DESCRIPTION

*Carbohydrate Research* publishes outstanding and timely research reports on **molecular aspects of carbohydrate chemistry, biochemistry, chemical biology and glycobiology**.

Areas of interest include:

- Sugars, glycosides and their derivatives; oligo- and poly-saccharides; glycoconjugates
- Chemical and enzymatic synthesis of carbohydrate-containing molecules
- Isolation and structural characterization of novel carbohydrate-containing molecules
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- Glycobiology, glycan metabolism and biosynthesis
- Glycomics and glycoinformatics
- Molecular aspects of glycoimmunochemistry
- Molecular aspects of glyconanoparticles and carbohydrate materials

The journal includes full-length research papers, reviews and notes, all of which are subjected to rigorous peer review prior to acceptance.

The editors have compiled a selection of articles, which reflect the redefined scope of Carbohydrate Research - we invite you to view the selection [here](#) and download the articles for free for a limited time.

AUDIENCE

Chemists, Biologists, Biochemists and Medical Researchers/Scientists involved in studies of molecular aspects of glycoscience.

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INTRODUCTION
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Title Compounds

3.1.1. Methyl 6-O-tert-butyldimethylsilyl-β-D-allypyranoside (4).

Note that the (numbered) compound is an example of a title compound, which should satisfy certain criteria if it is to be listed this way. Convincing evidence for identity and purity must be presented for all new carbohydrate derivatives listed as title compounds. Ordinarily, identity is established by NMR and mass spectral data. As evidence of purity authors are required to include an elemental (combustion) analysis (minimally C and H), with values deviating from the theoretical not more than 0.4% absolute. When a C and H analysis is not feasible (e.g., very small amounts of material available), the criteria used to assess purity should be specified; these should include NMR observations (absence of extraneous lines in a spectrum run at high sensitivity) and chromatographic data (GLC, HPLC, or TLC at high sensitivity). Also desirable are m/z values from mass spectra.
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**Nomenclature**

**Listing of Physical Data.** The preferred order is: mp (if applicable); [α]D (normally required for chiral compounds); Rf values (if pertinent); electronic-spectral data (UV, IR, if recorded); NMR data (if not presented in a table); MS. Note the use of semicolons to separate the successive items, and the use of ACS-approved abbreviations (see ACS Style Guide). Punctuate as in the following example:...gave needles: mp 8385 C; [α]D25110(c 1.4, CHCl3); IR (KBr); ν 1730 and 1260 (ester), 860 and 840 (Me3Si), and 710 cm-1(Ph); 1H NMR(CDC13, 600 MHz): δ...

If there are published physical constants (mp, [α]D, λmax, etc.) for the compound these should be cited, using the following format:

...allyl 2-acetamido-2-deoxy-[α]-L-glucopyranoside (1α): mp 175176 C, lit.6 172174 C; [α]D25 +155 (c 1.43, water), lit.6 +149; 1H NMR...

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Additional conventions used in describing higher order data include, for example, the designation of peaks in COSY spectra: Man H-1,2; HOHAHA tracking: GlcNAc H-2,3,4,5,6a,6b etc.; NOE contacts: Glc H-1, Xyl H-4,5e, etc. For designating resonances in oligosaccharides, the sugar units should be numbered with Roman numerals I, II, III, etc. beginning at the reducing (upstream) end of the molecule. (See IUPAC Nomenclature for Carbohydrates, 2-CARB-37.2.) The individual resonances are numbered with Roman numeral superscripts as, for example, the following: H-3I, H-3II, H-3 III.

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**Elemental analysis data**

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