

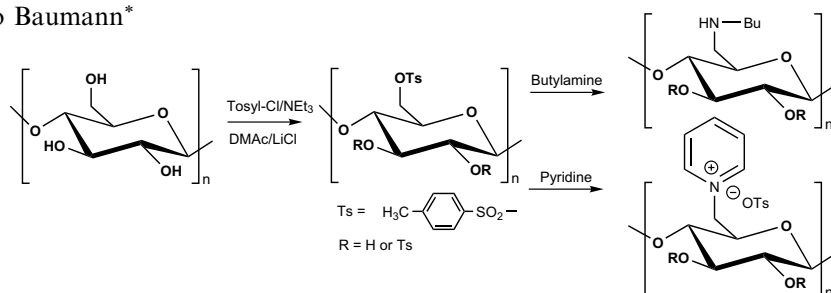
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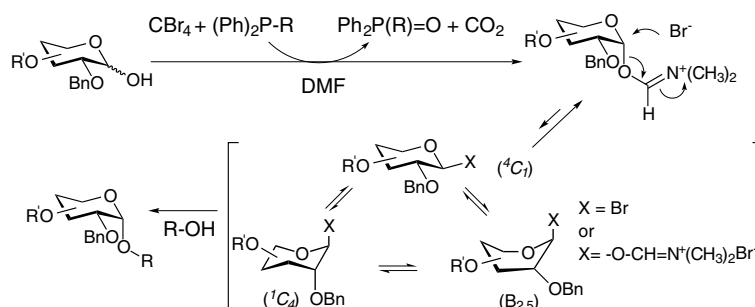
Chun Liu and Hanno Baumann\*



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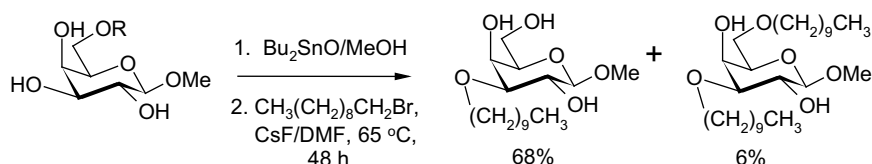
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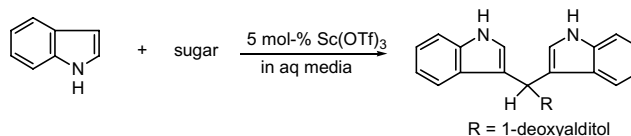
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# A mild and environmentally friendly scandium(III) trifluoromethanesulfonate-catalyzed synthesis of bis(3'-indolyl)alkanes and bis(3'-indolyl)-1-deoxyalditols

pp 2251–2255

Shingo Sato\* and Toshihiro Sato

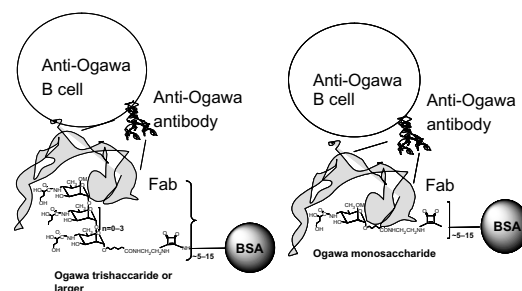


# Effect of saccharide length on the immunogenicity of neoglycoconjugates from synthetic fragments of the O-SP of *Vibrio cholerae* O1, serotype Ogawa

pp 2256–2269

Rina Saksena, Xingquan Ma, Terri K. Wade, Pavol Kováč and William F. Wade\*

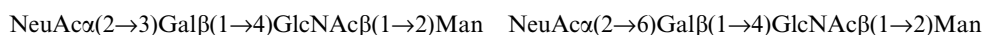
The binding energy (90%) for an Ogawa-specific Fab (antigen binding component of the antibody) to bind Ogawa LPS is contributed by the terminal perosamine of the Ogawa LPS. Thus, Ogawa-specific immunogens with equal moles of the terminal perosamine of Ogawa LPS induce equivalent titers of anti-Ogawa antibody independent of the extra mass of additional perosamines.



# Extraction of leukemia specific glycan motifs in humans by computational glycomics

pp 2270–2278

Yoshiyuki Hizukuri, Yoshihiro Yamanishi, Osamu Nakamura, Fumio Yagi, Susumu Goto and Minoru Kanehisa\*



# Construction of chimeric cyclodextrin glucanotransferases from *Bacillus circulans* A11 and *Paenibacillus macerans* IAM1243 and analysis of their product specificity

pp 2279–2289

Vichien Rimphanitchayakit,\* Takashi Tonozuka and Yoshiyuki Sakano

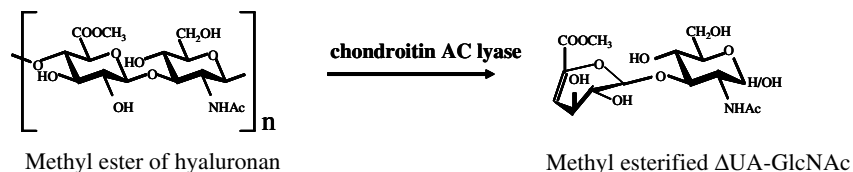
Three DNA fragments of 7919 base pairs containing genes for  $\beta$ -cyclodextrin glucanotransferase (CGTase, EC 2.4.1.19), an iron III dicitrate transport protein-like protein and a partial coding sequence for putative ferrichrome ABC transporter from *Bacillus circulans* A11 were cloned and sequenced (GenBank Accession AF302787).

**The secondary cell wall polymer of *Geobacillus tepidamans* GS5-97<sup>T</sup>: structure of different glycoforms** pp 2290–2296  
Christian Steindl, Christina Schäffer, Vilko Smrečki, Paul Messner and Norbert Müller\*

The basic backbone structure of the SCWP was established to be  $[\beta\text{-D-Manp-2,3-diNAcANH}_2\text{-(1}\rightarrow\text{6)-}\alpha\text{-D-Glcp-(1}\rightarrow\text{4)-}\beta\text{-D-Manp-2,3-diNAcANH}_2\text{-(1}\rightarrow\text{3)-}\alpha\text{-D-GlcpNAc-(1}\rightarrow\text{)}_n\text{-(1}\rightarrow\text{O)-PO}_2\text{-(O}\rightarrow\text{6)-MurNAc-}$  with different acetyl modifications of the amide groups.

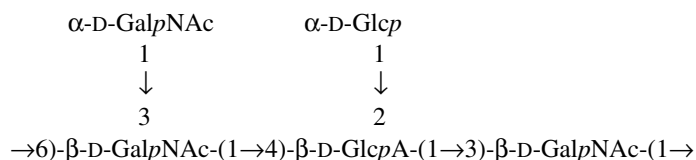
**Preparation of the methyl ester of hyaluronan and its enzymatic degradation** pp 2297–2304

Kana Hirano, Shinobu Sakai, Tsutomu Ishikawa, Fikri Y. Avci, Robert J. Linhardt and Toshihiko Toida\*



**Structure of the O-polysaccharide and serological studies of the lipopolysaccharide of *Proteus mirabilis* 2002** pp 2305–2310

Andrei V. Perepelov, Agnieszka Zabłotni, Alexander S. Shashkov, Yuriy A. Knirel and Zygmunt Sidorczyk\*



The O-polysaccharide of *P. mirabilis* 2002 has a common tetrasaccharide fragment with that of *P. mirabilis* 52/57 from serogroup O29, and on the basis of the structural and serological data, we propose to classify *P. mirabilis* 2002 into the *Proteus* O29 serogroup as a subgroup O29a,29b.

**Solid and solution state conformations of (±)-3-O-acetyl-1,2:4,5-di-O-isopropylidene-*allo*-inositol and (±)-3-O-acetyl-1,2:4,5-di-O-isopropylidene-6-O-methyl-*allo*-inositol** pp 2311–2318

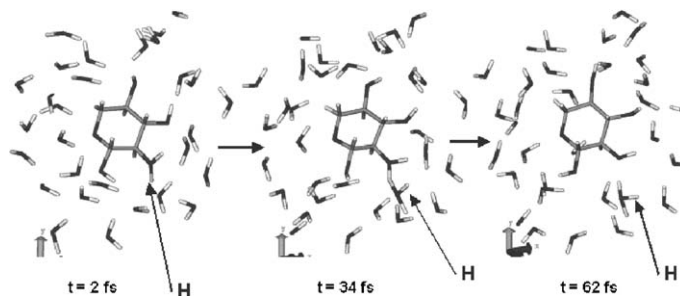
Kana M. Sureshan\* and Yutaka Watanabe\*



### Ab initio molecular dynamics simulations of $\beta$ -D-glucose and $\beta$ -D-xylose degradation mechanisms in acidic aqueous solution

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Xianghong Qian,\* Mark R. Nimlos, Mark Davis, David K. Johnson and Michael E. Himmel

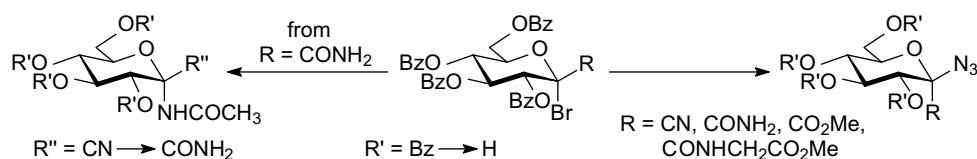


### NOTES

#### Synthesis of some derivatives of C-(1-deoxy-1-N-substituted-D-glucopyranosyl)formic acid (D-glucos-hept-2-ulopyranosonic acid) as potential inhibitors of glycogen phosphorylase

pp 2328–2334

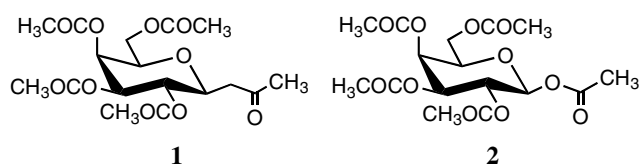
Katalin Czifrák, László Kovács, Katalin E. Kövér and László Somsák\*

The new compounds are weak inhibitors of muscle glycogen phosphorylase *b*.


#### Comparative structural analysis of 5,6,7,9-tetra-O-acetyl-4,8-anhydro-1,3-dideoxy-D-glycero-L-glucos-nonulose and its 1-O-acetylated analog, 1,2,3,4,6-penta-O-acetyl- $\beta$ -D-galactopyranose using X-ray crystallography

pp 2335–2339

Rishi Kumar, Pallavi Tiwari, Prakas R. Maulik and Anup Kumar Misra\*



\*Corresponding author

 Supplementary data available via ScienceDirect

## COVER

Model of blood group A trisaccharide in the binding site of the *Dolichos biflorus* lectin as established by a combination of theoretical and experimental approaches. Molecular modeling of the oligosaccharide demonstrated that two different conformations could be adopted by the trisaccharide in the binding site. NMR experiments using transferred nuclear Overhauser effects (TRNOE) displayed intermolecular contacts (blue arrows) corresponding to only one of the two theoretical conformations. This work is a collaboration between Anne Imberty (CERMAV, Grenoble) and Thomas Peters (University of Lübeck) and was presented during the XXII<sup>nd</sup> International Carbohydrate Symposium (Glasgow, 2004) on the occasion of the Whistler award.

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