

Carbohydrate Research Vol. 344, No. 7, 2009

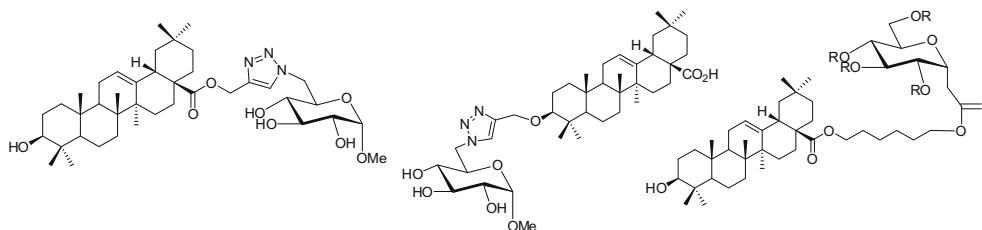
Contents

Full Papers

Synthesis of glucoconjugates of oleanolic acid as inhibitors of glycogen phosphorylase

pp 841–850

Keguang Cheng, Jun Liu, Xiaofeng Liu, Honglin Li, Hongbin Sun \*, Juan Xie \*



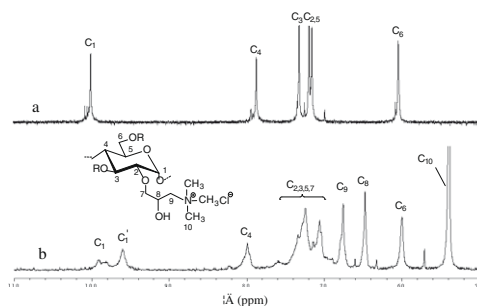
Glucoconjugates of oleanolic acid linked by either a triazole moiety or an ester function have been synthesized as novel inhibitors of glycogen phosphorylase. Several triterpene-glycoside conjugates exhibited moderate to good inhibitory activity against rabbit muscle GPa.



Preparation and characterization of cationic corn starch with a high degree of substitution in dioxane–THF–water media

pp 851–855

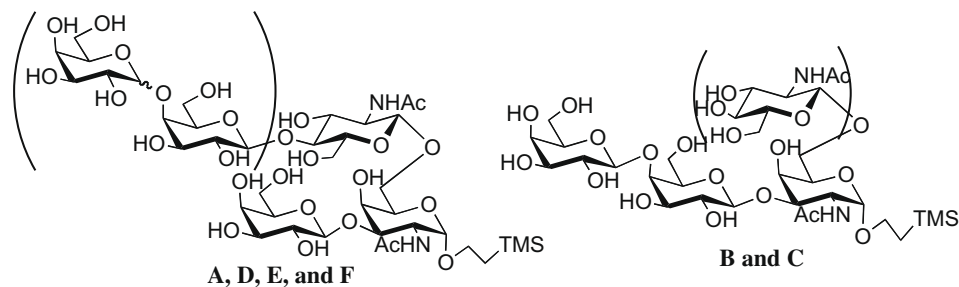
Pi-xin Wang \*, Xiu-li Wu, Xue Dong-hua, Xu Kun, Tan Ying, Du Xi-bing, Li Wen-bo



Synthetic studies on the carbohydrate moiety of the antigen from the parasite *Echinococcus multilocularis*

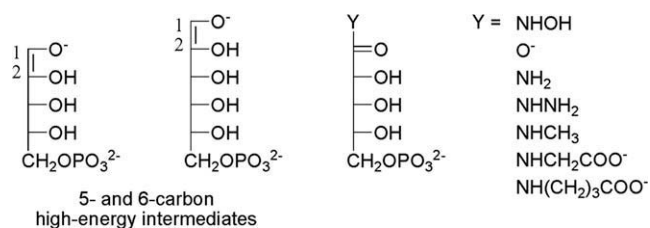
pp 856–868

Akihiko Koizumi, Noriyasu Hada \*, Asuka Kaburaki, Kimiaki Yamano, Frank Schweizer, Tadahiro Takeda \*



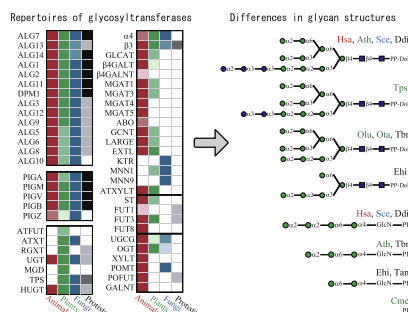
**Competitive inhibitors of type B ribose 5-phosphate isomerases: design, synthesis and kinetic evaluation of new D-allose and D-allulose 6-phosphate derivatives** pp 869–880

Sandrine Mariano, Annette K. Roos, Sherry L. Mowbray, Laurent Salmon \*



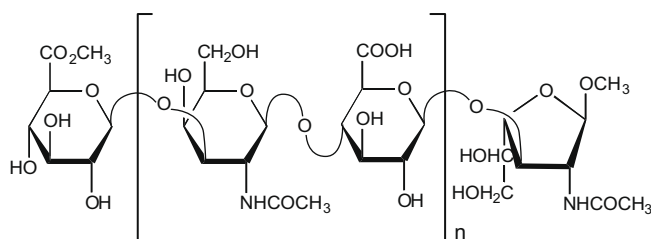
**Comprehensive analysis of glycosyltransferases in eukaryotic genomes for structural and functional characterization of glycans** pp 881–887

Kosuke Hashimoto, Toshiaki Tokimatsu, Shin Kawano, Akiyasu C. Yoshizawa, Shujiro Okuda, Susumu Goto, Minoru Kanehisa \*

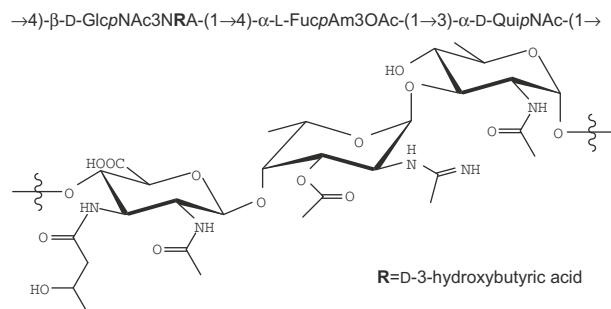


## Solvolytic depolymerization of chondroitin and dermatan sulfates pp 888–893

Toshihiko Toida \*, Kenji Sato, Noriko Sakamoto, Shinobu Sakai, Saori Hosoyama, Robert J. Linhardt

Structural analysis of the O-specific polysaccharide isolated from *Plesiomonas shigelloides* O51 lipopolysaccharide pp 894–900

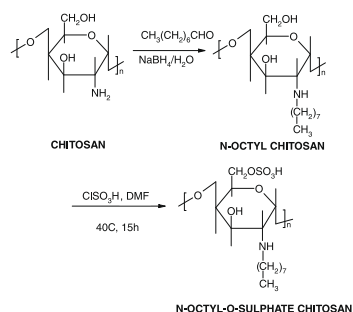
Anna Maciejewska, Jolanta Łukasiewicz \*, Tomasz Niedziela, Zbigniew Szewczuk, Czesław Ługowski



**Chitosan derivatives alter release profiles of model compounds from calcium phosphate implants**

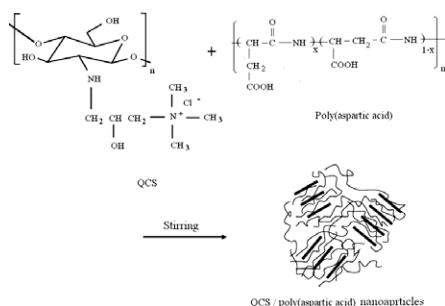
pp 901–907

S. Green, M. Roldo, D. Douroumis, N. Bouropoulos, D. Lamprou, D.G. Fatouros \*

**Quaternized chitosan (QCS)/poly (aspartic acid) nanoparticles as a protein drug-delivery system**

pp 908–914

Tie wei Wang, Qing Xu, Yan Wu \*, Ai jun Zeng, Mingjun Li, Hongxia Gao

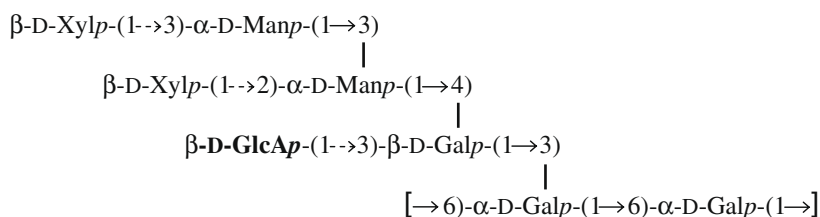


The preparation of QCS/poly (aspartic acid) nanoparticles, (—) QCS, (■) poly (aspartic acid).

**The structure of *Cryptococcus neoformans* galactoxylomannan contains  $\beta$ -D-glucuronic acid**

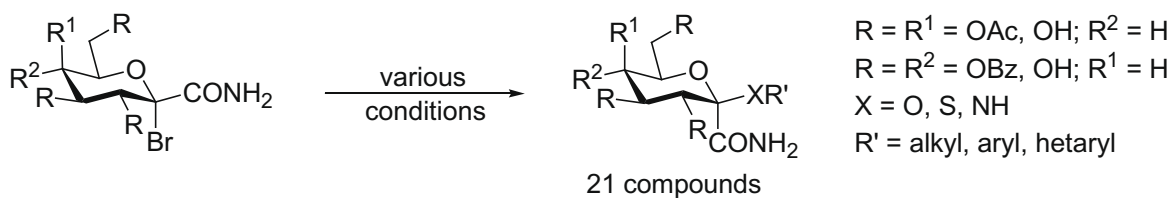
pp 915–920

Christian Heiss \*, J. Stacey Klutts, Zhirui Wang, Tamara L. Doering, Parastoo Azadi

**Notes****Synthesis of some O-, S- and N-glycosides of hept-2-ulopyranosonamides**

pp 921–927

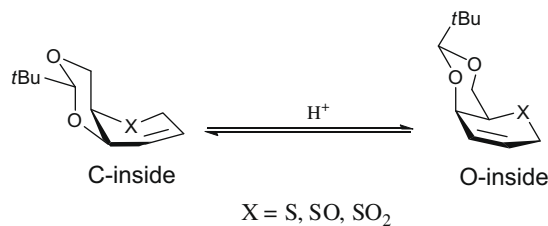
Veronika Nagy, Katalin Czifrák, Attila Bényei, László Somsák \*



Thermodynamic stabilities and conformational analyses of 4,6-*O*-acetalized 1,5-anhydro-5-thio-DL-*threo*-2-enitols

**pp 928–932**

Yuhya Watanabe, Tohru Sakakibara \*



### Sialic acid attenuates the cytotoxicity of the lipid hydroperoxides HpODE and HpETE

**pp 933–935**

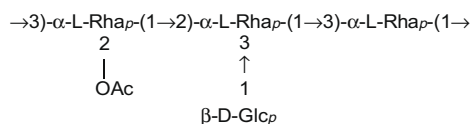
Ryosuke Iijima \*, Takatsugu Ichikawa, Masatoshi Yamazaki

*N*-Acetylneuraminic acid acts as an antioxidant of lipid hydroperoxides HpODE and HpETE. Reaction with *N*-acetylneuraminic acid attenuated the cytotoxicity of both hydroperoxides.

**Revised structure of the repeating unit of the O-specific polysaccharide from *Azospirillum lipoferum* strain SpBr17**

**pp 936–939**

Adam Choma \*, Iwona Komaniecka, Pawel Sowinski

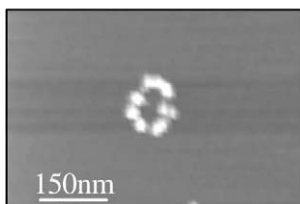


Structure of the repeating unit of an O-polysaccharide from *Azospirillum lipoferum* SpBr17.

## Conformational studies of the capsular polysaccharide produced by *Neisseria meningitidis* group A

**pp 940–943**

Michela Foschiatti, Meredith Hearshaw, Paola Cescutti, Neil Ravenscroft, R. Rizzo \*



Atomic force microscopy imaging of a *Neisseria meningitidis* group A polysaccharide cluster formed by the addition of calcium ions.

**Chitosan-LiOH-urea aqueous solution—a novel water-based system for chitosan processing****pp 944–947**

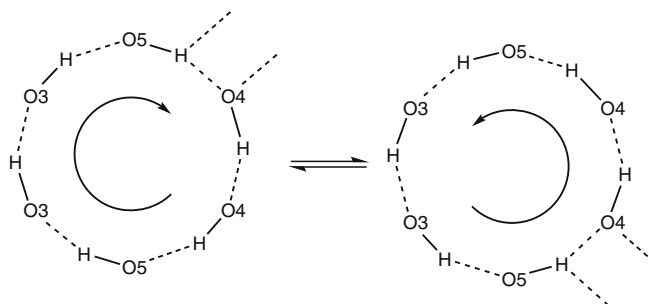
Min Fan, Qiaoling Hu \*




The image of the solution of CS80 in aqueous 4.8 wt % LiOH/8 wt % urea with a piece of extensive pH indicator paper LiOH mainly contributed to the dissolution of CS80. Urea, LiOH, and chitosan formed inclusion compound. The solution was pseudoplastic fluid, and was stable at ambient temperature.

**Disordered hydrogen bonding in *N*-(1-deoxy- $\beta$ -D-fructopyranos-1-yl)-*N*-allylaniline****pp 948–951**

Valeri V. Mossine \*, Charles L. Barnes, Thomas P. Mawhinney

**OTHER CONTENTS****Corrigendum****p 952**

\*Corresponding author

 Supplementary data available via ScienceDirect

**COVER**

Shown is a fluorescence image of cell-surface glycans in a 3-day old zebrafish larva. Different colors represent glycans biosynthesized at different times in development. The glycans were imaged in live zebrafish using a two-step approach termed the bioorthogonal chemical reporter strategy. Embryos were first metabolically labeled with the unnatural monosaccharide *N*-azidoacetylgalactosamine, which targets the core position of mucin-type O-glycans; subsequently, the azide-containing glycans were reacted with a cyclooctyne–fluorophore conjugate by copper-free click chemistry, a step that was repeated multiple times to target temporally distinct glycan pools with different fluorophores. This work is the result of a collaboration between the Departments of Chemistry and Molecular and Cell Biology at the University of California, Berkeley [Laughlin, S. T.; Baskin, J. M.; Amacher, S. L.; Bertozzi, C. R. *Science* **2008**, 320, 664].

© 2009 T. L. Lowary. Published by Elsevier Ltd.

---

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)



---

Abstracted/Indexed in: Chem. Abstr.; Curr. Contents: Phys., Chem. & Earth Sci. Life Sci. Current Awareness in Bio. Sci. (CABS). Science Citation Index. Full texts are incorporated in CJELSEVIER, a file in the Chemical Journals Online database which is available on STN® International. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

---



ELSEVIER

ISSN 0008-6215