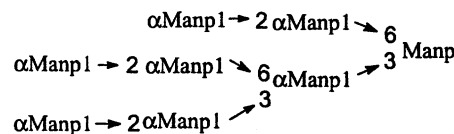
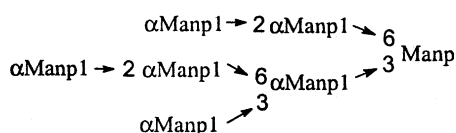


Efficient synthesis of a 3,6-branched mannose hepta- and octasaccharide

Carbohydr. Res. **2003**, 338, 2039

Jianjun Zhang, Zuchao Ma, Fanzuo Kong

Research Center for Eco-Environmental Sciences, Academia Sinica, Chinese Academy of Sciences, P.O. Box 2871, Beijing 100085, PR China



Highly efficient synthesis of alternate α - and β -(1 $\rightarrow$ 3)-linked glucose hepta- and octasaccharides

Carbohydr. Res. **2003**, 338, 2047

Ying Zeng, Fanzuo Kong

Research Center for Eco-Environmental Sciences, Academia Sinica, Chinese Academy of Sciences, P.O. Box 2871, Beijing 100085, PR China

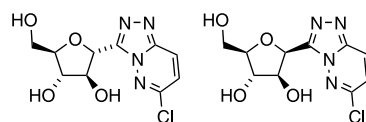
α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-1-OMP;
 β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-1-OMP;
 α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-1-OMP;
 β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-(1 $\rightarrow$ 3)- β Glc-(1 $\rightarrow$ 3)- α Glc-1-OMP.

Synthesis of 3-(α - and β -D-arabinofuranosyl)-6-chloro-1,2,4-triazolo[4,3-*b*]pyridazine

Carbohydr. Res. **2003**, 338, 2057

Martin Šala, Renata Jakše, Jurij Svete, Amalija Golobič, Ljubo Golič, Branko Stanovnik

Faculty of Chemistry and Chemical Technology, University of Ljubljana, Aškerčeva 5, P.O. Box 537, 1000 Ljubljana, Slovenia



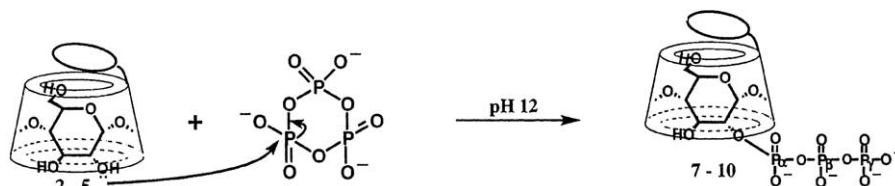
4 steps from D-glucose 4 steps from D-mannose

Stereoselective phosphorylation of branched cyclodextrins with inorganic *cyclo*-triphosphate

Carbohydr. Res. **2003**, 338, 2067

Hideko Inoue, Naoto Tone, Hirokazu Nakayama, Mitsutomo Tsuhako

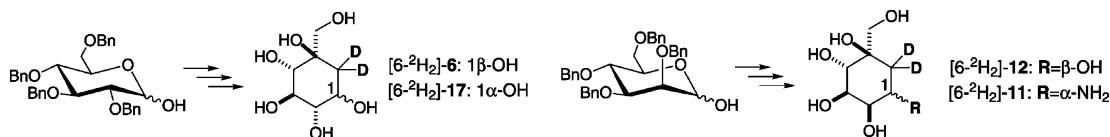
Department of Functional Molecular Chemistry, Kobe Pharmaceutical University, Kobe 658-8558, Japan



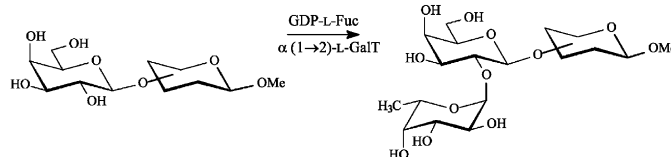
Biosynthetic studies on the α -glucosidase inhibitor acarbose: the chemical synthesis of isotopically labeled 2-*epi*-5-*epi*-valiolone analogs

Kenji Arakawa, Simeon G. Bowers, Benjamin Michels, Vu Trin, Taifo Mahmud[†]

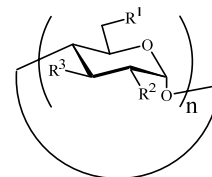
Department of Chemistry, University of Washington, Box 351700, Seattle, WA 98195-1700, USA



Fast and efficient synthesis of a novel homologous series of L-fucosylated trisaccharides using the *Helix pomatia* α -(1 $\rightarrow$ 2)-L-galactosyltransferase

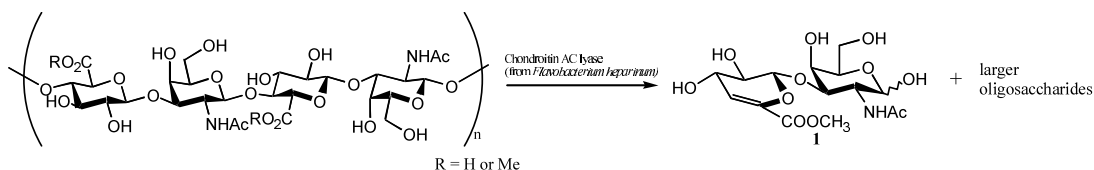
Angela Michelle Scheppokat,^a Hagen Bretting,^b Joachim Thiem^a^aInstitut für Organische Chemie, Universität Hamburg, Martin-Luther-King-Platz 6, D-20146 Hamburg, Germany^bZoologisches Institut, Universität Hamburg, Martin-Luther-King-Platz 3, D-20146 Hamburg, Germany

A sensitive and specific enzyme immunoassay for the detection of methyl ether derivatives of cyclomaltoheptaose

Florence Djedaïni-Pilard,^a Marie-Claire Nevers,^b Sandrine Weisse,^c
Jacques Grassi,^b Bruno Perly,^c Christophe Créminon^b^aLaboratoire des Glucides, Université de Picardie, F-80039 Amiens, France^bCEA, DRM, Service de Pharmacologie et d'Immunologie, CEA-Saclay, Batiment 136, F-91191 Gif sur Yvette, France^cCEA, DRECAM, Service de Chimie Moléculaire, CEA-Saclay, F-91191 Gif sur Yvette, France

n = 7 R¹ = R² = OCH₃ R³ = OH
 n = 7 R¹ = R² = R³ = OCH₃

Chondroitin O-methyl ester: an unusual substrate for chondroitin AC lyase

Fikri Y. Avci,^a Toshihiko Toida,^b Robert J. Linhardt^a^aDepartment of Chemistry, Rensselaer Polytechnic Institute, Troy, NY 12180-3590, USA^bDepartment of Bioanalytical Chemistry, Graduate School of Pharmaceutical Sciences, Chiba University, Chiba 263-8522, Japan

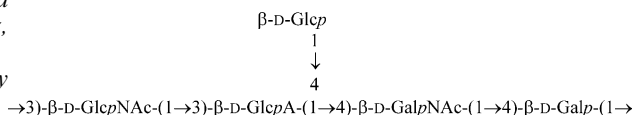
Structure of the O-polysaccharide of a serologically separate strain of *Proteus mirabilis*, TG 332, from a new proposed *Proteus* serogroup O50

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

^aDepartment of General Microbiology, Institute Microbiology and Immunology, University of Łódź, Banacha 12/16, 90-237 Łódź, Poland

^bN.D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, 119991 Moscow, Russian Federation

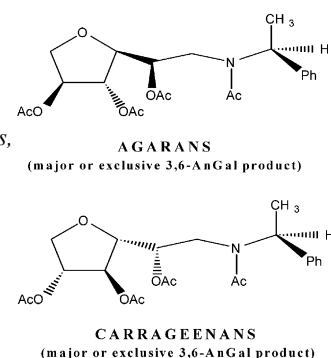
The O-polysaccharide, obtained by mild acid degradation of the lipopolysaccharide of *Proteus mirabilis*, is shown to be:



Determination of the configuration of 3,6-anhydrogalactose and cyclizable α -galactose 6-sulfate units in red seaweed galactans

Diego A. Navarro, Carlos A. Stortz

Departamento de Química Orgánica-CIHIDECAR, Facultad de Ciencias Exactas y Naturales, Univ. Buenos Aires, Pabellon 2, Ciudad Universitaria, 1428 Buenos Aires, Argentina



Crystal structures of O-acetylated 2-acylamino-2-deoxy-D-galactose derivatives

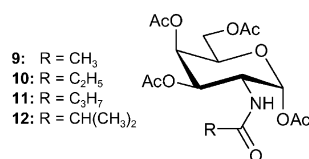
Thomas Mikeska,^a Martin Nieger,^b Heidi Mansikkamäki,^c Jörg Daniels,^b Thomas Kolter^a

^aKekulé-Institut für Organische Chemie und Biochemie der Universität, Gerhard-Domagk-Str.1, D-53121 Bonn, Germany

^bInstitut für Anorganische Chemie der Universität, Gerhard-Domagk-Str.1, D-53121 Bonn, Germany

^cDepartment of Chemistry, University of Jyväskylä, P.O. Box 35, FIN-40351 Jyväskylä, Finland

The X-ray structures of 1,3,4,6-tetra-O-acetyl-2-deoxy- α -D-galactopyranoside derivatives with four different 2-(acylamino) substituents have been determined with Mo K α radiation at 123 K.



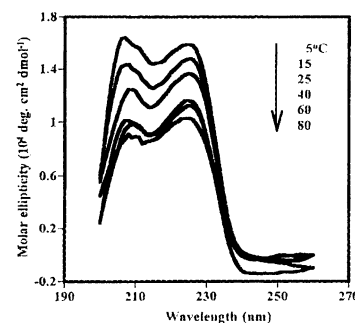
Helical structure of sugar-carrying polystyrene in aqueous solution by circular dichroism

Shojiro Shimojo,^a Chong-Su Cho,^b In-Kyu Park,^b Megumi Kunou,^a Mitsuaki Goto,^c Toshihiro Akaike^a

^aDepartment of Biomolecular Engineering, Tokyo Institute of Technology, 4259 Nagatsuta-cho Midori-ku, Yokohama 226-8501, Japan

^bSchool of Agricultural Biotechnology, Seoul National University, Kwonsun-gu, Suwon 441-744, Republic of Korea

^cBioQuest Research Ltd., Tokyo 107-0062, Japan



Atomic force microscopy of pea starch granules: granule architecture of wild-type parent, *r* and *rb* single mutants, and the *rrb* double mutant

Michael J. Ridout,^a Mary L. Parker,^a Cliff L. Hedley,^b Tatiana Y. Bogracheva,^b Victor J. Morris^a

^a*Institute of Food Research, Norwich Laboratory, Norwich Research Park, Colney, Norwich NR4 7UA, UK*

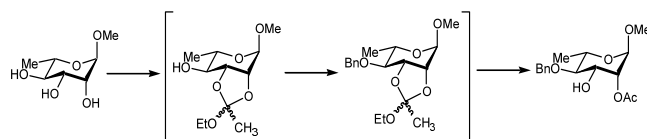
^bJohn Innes Centre, Norwich Research Park, Colney, Norwich NR4 7UH, UK

AFM studies on wild-type and near-isogenic pea starch mutants has revealed new insights into granule architecture and identified specific changes in granule structure caused by defined mutations in the biosynthetic pathway.

A simple one-pot method for the synthesis of partially protected mono- and disaccharide building blocks using an orthoesterification–benzylation–orthoester rearrangement approach

Balaram Mukhopadhyay, Robert A. Field

Centre for Carbohydrate Chemistry, School of Chemical Sciences and Pharmacy, University of East Anglia, Norwich NR4 7TJ, UK



Structure of the O-polysaccharide from the lipopolysaccharide of *Hafnia alvei* strain PCM 1546

Ewa Katzenellenbogen,^a Nina A. Kocharova,^b George V. Zatonsky,^b Agnieszka Korzeniowska-Kowal,^a Alexander S. Shashkov,^b Yuriv A. Knirel^b

^aL. Hirszfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Weigla 12, 53-114 Wrocław, Poland

^bN.D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Leninsky Prospekt 47, Moscow 119991, Russian Federation

