

Unexpected branching in pectin observed by atomic force microscopy

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The Atomic Force Microscope (AFM) is uniquely capable of unambiguously resolving individual macromolecules within a heterogeneous population. AFM images of tomato pectin reveal relatively long, linear branches attached to the backbone, which differ from the previously proposed structure of neutral sugar sidechains.

Studies on the synthesis of two tetrasaccharides and the reactivity difference between them

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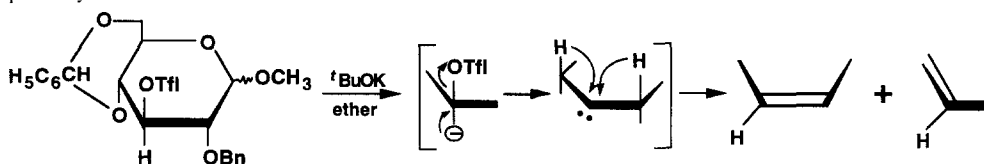
Two tetrasaccharides differing only in the anomeric configuration of the reducing end methyl glycoside behave completely differently in an attempted condensation with a same disaccharide donor. This unexpected result is studied in detail in this paper.

α And β -hydrogen eliminations in the reactions of some 3-O-triflylglycosides with ^tBuOK and pyridine

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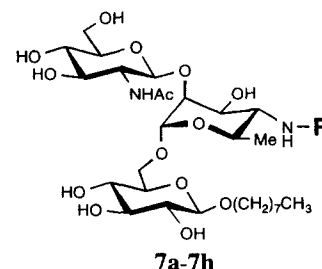
Reactions of 3-O-triflyl-D-gluco(or -allo-)pyranosides with ^tBuOK in ether gave a mixture of 2,3- and 3,4-, or 2,3-unsaturated products through α - or β -elimination, respectively.

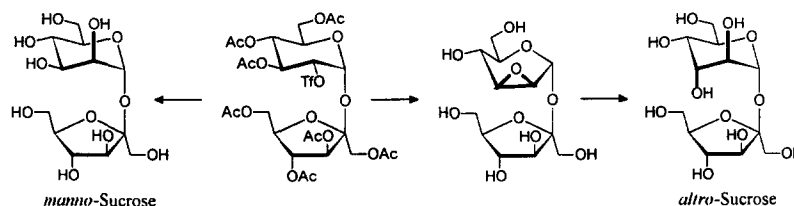


Synthesis and evaluation of eight aminodeoxy trisaccharide inhibitors for *N*-acetylglucosaminyltransferase-V

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Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada T6G 2G2

Eight amino-trisaccharides (**7a–7h**) were chemically synthesized and found to be competitive inhibitors of GlcNAcT-V with K_i values ranging from 3 to 106 μ M.

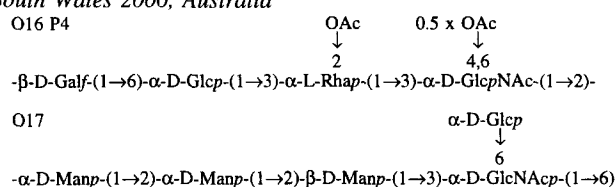
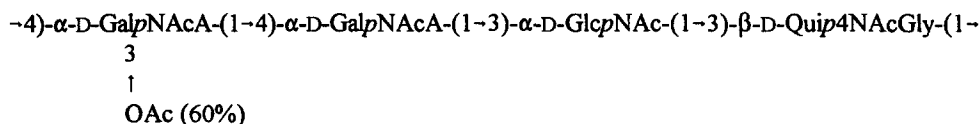


manno- and altro-Sucrose, and some amino-analoguesFrieder W. Lichtenthaler ^a, Stefan Mondel*Institut für Organische Chemie, Technische Universität Darmstadt, Petersenstraße 22, D-64287 Darmstadt, Germany***Isolation and characterization by electrospray-ionization mass spectrometry and high-performance anion-exchange chromatography of oligosaccharides derived from hyaluronic acid by hyaluronate lyase digestion: Observation of some heretofore unobserved oligosaccharides that contain an odd number of units**Kenneth N. Price ^a, Al Tuinman ^a, David C. Baker ^{a,*}, Christina Chisena ^b, Richard L. Cysyk ^b^a *Department of Chemistry, The University of Tennessee, Knoxville, TN 37996, USA*^b *Laboratory of Medicinal Chemistry, The National Cancer Institute, Bethesda, MD 20892, USA*

Oligosaccharides of dp 3–16 from the action of hyaluronate lyase from *Streptomyces hyalurolyticus* on hyaluronic acid were purified by GPC and characterized by ESIMS and HPAEC-PAD

The relationship between the structures of the O polysaccharides from *Escherichia coli* O17 and O16Michael Batley ^{a,*}, John W. Redmond ^a, Nicolle H. Packer ^a, Dan Liu ^b, Peter Reeves ^b^a *School of Chemistry, Macquarie University, New South Wales 2109, Australia*^b *Department of Microbiology, University of Sydney, Sydney, New South Wales 2006, Australia*

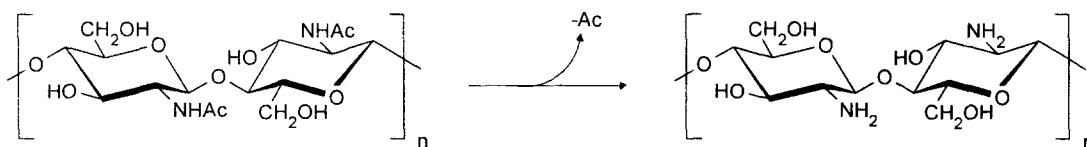
The chemical structure of the O16 antigen from *E. coli* strain P4 has been determined. Comparison with O17 antigen explains the reported cross-reaction of O antigen from the O16 strain K-12 with anti-O17 antibody.

**Structural studies on the *Shigella*-like *Escherichia coli* O121 O-specific polysaccharide**Haralambos Parolis ^{*}, Lesley A.S. Parolis, Gianfranco Olivieri*School of Parhamceutical Sciences, Rhodes University, Grahamstown 6140, South Africa*

Heterogeneous *N*-deacetylation of chitin in alkaline solution

Ke Liang B. Chang ^{a,*}, Gengia Tsai, John Lee, Wen-Rong Fu

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Structure of a phosphorylated polysaccharide from *Shewanella putrefaciens* strain S29

Alexander S. Shashkov ^{a,*}, Sof'ya N. Senchenkova ^a, Evgeny L. Nazarenko ^b, Vladimir A. Zubkov ^b, Natal'ya M. Gorshkova ^b, Yuriy A. Knirel, Raisa P. Gorshkova ^b

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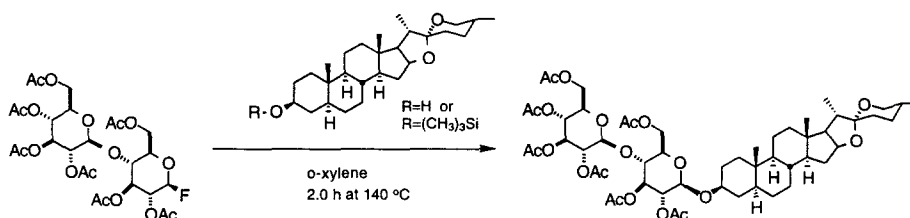
^b Pacific Institute of Bioorganic Chemistry, Far East Branch of the Russian Academy of Sciences, Vladivostok 690022, Russian Federation

4)- α -L-QuipNac-(1 $\rightarrow$ 3)- α -D-GlcpNac-(1 $\rightarrow$ 3)- β -D-Quip4Nac-(1 $\rightarrow$ 3)- α -D-Galp-1-P-(O $\rightarrow$

Thermal glycosylations: Reactions of β -cellobiosyl fluoride heptaacetate with tigogenin and its trimethylsilyl ether

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Pfizer Inc., Central Research Division, Groton, CT 06430, USA



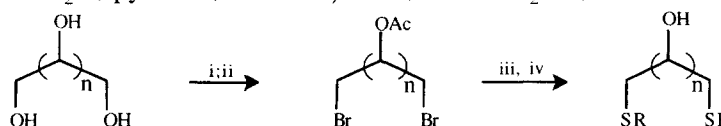
Efficient synthesis of α, ω -dibromodideoxyalditols as precursors for α, ω -dithioalkylalditols

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$n = 3$ (pentitols), 4 (hexitols)

i) AcBr, 1,4-dioxane; ii) Ac₂O, pyridine; iii) RSH/NaH, THF-Me₂SO; iv) MeONa, MeOH.

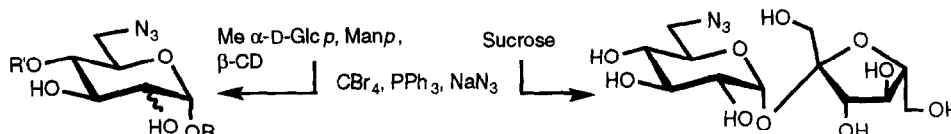


A mild one-step selective conversion of primary hydroxyl groups into azides in mono- and oligo-saccharides

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^b CNRS and Université Joseph Fourier-Grenoble I, Département de Pharmacochimie Moléculaire / Glucides, BP 138, F-38243 Meylan, France



Solid-phase synthesis of a glycosylated peptide fragment of the IL-8 receptor containing two vicinal oligosaccharide chains

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Compound **1** was prepared by means of solid-phase synthesis, using benzylated oligosaccharide-Asn conjugate and Fmoc-amino acids as building blocks.

