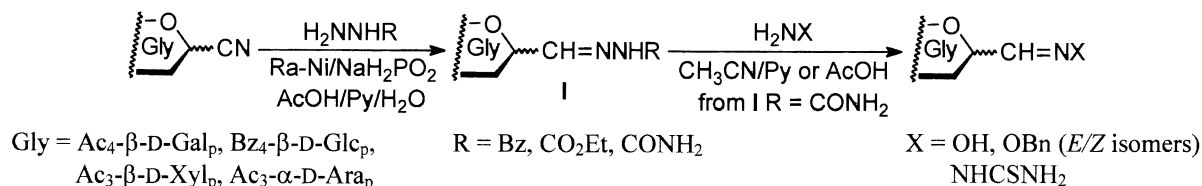
Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, P.O. Box 2871, Beijing 100085, PR China



Preparation of 2,6-anhydro-aldose acylhydrazones, -semicarbazones and -oximes from 2,6-anhydro-aldononitriles (glycosyl cyanides)

Marietta Tóth, László Somsák

Department of Organic Chemistry, University of Debrecen, H-4010, P.O. Box 20, Debrecen, Hungary

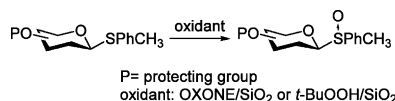


An efficient and selective method for preparing glycosyl sulfoxides by oxidizing glycosyl sulfides with OXONE or *t*-BuOOH on SiO₂

Ming-Yi Chen,^{a,b} Laxmikant Narhari Patkar,^a Hui-Ting Chen,^a Chun-Cheng Lin^a

^aInstitute of Chemistry, Academia Sinica, 128, Sec. 2, Yen-Chiu-Yuan Rd. Nankang, Taipei 115, Taiwan, ROC

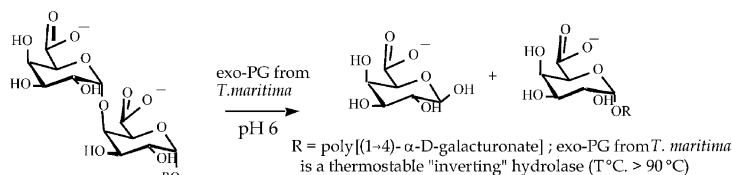
^bDepartment of General Education, Taipei Nursing College, Taipei 112, Taiwan, ROC



Cloning expression and characterization of a thermostable exopolygalacturonase from *Thermotoga maritima*

Judicaël Parisot, Virginie Langlois, Vehary Sakanyan, Claude Rabiller

Unité de Recherches en Biocatalyse (unité CNRS 2230), Faculté des Sciences et des Techniques, 2, rue de la Houssinière, BP, 92208 F-44322 Nantes, France



Mechanistic study of the intramolecular conversion of maltose to trehalose by *Thermus caldophilus* GK24 trehalose synthase

Sukhoon Koh,^a Joongsu Kim,^a Hyun-Jae Shin,^b DuckHee Lee,^a Jungdon Bae,^a Dooil Kim,^a Dae-Sil Lee^a

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