Graphical Abstracts

Carbohydr. Res. **2002,** *337,* 1

Selective epimerization of L-*chiro*-inositol to L-*muco*- and D-*chiro*-inositol derivatives

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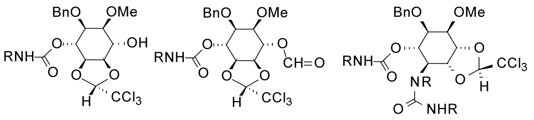

Carbohydr. Res. **2002,** *337,* 11

Synthesis of α-lactosyl-(1 → 3)-L-*glycero*-α-D-*manno*-heptopyranoside, a partial oligosaccharide structure expressed within the lipooligosaccharide produced by *Neisseria gonorrhoeae* strain 15253

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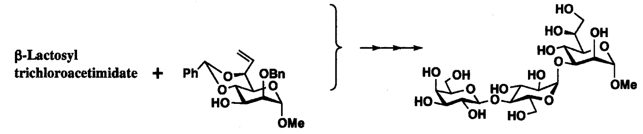

Carbohydr. Res. **2002,** *337,* 21

The saccharide–hydrazide linkage: molecular and crystal structures of the semicarbazide derivatives of D-glucose, D-galactose, and D-xylose, including a ‘forbidden’ conformation of the galactose derivative

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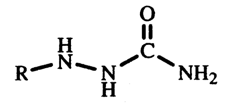
The structures **1**–**3** have been determined by X-ray crystallography. Glucose derivative **1** is a dihydrate. Galactose derivative **2** crystallizes with two molecules in the asymmetric unit, one of which has the *gg* side chain conformation. In all three structures, the carbonyl oxygen atom serves as a strong H-bond acceptor. It is likely to play a similar role in intermolecular interactions in macromolecular systems.



$R{-}NH{-}NH{-}C(=O){-}NH_2$

1 R = β-D-glucopyranosyl
2 R = β-D-galactopyranosyl
3 R = β-D-xylopyranosyl

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Bromonium ion-promoted glycosidic bond formation and simultaneous bromination of an activated aryl aglycon

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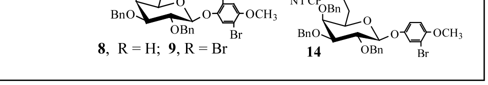
N-Bromosuccinimide (NBS) together with a catalytic amount of Me_3SiOTf was found to be effective for the activation of thioglycosides. With the introduction of the glycosidic bond, bromination on the activated aromatic ring of the glycosyl acceptor was observed.



Carbohydr. Res. **2002**, *337*, 37

Synthesis and biological evaluation of a radiolabeled analog of methyl 2-acetamido-2,4-dideoxy-β-D-*xylo*-hexopyranoside directed towards influencing cellular glycosaminoglycan biosynthesis

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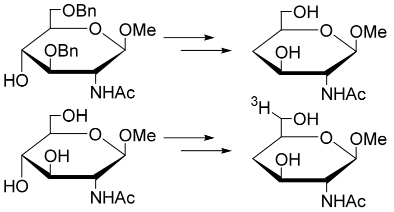

The title compounds were synthesized and evaluated as inhibitors of hepatocyte cellular glycosaminoglycan biosynthesis.

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Molecular structure of the rhamsan-like exocellular polysaccharide RMDP17 from *Sphingomonas paucimobilis*

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X-Ray diffraction analysis reveals that RMDP17, a 2-deoxy rhamsan analog, adopts a gellan-like, double helix. The side chain of the branched polymer is hydrogen bonded to the main chain. Sodium ions, linked to the carboxylate groups, promote the association of helices via water molecules. Two helices occupy a trigonal unit cell in an antiparallel fashion connected by a series of hydrogen bonds involving main chain and side chain atoms, as well as some water bridges.

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Sulfated polysaccharides from the red seaweed *Georgiella confluens*

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Georgiella confluens biosynthesizes highly methylated agarans, with a low 3,6-anhydrogalactose content, and an unusual substitution pattern: sulfation mainly at the 3-position of α-L-galactose and xylose side chains at the 4-position of the β-D-galactose.

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Regioselective synthesis of alditol vicinal bis-cyclic thionocarbonates via alditol stannylene acetal complexes as a short and efficient route to α,ω-diiodoalditol derivatives

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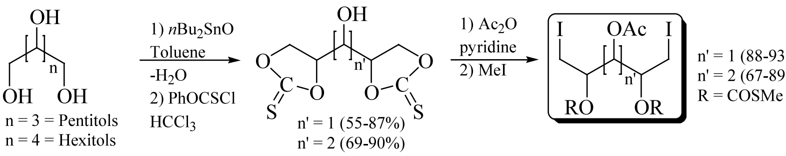

Carbohydr. Res. **2002,** *337,* 75

(±)-1,2:5,6-Di-*O*-isopropylidene-*myo*-inositol and (±)-6-*O*-benzoyl-1,2:4,5-di-*O*-isopropylidene-*myo*-inositol: a practical preparation of key intermediates for *myo*-inositol phosphates

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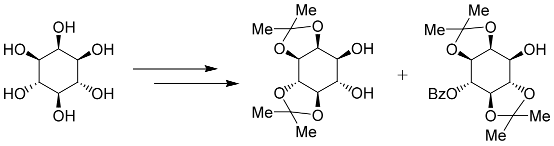

Carbohydr. Res. **2002,** *337,* 79

Crystal structure of 4,6-*O*-ethylidene-*N*-(2-hydroxybenzylidene)-β-D-glucopyranosylamine

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