



Carbohydrate Research 303 (1997) III–IX

Subject index

4-Acetamido-4,6-dideoxyglucose

Structure of a phosphorylated polysaccharide from *Shewanella putre-faciens* strain S29 333

Acetolysis

Synthesis of chromogenic substrates of α -amylases on a cyclodextrin basis 407

Acetoxonium ion

Efficient synthesis of α , ω -dibromodideoxyalditols as precursors for α , ω -dithioalkylalditols 359

N-Acetylglucosaminyltransferase-V

Synthesis and evaluation of eight aminodeoxy trisaccharide inhibitors for N-acetylglucosaminyltransferase-V 283

Adaptation

Confirmation and complete ¹H and ¹³C NMR assignment of the structure of peptidoglycan from *Sarcina ventriculi*, a highly adaptable Gram-positive bacterium 103

Affinity

p-Aminophenyl 1-thio-β-D-cellobioside: Synthesis and application in affinity chromatography of exo-type cellulases 255

AFM

Unexpected branching in pectin observed by atomic force microscopy 251

Agarosc

Anhydro sugar and linkage contributions to circular dichroism of agarose and carrageenan, with conformational implications 73

Aggregation

Molecular weight and aggregation behaviour in solution of β -D-glucan from *Poria cocos* sclerotium 193

Alditols

Efficient synthesis of α , ω -dibromodideoxyalditols as precursors for α , ω -dibromodideoxyalditols 359

Aldohexoses

Synthesis, purification and liquid-crystalline behaviour of several alkyl I-thio-D-glycopyranosides 423

Alpha-amylase

Study of the action of human salivary alpha-amylase on 2-chloro-4-nitrophenyl α -maltotrioside in the presence of potassium thiocyanate 219

Amino acid

Preparation and complexation ability of zwitterionic derivatives of cyclodextrins 229

Amino sugars

A mild one-step selective conversion of primary hydroxyl groups into azides in mono- and oligo-saccharides 367

Amphiphile

Synthesis, purification and liquid-crystalline behaviour of several alkyl 1-thio-D-glycopyranosides 423

α-Amylase substrate

Synthesis of chromogenic substrates of α -amylases on a cyclodextrin basis 407

1,3-Anhydro- α -D-altropyranoside

Synthesis of thromboxane A₂ models from glucose 417

Anhydro sugars

Anhydro sugar and linkage contributions to circular dichroism of agarose and carrageenan, with conformational implications 73

Antisense

Synthesis and evaluation of glucuronic acid derivatives as alkylating agents for the reversible masking of internucleoside groups of antisense oligonucleotides 17

Antiviral agents

Synthesis of L-ribofuranosyl C-nucleosides 33

L-Arabinose

Synthesis, purification and liquid-crystalline behaviour of several alkyl 1-thio-D-glycopyranosides 423

Arabinoxylan

Oxidative cross-linking of corn bran hemicellulose: formation of ferulic acid dehydrodimers 459

Arsonium ylides

Réaction d'aldoses partiellement protégés avec des ylures d'arsenic stabilisés: synthèse de dérivés insaturés $\it E$ acycliques et de dérivés $\it C$ -glycosyle 1

Aspergillus aculeatus

Action patterns and mapping of the substrate-binding regions of endo- $(1 \rightarrow 5)$ - α -1-arabinanases from Aspergillus niger and Aspergillus aculeatus 207

Aspergillus niger

Action patterns and mapping of the substrate-binding regions of endo- $(1 \rightarrow 5)$ - α -L-arabinanases from *Aspergillus niger* and *Aspergillus aculeatus* 207

Benzoylation

A simple access to lactose-derived building blocks required in glyco-conjugate synthesis 39

Biotinylated T-antigen-serine

Unusual lactam formation occurring in the synthesis of a biotinylated T-antigen-serine derivative 25

Birch

Simplified preparation of the ginsenoside- ${\rm Rh}_2$ minor saponin from ginseng 449

β -lyxos

Manipulation of free carbohydrates via stannylene acetals. Preparation of β -per-O-acyl derivatives of D-mannose, L-rhamnose, 6-O-trityl-D-talose, and D-lyxose 239

B-mannose

Manipulation of free carbohydrates via stannylene acetals. Preparation of β -per-O-acyl derivatives of D-mannose, L-rhamnose, 6-O-trityl-D-talose, and D-lyxose 239

β -rhamnose, β -talose

Manipulation of free carbohydrates via stannylene acetals. Preparation of β -per-O-acyl derivatives of D-mannose, L-rhamnose, 6-O-trityl-D-talose, and D-lyxose 239

¹BuOK

 α - And β -hydrogen eliminations in the reactions of some 3-O-tri-flylglycosides with ^tBuOK and pyridine 267

Calonectria

Structural elucidation of acidic fungal polysaccharides isolated from the cell-wall of genera Cylindrocladium and Calonectria 67

IV Subject index

Carbene

 α - And β -hydrogen eliminations in the reactions of some 3-O-triflylglycosides with 'BuOK and pyridine 267

Carbohydrate oxidation

Oxidation of methyl and *n*-octyl α -D-glucopyranoside over graphite-supported platinum catalysts: effect of the alkyl substituent on activity and selectivity 175

Carbohydrates

The introduction of an hydrophobic chain on α , α -trehalose via the synthesis of acetals. The detergent properties of these derivatives 159

Carboxylates

Oxidation of methyl and n-octyl α -D-glucopyranoside over graphitesupported platinum catalysts: effect of the alkyl substituent on activity and selectivity 175

Carrageenan

Anhydro sugar and linkage contributions to circular dichroism of agarose and carrageenan, with conformational implications 73

Catalytic hydrogen transfer

A two step synthesis of 3-deoxy-D- or L-glycono-1,4-lactones and 2-O-alkyl-3-deoxy-D-glycono-1,4-lactones from D- or L-glyconolactones 185

β -Cellobiosyl fluoride heptaacetate

Thermal glycosylations: Reactions of β -cellobiosyl fluoride heptaacetate with tigogenin and its trimethylsilyl ether 347

Cellulose

A new family of oligosaccharides from the xyloglucan of *Hymenaea* courbaril L. (Leguminosae) cotyledons 233

Cell walls

Oxidative cross-linking of corn bran hemicellulose: formation of ferulic acid dehydrodimers 459

Chemoenzymatic synthesis

Unusual lactam formation occurring in the synthesis of a biotinylated T-antigen-serine derivative 25

Chitin

Heterogeneous N-deacetylation of chitin in alkaline solution 327 Chitin deacetylase

Deacetylation of chitin oligosaccharides of dp 2-4 by chitin deacetylase from *Colletotrichum lindemuthianum* 353

Chitin oligomers

Deacetylation of chitin oligosaccharides of dp 2-4 by chitin deacetylase from *Colletotrichum lindemuthianum* 353

Chitosan

Heterogeneous N-deacetylation of chitin in alkaline solution 327

2-Chloro-4-nitrophenyl α-maltotrioside

Study of the action of human salivary alpha-amylase on 2-chloro-4-nitrophenyl α -maltotrioside in the presence of potassium thiocyanate 219

Cholesterol-lowering agent

Thermal glycosylations: Reactions of β -cellobiosyl fluoride heptaacetate with tigogenin and its trimethylsilyl ether 347

Chromatography

Synthesis, purification and liquid-crystalline behaviour of several alkyl 1-thio-D-glycopyranosides 423

Circular dichroism

Anhydro sugar and linkage contributions to circular dichroism of agarose and carrageenan, with conformational implications 73

Clinical assay

Study of the action of human salivary alpha-amylase on 2-chloro-4-nitrophenyl α -maltotrioside in the presence of potassium thiocyanate 219

Colletotrichum lindemuthianum

Deacetylation of chitin oligosaccharides of dp 2-4 by chitin deacetylase from *Colletotrichum lindemuthianum* 353

Conformation

Studies on the synthesis of two tetrasaccharides and the reactivity difference between them 261

Corallinaceae

Structure of a sulfated xylogalactan from the calcareous red alga Corallina pilulifera P. et R. (Rhodophyta, Corallinaceae) 93

Corallina pilulifera

Structure of a sulfated xylogalactan from the calcareous red alga Corallina pilulifera P. et R. (Rhodophyta, Corallinaceae) 93

Cotyledons

A new family of oligosaccharides from the xyloglucan of *Hymenaea* courbaril L. (Leguminosae) cotyledons 233

Cross-linking

Oxidative cross-linking of corn bran hemicellulose: formation of ferulic acid dehydrodimers 459

Cyclic disaccharide

Synthesis and X-ray crystallographic study of cyclobis-(1 \rightarrow 2)- α -D-glucopyranosyl peracetate 165

Cyclobisglucosyl

Synthesis and X-ray crystallographic study of cyclobis- $(1 \rightarrow 2)$ - α -D-glucopyranosyl peracetate 165

Cyclodextrins

A mild one-step selective conversion of primary hydroxyl groups into azides in mono- and oligo-saccharides 367

Preparation and complexation ability of zwitterionic derivatives of cyclodextrins 229

Synthesis of chromogenic substrates of α -amylases on a cyclodextrin basis 407

Cylindrocladium

Structural elucidation of acidic fungal polysaccharides isolated from the cell-wall of genera *Cylindrocladium* and *Calonectria* 67

Cytotoxicity

Simplified preparation of the ginsenoside-Rh₂ minor saponin from ginseng 449

L-9-Deazaadenosine

Synthesis of L-ribofuranosyl C-nucleosides 33

3-Deoxy-glycono-1,4-lactones

A two step synthesis of 3-deoxy-D- or L-glycono-1,4-lactones and 2-O-alkyl-3-deoxy-D-glycono-1,4-lactones from D- or L-glyconolactones 185

Depolymerization

Effects of oxygen-derived free radicals on the molecular weight and the polydispersity of hyaluronan solutions 153

Detritylation

Detritylation of mono- and di-saccharide derivatives using ferric chloride hydrate 445

Deuterated compound

 α - And β -hydrogen eliminations in the reactions of some 3-O-triflylglycosides with ¹BuOK and pyridine 267

α , ω -Dibromoalditols

Efficient synthesis of α, ω -dibromodideoxyalditols as precursors for α, ω -dibromodileylalditols 359

2,6-dideoxy

Synthesis of thromboxane A₂ models from glucose 417

Diferulic acid

Oxidative cross-linking of corn bran hemicellulose: formation of ferulic acid dehydrodimers 459

Diffusion

Water diffusion in glasses of carbohydrates 199

2,6-Dioxabicyclo[3.1.1]heptanes

Synthesis of thromboxane A2 models from glucose 417

Disaccharide

The effects of organic solvents on the synthesis of galactose disaccharides using β -galactosidases 339

Disaccharide building blocks

A simple access to lactose-derived building blocks required in glyco-conjugate synthesis 39

α , ω -Dithioalkylalditols

Efficient synthesis of α , ω -dibromodideoxyalditols as precursors for α , ω -dithioalkylalditols 359