LINUCS: Linear Notation for Unique description of

Carbohydr. Res. 2001, 336, 1

Carbohydrate Sequences

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 α -D-Manp-(1 \rightarrow 2)- α -D-Manp-(1 \rightarrow 6)+

 α -D-Manp-(1 \rightarrow 6)- β -D-Manp-(1 \rightarrow 4)- β -D-GlcpNA

 α -D-Manp-(1 \rightarrow 2)- α -D-Manp-(1 \rightarrow 3)+

resulting linear unique code using the reducing end as root:

 $[\][\beta\text{-D-Glc}pNA]\{[(4+1)][\beta\text{-D-Manp}]\{[(6+1)][\alpha\text{-D-Manp}]\{[(3+1)][\alpha\text{-D-Manp}]\{[(2+1)][\alpha\text{-D-Manp}][(2+1)][\alpha\text{-D-Manp}][\alpha\text{-D-Manp}][(2+1)][\alpha\text{-D-Manp}][(2+1)][\alpha\text{-D-Manp}][(2+1)][\alpha\text{-D-Manp}][(2+1)][\alpha\text{-D-Manp}][(2+1)][\alpha\text{-D-Manp}][(2+1)][\alpha\text{-D-Ma$

Study of glycosylation with N-trichloroacetyl-D-

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glucosamine derivatives in the syntheses of the spacer-armed pentasaccharides sialyl lacto-N-neotetraose and sially lacto-N-tetraose, their fragments, and analogues

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The synthesis of the title oligosaccharides included a systematic study of glycosylation with the donors shown of the acceptors derived from galactose, lactose, and lactosamine.

R = Ac, Bn X = SEt, Br, OAc, OC(NH)CCI₃

R¹ R² = benzylidene, Ad

Trapping of a covalent enzyme intermediate in the reaction

Carbohydr. Res. 2001, 336, 47

of Bacillus macerans cyclomaltodextrin glucanyltransferase with cyclomaltohexaose

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Laboratory of Carbohydrate Chemistry and Enzymology, Iowa State University, 4254 Molecular Biology Building, Ames, IA 50011, USA

> .Enz Trapped covalently linked enzyme intermediate -Enz

Sugar complexes with metal²⁺ ions: thermodynamic

Carbohydr. Res. 2001, 336, 55

parameters of associations of Ca²⁺, Mg²⁺ and Zn²⁺ with galactaric acid

Monica Saladini, Ledi Menabue, Erika Ferrari

Department of Chemistry, University of Modena and Reggio Emilia, Via Campi 183, 41100 Modena, Italy

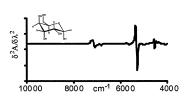
Rapid analysis of sugars in fruit juices by FT-NIR spectroscopy

Carbohydr. Res. 2001, 336, 63

Luis E. Rodriguez-Saona, a Fredrick S. Fry, Michael A. McLaughlin, Elizabeth M. Calveyb

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Simple partial least-squares regression FT-NIR models generated from transmittance spectra reproducibly and precisely predicted the individual sugar content in different juice matrices using an external calibration prepared with sugar standard solutions. The technique allowed for the rapid, accurate, non-destructive and simultaneous analysis of sugars in juices and could be applied in quality control of beverages or to monitor for adulteration and contamination.



Facile nitroxide-mediated oxidations of D-glucose to D-glucaric acid

Carbohydr. Res. 2001, 336, 75

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The oxidation of D-(+)-glucose to D-glucaric acid using a TEMPO-like nitroxide oxidation catalyst was carried out using several oxidizing agents and co-catalysts.

Syntheses and activities as trehalase inhibitors of N-arylglycosylamines derived from fluorinated anilines

Carbohydr. Res. 2001, 336, 79

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$$R^{2}$$
 R^{3}
 NH_{2}
 $+$
 $D-Sugar$
 R^{2}
 R^{3}
 R^{2}
 R^{3}
 R^{3}

R¹, R², R³ = H, F R⁴ = D -Glucopyranosyl, D-Galactopyranosyl, D-Mannopyranosyl, D-Xylopyranosyl