

Carbohydrate Research Vol. 343, No. 17, 2008

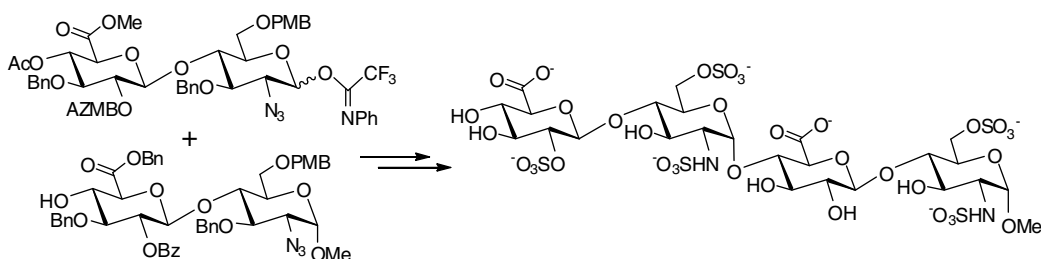
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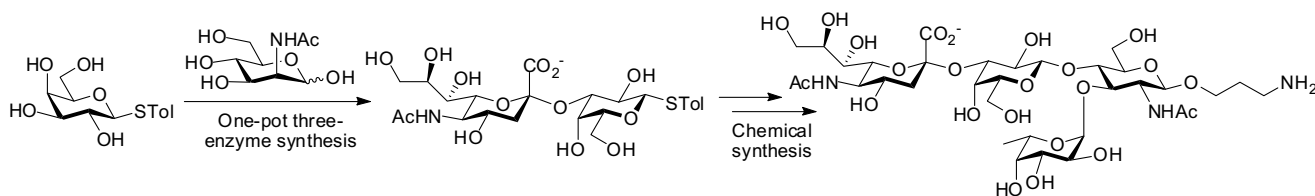
Jianfang Chen, Ying Zhou, Chen Chen, Weichang Xu, Biao Yu *



Chemical preparation of sialyl Lewis x using an enzymatically synthesized sialoside building block

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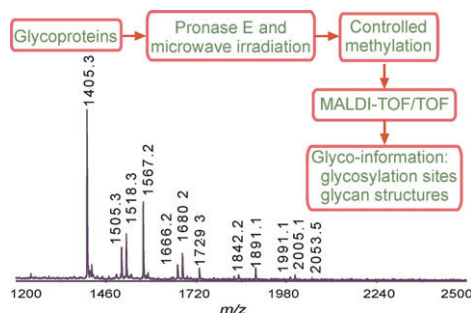
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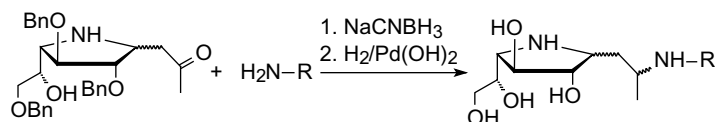
Xin Liu, Kenneth Chan, Ivan K. Chu, Jianjun Li *



Synthesis of iminoalditol analogues of galactofuranosides and their activities against glycosidases

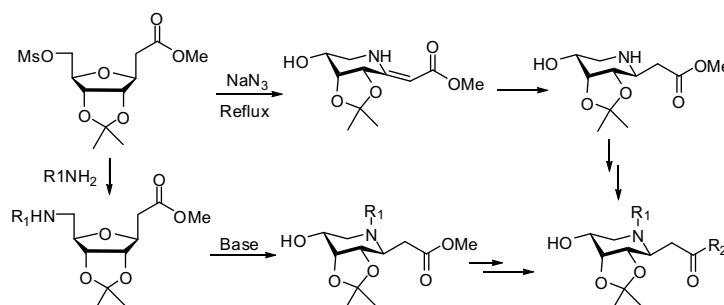
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Mahendra Sandbhor, Milan Bhasin, Dean T. Williams, Margaret Hsieh, Shih-Hsiung Wu, Wei Zou *

**Synthesis of iminoalditol and N-alkyl iminoalditol derivatives of ribopyranosides**

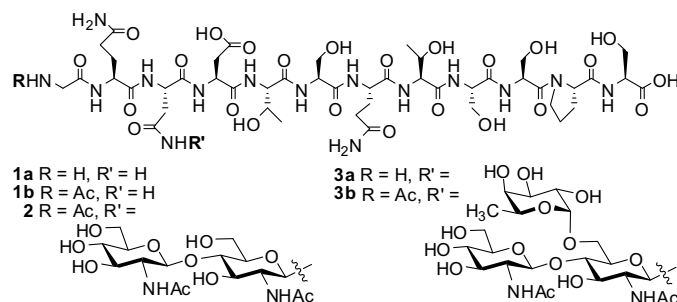
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An-Tai Wu *, Pey-Jiuann Wu, Wei Zou, Jiun-Ly Chir, Yuan-Chun Chang, Shuan-Yi Tsai, Chao-Qi Guo, Wei-Shuan Chang, Yu-Chi Hsieh

**Synthesis and CD structural studies of CD52 peptides and glycopeptides**

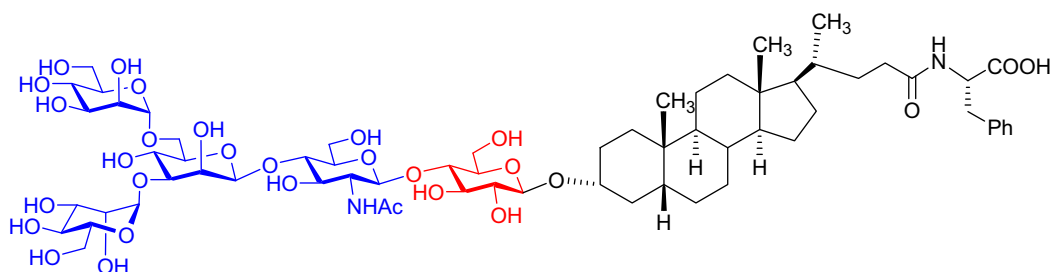
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Benjamin M. Swarts, Yu-Cheng Chang, Honggang Hu, Zhongwu Guo *

**Introducing N-glycans into natural products through a chemoenzymatic approach**

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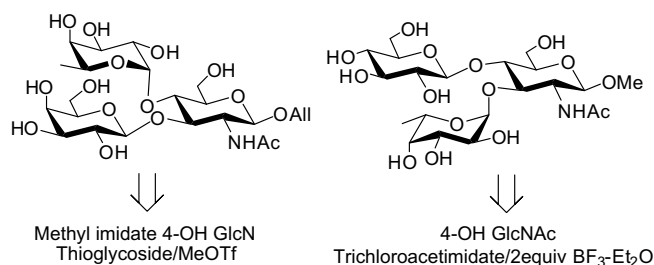
Wei Huang, Hirofumi Ochiai, Xinyu Zhang, Lai-Xi Wang *



Application and limitations of the methyl imidate protection strategy of *N*-acetylglucosamine for glycosylations at O-4: synthesis of Lewis A and Lewis X trisaccharide analogues

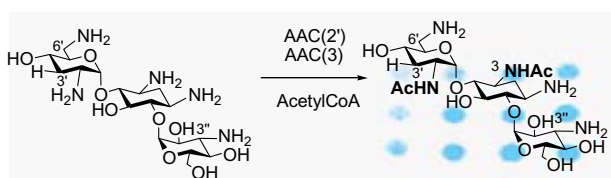
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Jenifer L. Hendel, Anderson Cheng, France-Isabelle Auzanneau *

**Studying aminoglycoside modification by the acetyltransferase class of resistance-causing enzymes via microarray**

pp 2924–2931

Olivia J. Barrett, Alexei Pushechnikov, Meilan Wu, Matthew D. Disney *

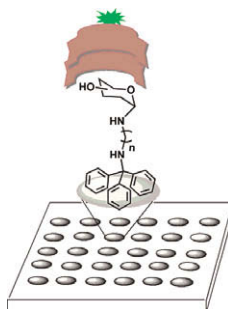


Aminoglycoside microarrays have been used to study modification of sugars by the acetyltransferase class of resistance enzymes.

**Trityl-derivatized carbohydrates immobilized on a polystyrene microplate**

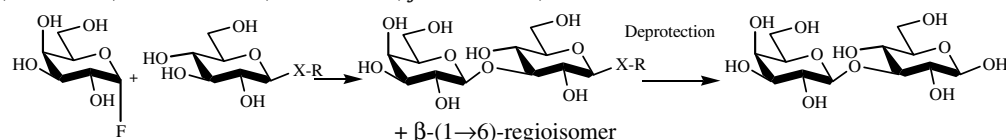
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Lan Zou, Hei-Leung Pang, Pak-Ho Chan, Zhi-Shu Huang, Lian-Quan Gu, Kwok-Yin Wong *

**Engineering of glucoside acceptors for the regioselective synthesis of β -(1→3)-disaccharides with glycosynthases**

pp 2939–2946

Zsuzanna Marton, Vinh Tran, Charles Tellier, Michel Dion, Jullien Drone, Claude Rabiller *

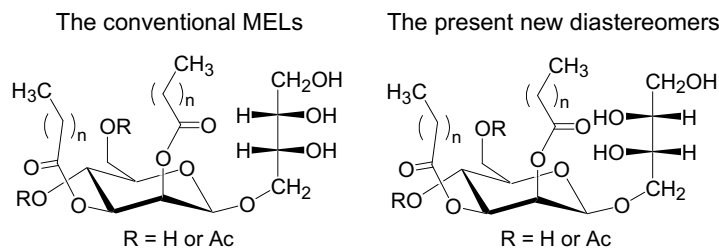


Catalyst : Glycosynthase E338G from <i>Thermus thermophilus</i>	X	R	% regioselectivity/ % yield	Deprotection conditions	Deprotection
	O	C ₆ H ₅	100 / 90	H ₃ O ⁺	Non-chem oselective
	O	CH ₂ -C ₆ H ₅	50 / 60	H ₂ / Pd	quantitative
	O		84 / 70	H ₂ / Pd	quantitative
	S	C ₆ H ₅	94 / 94	NBS / H ₂ O	quantitative

A basidiomycetous yeast, *Pseudozyma crassa*, produces novel diastereomers of conventional mannosylerythritol lipids as glycolipid biosurfactants

pp 2947–2955

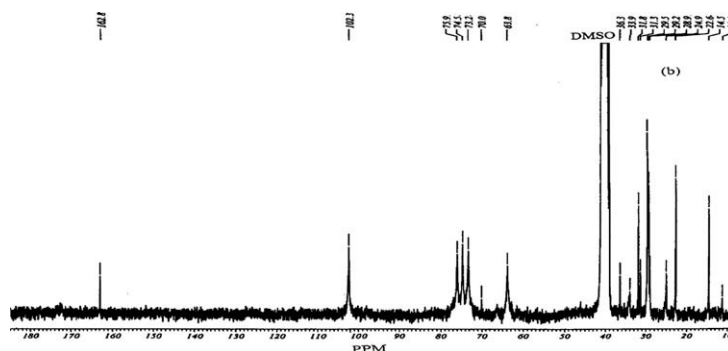
Tokuma Fukuoka, Mayo Kawamura, Tomotake Morita, Tomohiro Imura, Hideki Sakai, Masahiko Abe, Dai Kitamoto *



Rapid homogeneous lauroylation of wheat straw hemicelluloses under mild conditions

pp 2956–2962

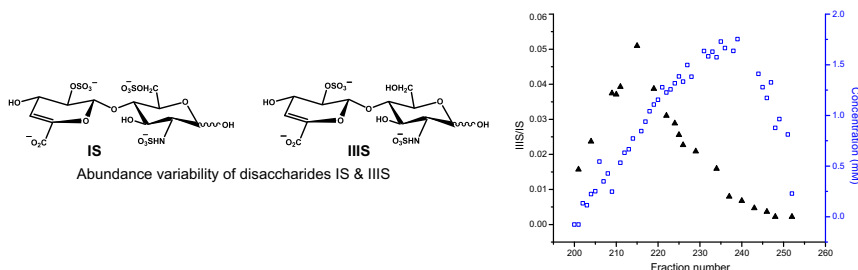
Feng Peng, Jun-Li Ren, Bai Peng, Feng Xu *, Run-Cang Sun, Jin-Xia Sun



Heterogeneity of depolymerized heparin SEC fractions: to pool or not to pool?

pp 2963–2970

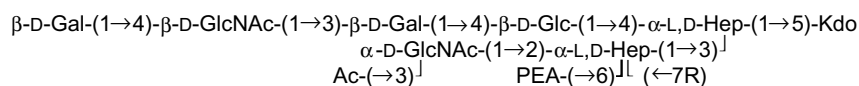
Stacie L. Eldridge, Albert K. Korir, Sarah M. Gutierrez, Fernando Campos, John F. K. Limtiaco, Cynthia K. Larive *



The structure of the L9 immunotype lipooligosaccharide from *Neisseria meningitidis* NMA Z2491

pp 2971–2979

Biswa Choudhury, Charlene M. Kahler, Anup Datta, David S. Stephens, Russell W. Carlson *

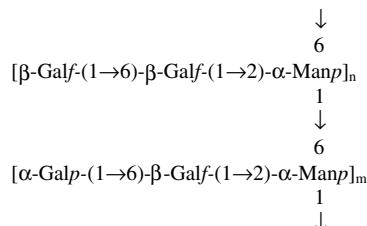


Structural elucidation of a cell wall fungal polysaccharide isolated from *Ustilaginoidea virens*, a pathogenic fungus of *Oriza sativa* and *Zea mays*

pp 2980–2984

J. A. Leal, Jesús Jiménez-Barbero, Manuel Bernabé, Alicia Prieto *

The idealized repeating unit of the polysaccharide isolated from *Ustilaginoidea virens* is proposed to be:

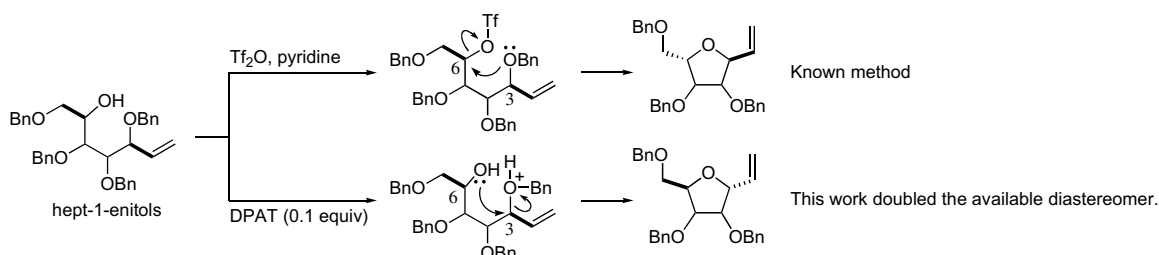


NOTES

Highly stereoselective synthesis of C-vinyl furanosides through acid-catalyzed S_N2 inversion at the C-3 position of 1,2-dideoxy-hept-1-enitols

pp 2985–2988

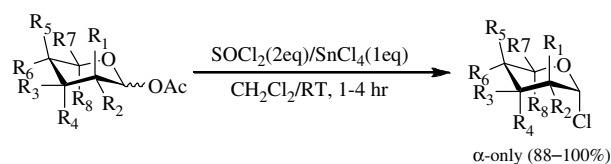
Hitoshi Tsuchiya, Noriaki Asakura, Yasunori Ikeda, Hidetoshi Yamada *



A facile preparation of peracylated α -aldopyranosyl chlorides with thionyl chloride and tin tetrachloride

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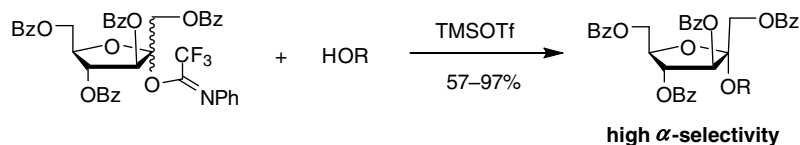
Qingbing Wang, Jie Fu, Jianbo Zhang *



Synthesis of fructofuranosides: efficient glycosylation with *N*-phenyltrifluoroacetimidate as the leaving group

pp 2992–2996

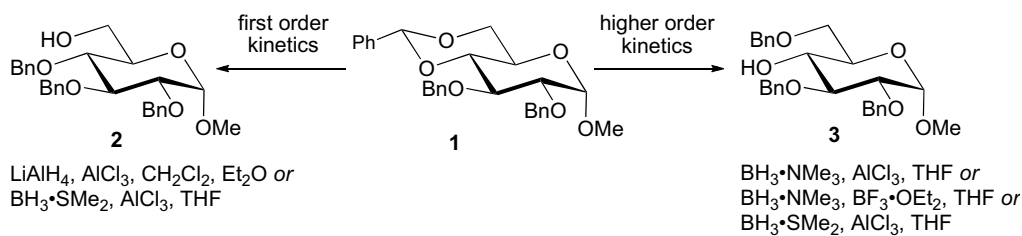
Gaoyan Lian, Qi Gao, Feng Lin *



Reductive openings of benzylidene acetals. Kinetic studies of borane and alane activation by Lewis acids

pp 2997–3000

Richard Johnsson, Risto Cukalevski, Fanny Dragén, Damir Ivanisevic, Ida Johansson, Linn Petersson, Erika Elgstrand Wettergren, Ka Bo Yam, Beatrice Yang, Ulf Ellervik *

**Expression, purification and characterization of *endo*-type chitosanase of *Aspergillus* sp. CJ22-326 from *Escherichia coli***

pp 3001–3004

Songlin Li, Liang Chen, Chen Wang, Wenshui Xia *

The cDNA encoding *endo*-chitosanase from *Aspergillus* sp. CJ22-326 was cloned, expressed and its product was purified from *E. coli*. Chitosanase activity of the recombinant protein was much higher than other heterologous expression fungal proteins.

X-ray crystallographic and high-resolution NMR spectroscopy characterization of 4,6-di-O-acetyl-2,3-dideoxy- α -D-erythro-hex-2-enopyranosyl sulfamide

pp 3005–3008

Pedro A. Colinas *, Rodolfo D. Bravo, Gustavo A. Echeverría *

Single crystal X-ray diffraction and high-resolution ¹H and ¹³C NMR spectral data for 4,6-di-O-acetyl-2,3-dideoxy- α -D-erythro-hex-2-enopyranosyl sulfamide, a selective inhibitor of carbonic anhydrase isozyme IX, are reported. The ⁰H₅ was found to be the preferred form for this glycosyl sulfamide, both in the crystal lattice and in solution.



*Corresponding author

+ Supplementary data available via ScienceDirect

COVER

The graphic represents a molecular dynamics simulation of water density around the disaccharide α -D-Araf-(1 $\rightarrow$ 5)- α -D-Araf-OCH₃, highlighting the interglycosidic linkage. The red clouds represent regions where the probability of finding an oxygen atom is high while the gray clouds are for hydrogen atoms. This work is the result of a collaboration in the Alberta Ingenuity Centre for Carbohydrate Science and Department of Chemistry at the University of Alberta between the groups of Pierre-Nicolas Roy and Todd L. Lowary (Castillo, N.; Roy, P. N.; Lowary, T. L. Manuscript in Preparation).

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Abstracted/Indexed in: Chem. Abstr.; Curr. Contents: Phys., Chem. & Earth Sci. Life Sci. Current Awareness in Bio. Sci. (CABS). Science Citation Index. Full texts are incorporated in CJESEVIER, a file in the Chemical Journals Online database which is available on STN[®] International. Also covered in the abstract and citation database SCOPUS[®]. Full text available on ScienceDirect[®]



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ISSN 0008-6215