Graphical Abstracts

Carbohydr. Res. **2003,** *338*, 1917

Characterisation and X-ray crystallography of products from the Bucherer–Bergs reaction of methyl 2,3-*O*-isopropylidene-α-D-*lyxo*-pentodialdo-1,4-furanoside

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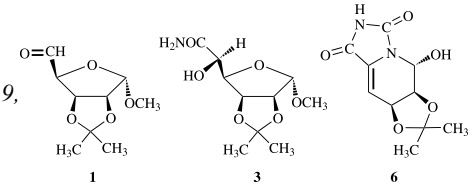

Carbohydr. Res. **2003,** *338*, 1925

Highly efficient preparation of tumor antigen-containing glycopeptide building blocks from novel pentenyl glycosides

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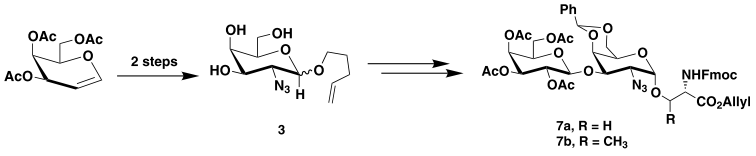

Carbohydr. Res. **2003,** *338*, 1937

Synthesis of fluorescence-labelled disaccharide substrates of glucosidase II

Ian Cumpstey,[a] Terry D. Butters,[b] Richard J. Tennant-Eyles,[a] Antony J. Fairbanks,[a] Robert R. France,[a] Mark R. Wormald[b]

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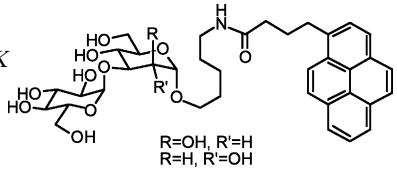

Carbohydr. Res. **2003,** *338*, 1951

Solid-supported enzymatic synthesis of pectic oligogalacturonides and their analysis by MALDI-TOF mass spectrometry

Fanny Guillaumie,[a] Jason D. Sterling,[b] Knud J. Jensen,[c] Owen R.T. Thomas,[a] Debra Mohnen[b]

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Carbohydr. Res. **2003,** *338*, 1961

Alternansucrase acceptor reactions with methyl hexopyranosides

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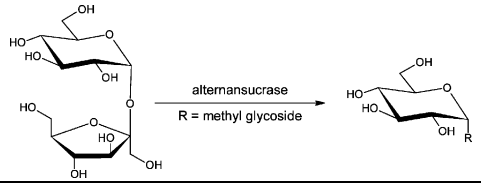

Carbohydr. Res. **2003,** *338*, 1969

Study of the inhibition of four alpha amylases by acarbose and its 4^{IV}-α-maltohexaosyl and 4^{IV}-α-maltododecaosyl analogues

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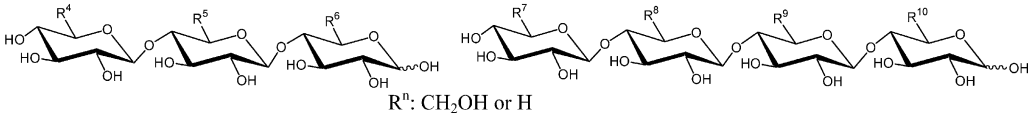
α-amylase from	Acarbose (μM)	G_6-acarbose (nM)	G_{12}-acarbose (nM)
Porcine pancreas	$K_i = 0.80$	7	11
Human saliva	$K_i = 1.27$	14	18
Bacillus amyloliquefaciens	$K_i = 13.00$	37	81
Aspergillus oryzae	$K_i = 270.0$	33	59

Carbohydr. Res. **2003,** *338*, 1981

Enzymatic synthesis of a library of β-(1→4) hetero- D-glucose and D-xylose-based oligosaccharides employing cellodextrin phosphorylase

Keiko Shintate, Motomitsu Kitaoka, Yeon-Kye Kim, Kiyoshi Hayashi

Enzyme Laboratory, National Food Research Institute, 2-1-12 Kannondai, Tsukuba, Ibaraki 305-8642, Japan



Carbohydr. Res. **2003,** *338*, 1991

The structure of the rough-type lipopolysaccharide from *Shewanella oneidensis* MR-1, containing 8-amino-8-deoxy-Kdo and an open-chain form of 2-acetamido-2-deoxy-D-galactose

Evgeny Vinogradov,[a] Anton Korenevsky,[b] Terry J. Beveridge[b]

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(1*S*)-GalNAc*o*-(1→4,6)-α-Gal-(1→6)-α-Gal-(1→3)-α-Gal-(1-*P*-3)-α-DDHep-(1→5)-α-8-aminoKdo4R-(2→6)-β-GlcN4*P*-(1→6)-α-GlcN1*P*, where R is *P* or Et*NPP*, (1*S*)-GalNAc*o* is GalNAc in a open-chain form.

Carbohydr. Res. **2003,** *338*, 1999

Structure of the *N*-acetyl-L-rhamnosamine-containing O-polysaccharide of *Proteus vulgaris* TG 155 from a new *Proteus* serogroup, O55

Anna N. Kondakova,[a] Katarzyna Kolodziejska,[b] Krystyna Zych,[b]
Sof'ya N. Senchenkova,[a] Alexander S. Shashkov,[a] Yuriy A. Knirel,[a] Zygmunt Sidorczyk[b]

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[b]*Department of General Microbiology, Institute of Microbiology and Immunology, University of Lódz, Lódz, Poland*

α-L-Rha*p*NAc
1
↓
4
→3)-α-D-Qui*p*NAc-(1→3)-α-D-Glc*p*NAc-(1→3)-α-D-Gal*p*NAcA-(1→

The O-polysaccharide of the lipopolysacchride (LPS) of *Proteus vulgaris* TG 155 was established as shown above.

Carbohydr. Res. **2003,** *338*, 2005

The crystal structure of 1,2,3,4,6-*penta*-*O*-benzoyl-α-D-mannopyranose: observation of C–H···π interaction as a surrogate to O–H···O interaction of a free sugar

B. Muktha,[a] O. Srinivas,[b] M.R. Amresh,[b] T.N. Guru Row,[a] N. Jayaraman,[b] K. Sekar[c]
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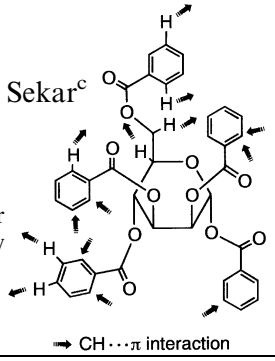
Single crystal X-ray analysis of the title compound reveals the complete control of molecular packing through an exclusive CH···π interaction. That this interaction can surrogate naturally occurring OH···O interaction is also observed.



Carbohydr. Res. **2003,** *338*, 2013

1,2-*O*-Trichloroethylidene acetal group protected 3,5-dieno-1,4-furanose derivatives

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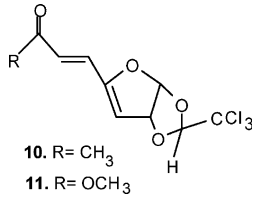

Carbohydr. Res. **2003,** *338*, 2017

Identification of a digalactosyl ononitol from seeds of adzuki bean (*Vigna angularis*)

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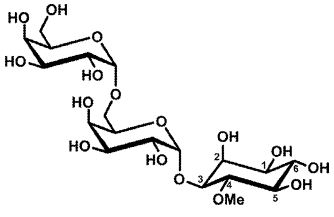

Carbohydr. Res. **2003,** *338*, 2021

NMR-based identification of cell wall galactomannan of *Streptomyces* sp. VKM Ac-2125

Alexander S. Shashkov,[a] Galina M. Streshinskaya,[b] Larisa N. Kosmachevskaya,[b] Sof'ya N. Senchenkova,[a] Lyudmila I. Evtushenko,[c] Irina B. Naumova[b]

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→6)-β-D-Gal*p*-(1→
3
↑
α-D-Man*p*-1

Carbohydr. Res. **2003,** *338*, 2025

Structure of the O-polysaccharide of *Erwinia carotovora* ssp. *carotovora* GSPB 436

Sof'ya N. Senchenkova,[a] Yuriy A. Knirel,[a] Alexander S. Shashkov,[a] Mamdoh Ahmed,[b] Athanasios Mavridis,[b] Klaus Rudolph[b]

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[b]*Institut für Pflanzenpathologie und Pflanzenschutz, Georg-August-Universität, D-37077 Göttingen, Germany*

α-D-Glc*p*-(1→3)┐
→3)-β-L-Rha*p*-(1→4)-α-L-Rha*p*-(1→3)-α-D-Fuc*p*-(1→

The O-polysaccharide of a phytopathogenic bacterium, *Erwinia carotovora* ssp. *carotovora* GSPB 436, was studied by sugar and methylation analysis, along with ^{1}H and ^{13}C NMR spectroscopy. The following structure of the branched tetrasaccharide repeating unit of the O-polysaccharide was established as shown above.

Carbohydr. Res. **2003,** *338*, 2029

Sugar complexes with neodymium nitrate. Spectroscopic and structural studies of two $Nd(NO_3)_3$–galactitol complexes

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