

Carbohydrate Research Vol. 344, Issue 9, 2009

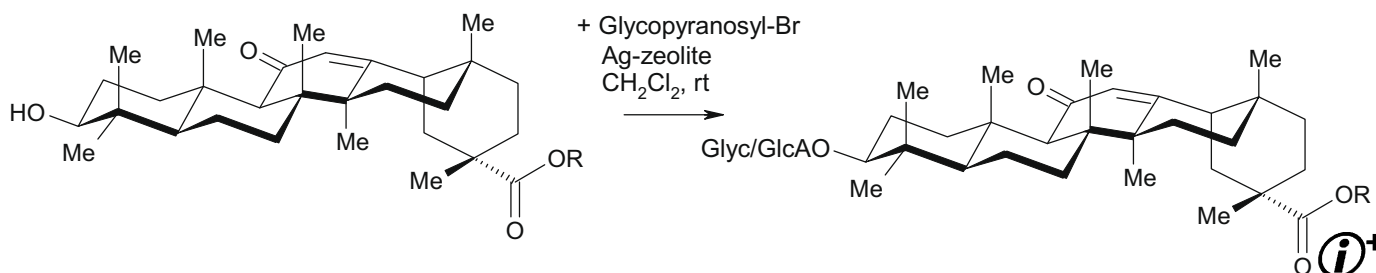
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Full Papers

Efficient synthesis of glycyrrhetic acid glycoside/glucuronide derivatives using silver zeolite as promoter

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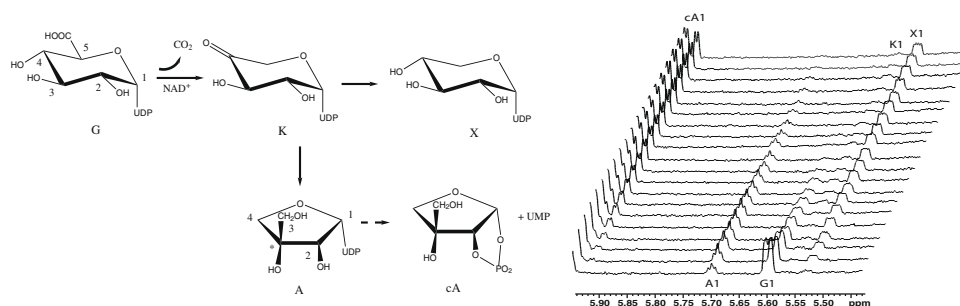
Maria Carmen del Ruiz Ruiz, Hassan Amer, Christian Stanetty, Igor Beseda, Laszlo Czollner, Priti Shah, Ulrich Jordis, Bernhard Kueenburg, Dirk Claßen-Houben, Andreas Hofinger, Paul Kosma *



Real-time NMR monitoring of intermediates and labile products of the bifunctional enzyme UDP-apiose/UDP-xylose synthase

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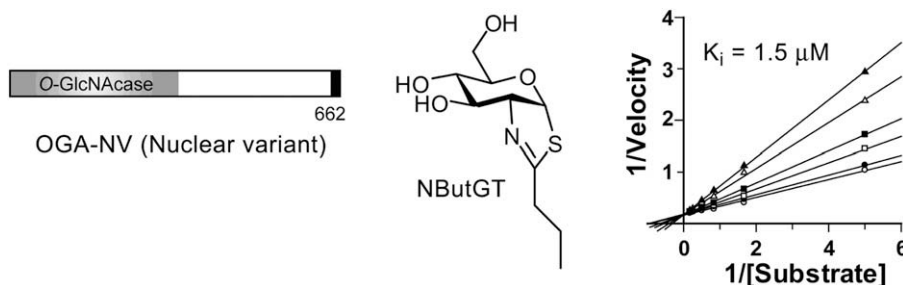
Paul Guyett, John Glushka, Xiaogang Gu, Maor Bar-Peled *



Enzymatic characterization and inhibition of the nuclear variant of human O-GlcNAcase

pp 1079–1084

Matthew S. Macauley, David J. Vocadlo *

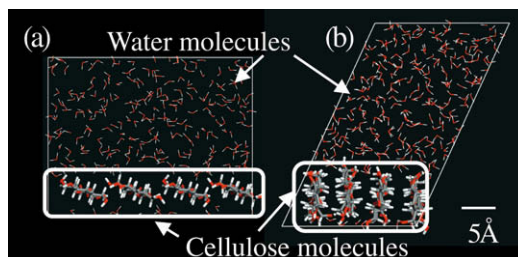


The short nuclear variant of O-GlcNAcase (OGA) carries out catalysis via similar transition states as full-length OGA and is also effectively inhibited by known inhibitors of full-length OGA.

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Hitomi Miyamoto, Myco Umemura, Takeshi Aoyagi, Chihiro Yamane *, Kazuyoshi Ueda, Kazuhiro Takahashi

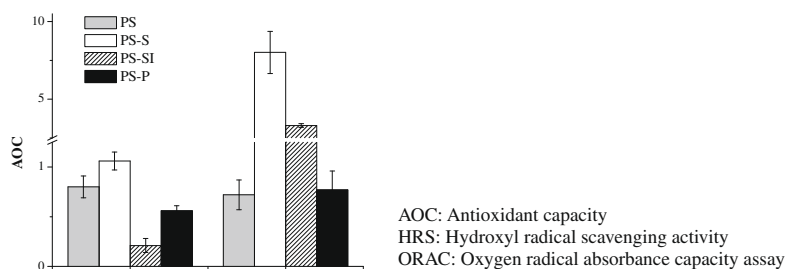


Changes in hydrogen-bonded mini-sheets in water media: (a), before calculation; (b), after 1 ns calculation.

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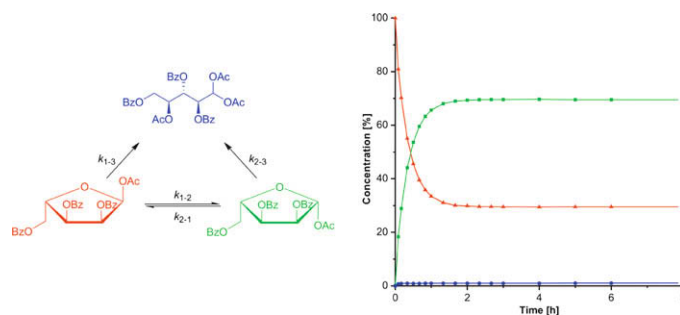
M.J. Aguirre, M. Isaacs, B. Matsuhiro *, L. Mendoza, E.A. Zúñiga



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Jonas J. Forsman, Johan Wärnå, Dmitry Yu. Murzin, Reko Leino *

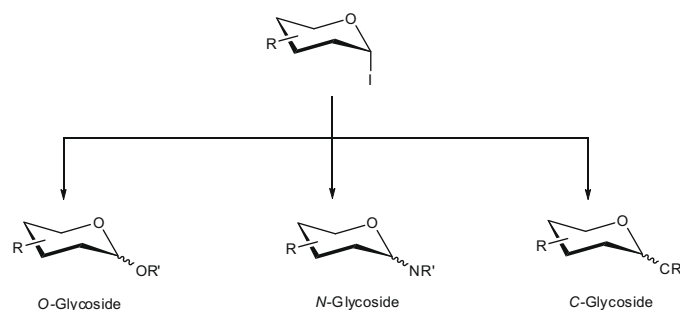


Mini Review

Glycosyl iodides. History and recent advances

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Peter J. Meloncelli, Alan D. Martin, Todd L. Lowary *

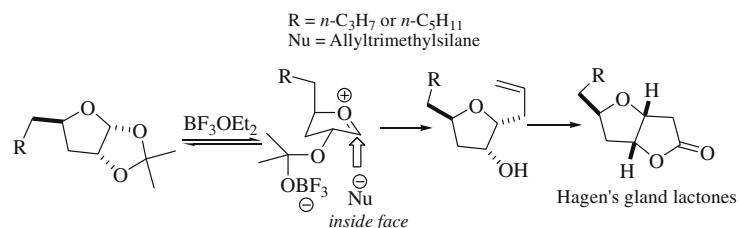


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A short and practical synthesis of two Hagen's gland lactones

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Evelyn Paz-Morales, Ruth Melendres, Fernando Sartillo-Piscil *

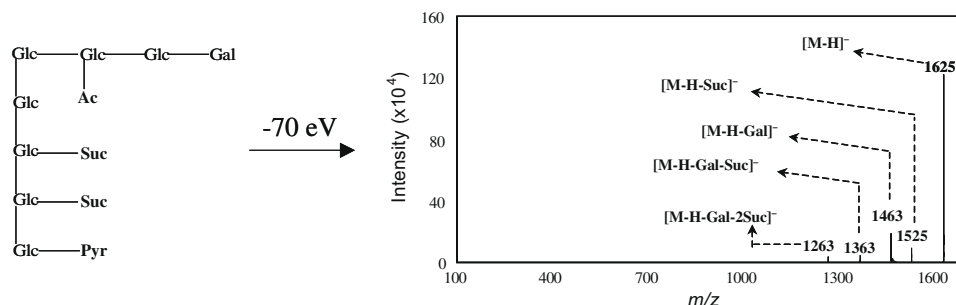


A short and practical synthesis of Hagen's gland lactones is reported.

Low-energy collision-activated dissociation electrospray ionization tandem mass spectrometric analysis of *Sinorhizobial* succinoglycan monomers

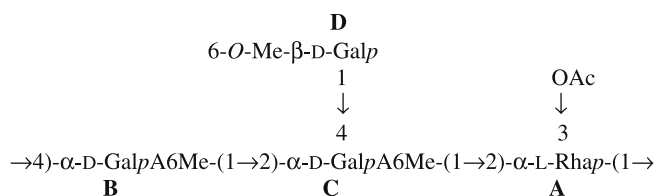
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Sanghoo Lee, Soonho Kwon, Chanho Kwon, Seunho Jung *

**Structural investigation of a heteropolysaccharide isolated from the green fruits of *Capsicum annuum***

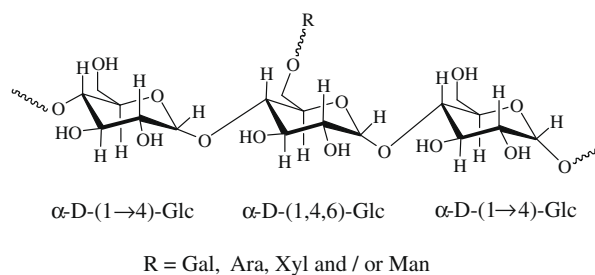
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Subhas Mondal, Debsankar Das, Debabrata Maiti, Sadhan K. Roy, Syed S. Islam *

**Chemical structures of water-soluble polysaccharides from *Rhizoma Panacis Japonici***

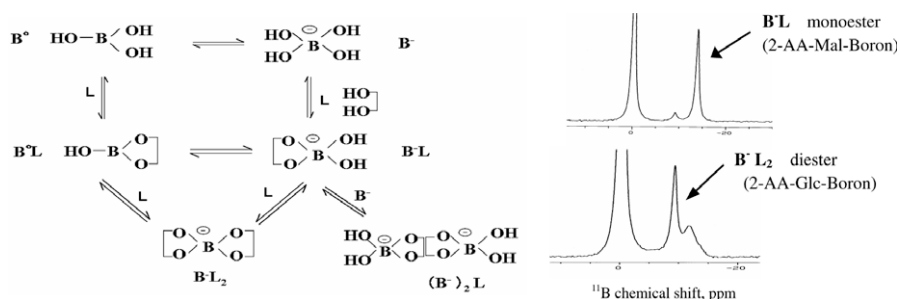
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Zhiping Huang, Lina Zhang *



Influence of borate complexation on the electrophoretic behavior of 2-AA derivatized saccharides in capillary electrophoresis

pp 1141–1145

Jianxin Chen, Liping He ^{*}, Mitsuru Abo, Jinghua Zhang, Kae Sato, Akira Okubo^{*}Corresponding author

Supplementary data available via ScienceDirect

COVER

Shown is a fluorescence image of cell-surface glycans in a 3-day old zebrafish larva. Different colors represent glycans biosynthesized at different times in development. The glycans were imaged in live zebrafish using a two-step approach termed the bioorthogonal chemical reporter strategy. Embryos were first metabolically labeled with the unnatural monosaccharide *N*-azidoacetylgalactosamine, which targets the core position of mucin-type O-glycans; subsequently, the azide-containing glycans were reacted with a cyclooctyne–fluorophore conjugate by copper-free click chemistry, a step that was repeated multiple times to target temporally distinct glycan pools with different fluorophores. This work is the result of a collaboration between the Departments of Chemistry and Molecular and Cell Biology at the University of California, Berkeley [Laughlin, S. T.; Baskin, J. M.; Amacher, S. L.; Bertozzi, C. R. *Science* **2008**, 320, 664].

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