

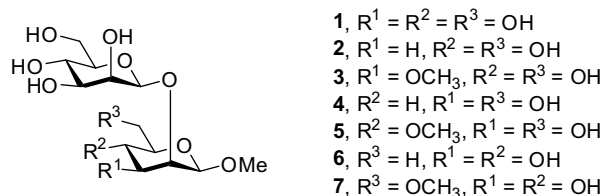
Carbohydrate Research Vol. 344, No. 5, 2009

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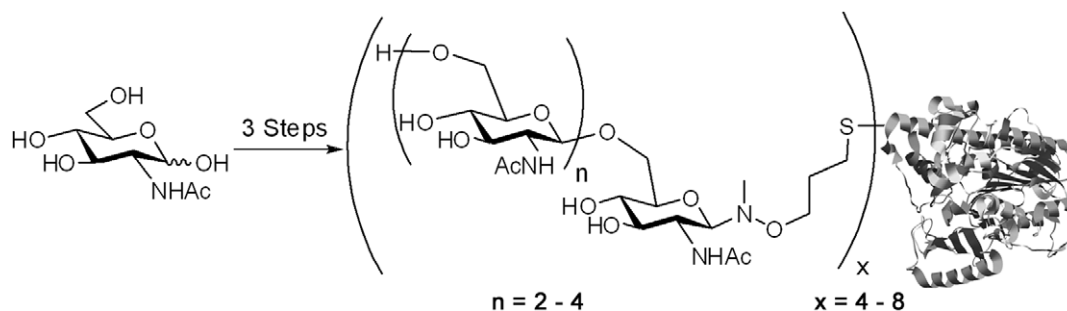
- Synthesis of monodeoxy and mono-*O*-methyl congeners of methyl β -D-mannopyranosyl-(1 \rightarrow 2)- β -D-mannopyranoside for epitope mapping of anti-*Candida albicans* antibodies** pp 555–569

Corwin M. Nycholat, David R. Bundle *



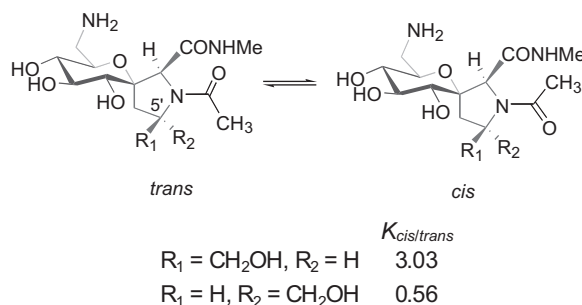
- Efficient synthesis and protein conjugation of β -(1 \rightarrow 6)-D-*N*-acetylglucosamine oligosaccharides from the polysaccharide intercellular adhesin** pp 570–575

Carmen Leung, Anthony Chibba, Rodolfo F. Gómez-Biagi, Mark Nitz *



- Design and synthesis of glucose-templated proline–lysine chimera: polyfunctional amino acid chimera with high prolyl *cis* amide rotamer population** pp 576–585

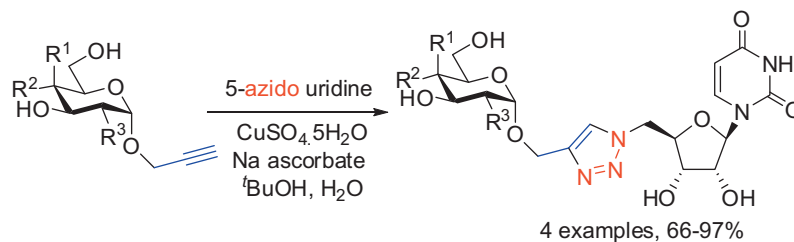
Kaidong Zhang, Frank Schweizer *



Probing replacement of pyrophosphate via click chemistry; synthesis of UDP-sugar analogues as potential glycosyl transferase inhibitors

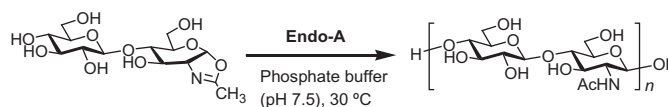
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Kar Kheng Yeoh, Terry D. Butters, Brendan L. Wilkinson, Antony J. Fairbanks *


Endo- β -N-acetylglucosaminidase-catalyzed polymerization of β -GlcP-(1 \rightarrow 4)-GlcPNAc oxazoline: a revisit to enzymatic transglycosylation

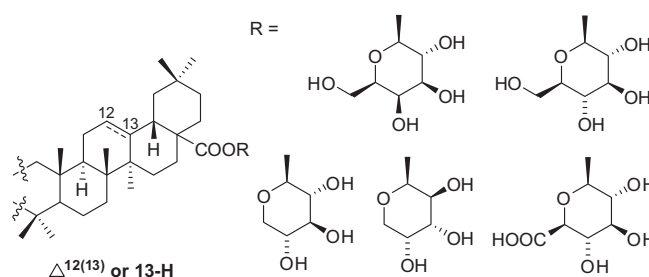
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Hirofumi Ochiai, Wei Huang, Lai-Xi Wang *


Glycoside modification of oleanolic acid derivatives as a novel class of anti-osteoclast formation agents

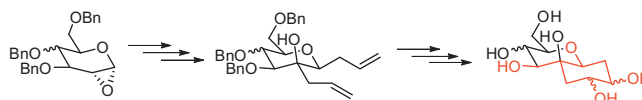
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Jun-Feng Li, Song-Jie Chen, Yu Zhao, Jian-Xin Li *


Synthesis of fused pyran-carbahexopyranoses as glycosidase inhibitors

pp 606–612

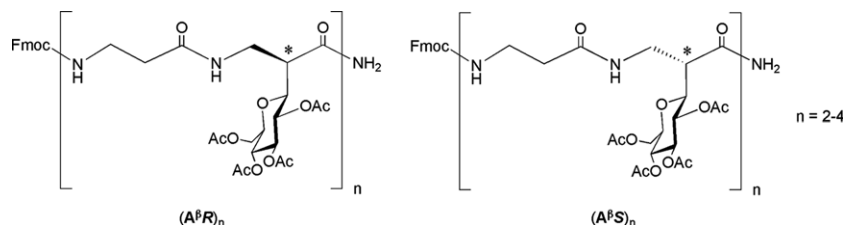
Venkata Ramana Doddi, Pavan K. Kancharla, Y. Suman Reddy, Amit Kumar, Yashwant D. Vankar *



Preparation and conformational analysis of C-glycosyl β^2 - and β/β^2 -peptides

pp 613–626

Yoko Inaba, Toru Kawakami, Saburo Aimoto, Takahisa Ikegami, Takae Takeuchi, Takashi Nakazawa, Shigenobu Yano, Yuji Mikata *

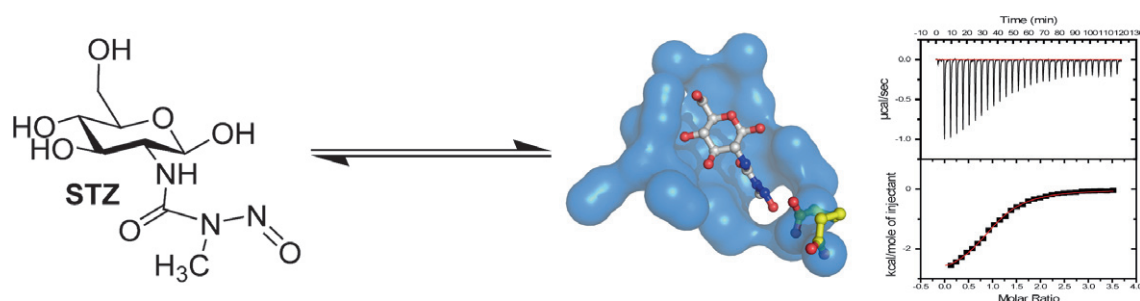


The novel C-glycosyl β^2 - and β/β^2 -peptides have been prepared using solution and solid-phase syntheses. The peptides can form a helical structure, in which the helix directions are governed by the configuration at the α -carbon of C-glycosyl β^2 -amino acids in the peptide backbone.

Structural insight into the mechanism of streptozotocin inhibition of O-GlcNAcase

pp 627–631

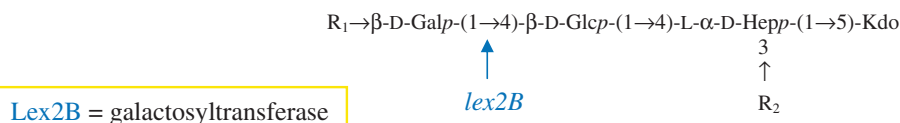
Yuan He, Carlos Martinez-Fleites, Abigail Bubb, Tracey M. Gloster, Gideon J. Davies *



A dual role for the *lex2* locus: identification of galactosyltransferase activity in non-typeable *Haemophilus influenzae* strains 1124 and 2019

pp 632–641

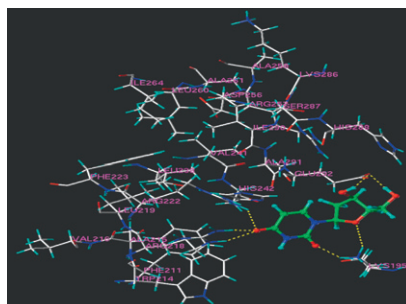
Mikael K.R. Engskog, Håkan H. Yildirim, Jianjun Li, James C. Richards, Mary Deadman, Derek W. Hood, Elke K.H. Schweda*



Characterization of the interaction between 2'-deoxyuridine and human serum albumin

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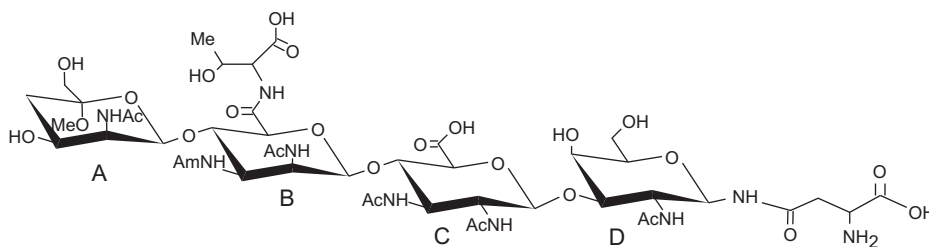
Fengling Cui *, Yinghua Yan, Qiangzhai Zhang, Juan Du, Xiaojun Yao *, Guirong Qu, Yan Lu



A novel N-linked flagellar glycan from *Methanococcus maripaludis*

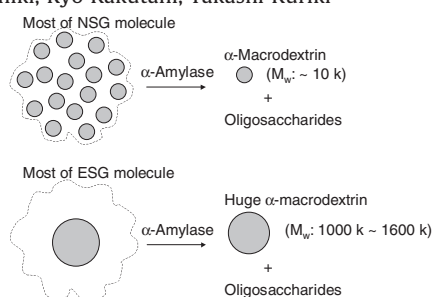
pp 648–653

John Kelly, Susan M. Logan, Ken F. Jarrell, David J. VanDyke, Evgeny Vinogradov *

**Fine structural properties of natural and synthetic glycogens**

pp 654–659

Hiroki Takata *, Hideki Kajiura, Takashi Furuyashiki, Ryo Kakutani, Takashi Kuriki

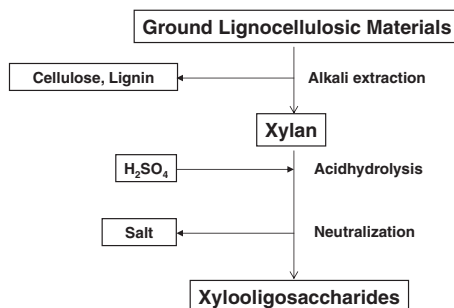


It has been shown that enzymatically-synthesized glycogen (ESG) has similar structural and physicochemical properties to natural source glycogen (NSG). However, hydrolysis of glycogens with an excess amount of alpha-amylase suggested a slight difference in the distribution of α -1,6 linkages in ESG and NSG molecules.

Production of xylooligosaccharides by controlled acid hydrolysis of lignocellulosic materials

pp 660–666

Ozlem Akpinar *, Kader Erdogan, Seyda Bostanci

**The structure of the O-antigen in the endotoxin of the emerging food pathogen *Cronobacter (Enterobacter) muytjensii* strain 3270**

pp 667–671

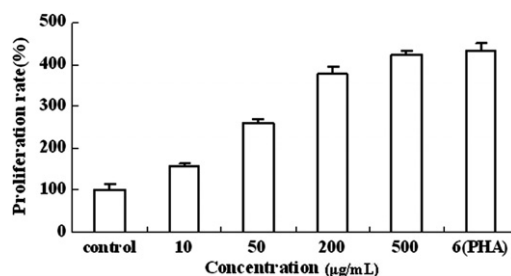
Leann L. MacLean, Franco Pagotto, Jeffrey M. Farber, Malcolm B. Perry *



Structural elucidation and immuno-stimulating activity of an acidic heteropolysaccharide (TAPA1) from *Tremella aurantialba*

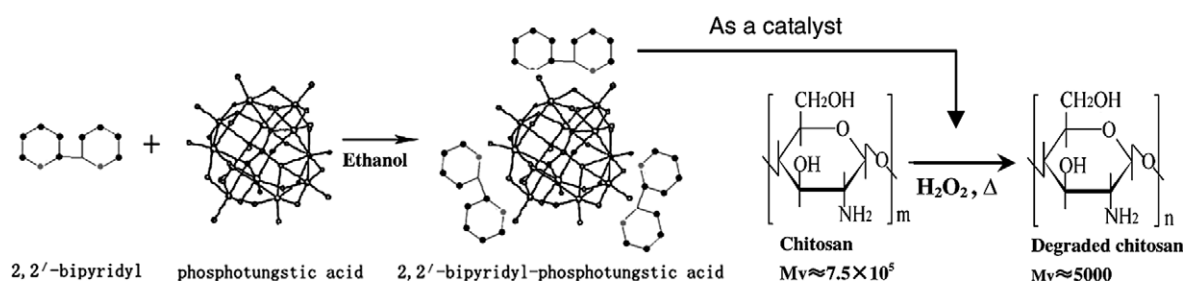
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XiuJu Du, JingSong Zhang^{*}, Yan Yang, LiBin Ye, QingJiu Tang, Wei Jia, YanFang Liu, Shuai Zhou, Ruixia Hao, ChunYu Gong, Yingjie Pan^{*}


Notes
A novel supramolecular compound 2,2'-bipyridyl-phosphotungstic acid: synthesis and catalysis

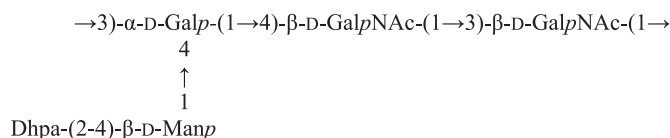
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Qiong-Sheng Wang, Shi-Ming Wang^{*}, Shan Lin


Structure of the O-polysaccharide from the lipopolysaccharide of *Providencia alcalifaciens* O31 containing an ether of D-mannose with (2R,4R)-2,4-dihydroxypentanoic acid

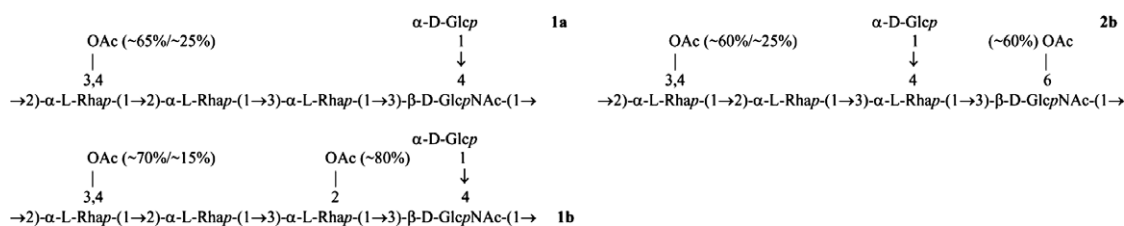
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Olga G. Ovchinnikova^{*}, Nina A. Kocharova, Alexander S. Shashkov, Magdalena Bialczak-Kokot, Yuriy A. Knirel, Antoni Rozalski


A similarity in the O-acetylation pattern of the O-antigens of *Shigella flexneri* types 1a, 1b, and 2a

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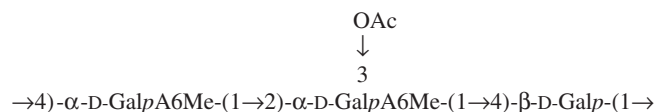
Andrei V. Perepelov^{*}, Vyacheslav L. L'vov, Bin Liu, Sofya N. Senchenkova, Mariya E. Shekht, Alexander S. Shashkov, Lu Feng, Petr G. Aparin, Lei Wang, Yuriy A. Knirel



Structural identification and cytotoxic activity of a polysaccharide from the fruits of *Lagenaria siceraria* (Lau)

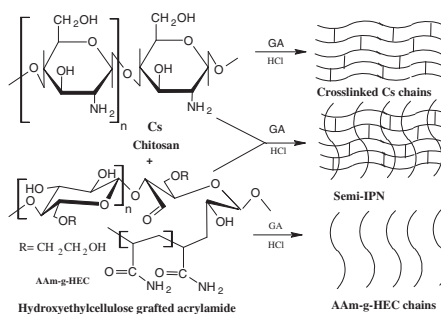
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Kaushik Ghosh, Krishnendu Chandra, Arnab K. Ojha, Siddik Sarkar, Syed S. Islam *

**Synthesis and characterization of chitosan-based pH-sensitive semi-interpenetrating network microspheres for controlled release of diclofenac sodium**

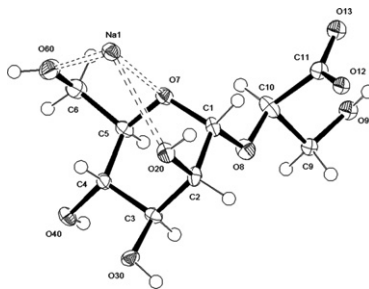
pp 699–706

A. AL-Kahtani Ahmed, H.S. Bhojya Naik, B.S. Sherigara *

**X-ray structure of a sodium salt of digeneaside isolated from red alga *Ceramium botryocarpum***

pp 707–710

Audrey Claude, Stéphanie Bondu *, François Michaud, Nathalie Bourgougnon, Eric Deslandes



The crystal structure of the monohydrated sodium digeneaside salt (2-O- α -D-mannopyranosyl-D-glyceric acid) was determined by single-crystal X-ray diffraction.

*Corresponding author

 Supplementary data available via ScienceDirect

COVER

Shown is a fluorescence image of cell-surface glycans in a 3-day old zebrafish larva. Dierent colors represent glycans biosynthesized at dierent 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].

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