



Carbohydrate Research 280 (1996) C13-C17

Subject index

Acid hydrolysis

Degradation of double-stranded xanthan by hydrogen peroxide in the presence of ferrous ions: comparison to acid hydrolysis 85

'Adenophostin' analogue

Synthesis of methyl 2-O-allyl-(and 3-O-allyl-)-5-O-benzyl-β-D-ribofuranoside 209

Aldo-enol transition

Aldo-enol transition in periodate-oxidized dextrans 171

Aldopentono-1,4-thiolactone conformation

Conformation of 4-thio-L-lyxono-1,4-lactone in solution and in the crystalline state 187

Alkaline degradation

Alkaline degradation of glucose: effect of initial concentration of reactants 27

Alkaline degradation of fructofuranosides 47

n-Alkyl α -D-glucopyranosides

Effect of *n*-alkyl glucosides on waxy maize and wheat starch retrogradation 157

6-O-Alkyl-D-hexopyranosides

Synthesis of some methyl 6-O-alkyl- α -D-glycopyranosides 151

Allyl ethers

Synthesis of methyl 2-O-allyl-(and 3-O-allyl-)-5-O-benzyl-β-D-ribofuranoside 209

1,5-Anhydroalditols

Synthesis of partially protected 1,5-anhydroalditols by hydroboration of glycals 351

Anomerization

Transglycosylation reactions of permethylated methyl p-glucopyranosides with partially methylated 1,5-anhydroalditols 59

1-Aryl-6,7-dichloro-3-β-D-erythrofuranosylpyrazo - lo[3,4-b]quinoxaline

1-Aryl-6,7-dichloro-3- β -D-erythrofuranosyl-pyrazolo[3,4-b]quinoxaline C-nucleoside analogues 127

Capillary electrophoresis

Capillary electrophoresis separation of mucin motif MUC 5AC glycopeptides from in vitro O-glycosylation reactions 121

Cavity expansion

Heptakis[6-S-(2,3-dihydroxypropyl)-6-thio]-cyclomaltoheptaose and its sulfone: water-soluble β -cyclodextrin derivatives having modified polarity 315

Chloralose

Chlorodeoxy derivatives from p-galactochloralose 339

Chlorodeoxy sugars

Chlorodeoxy derivatives from p-galactochloralose 339

Circular dichroism

Vacuum ultraviolet circular dichroism of gellan-family polymer films from water and dimethyl sulfoxide 15

C-nucleoside analogues

1-Aryl-6,7-dichloro-3-β-D-erythrofuranosylpyrazolo[3,4-b]quinoxaline C-nucleoside analogues 127

Complex type

Rationally designed syntheses of high-mannose and complex type undecasaccharides 67

Conformational analysis

Two-bond ¹³C-¹³C spin-coupling constants in carbohydrates: effect of structure on coupling magnitude and sign 177

Coupling constants, two-bond ¹³C-¹³C spin-spin Two-bond ¹³C-¹³C spin-coupling constants in carbohydrates: effect of structure on coupling magnitude and sign 177

Cyclic acetals

Chlorodeoxy derivatives from p-galactochloralose 339 C14 Subject index

Cyclization

A method for the synthesis of C-(2-deoxy- β -glycosyl)arenes 277

Cyclodextrins, methylated

Facile preparation of phenyl 1-thioglycosides of partially methylated maltooligosaccharides by restricted thiolysis of fully methylated cyclodextrins 139

Cyclomaltoheptaose (β -cyclodextrin)

Migration of secondary *tert*-butyldimethylsilyl groups in cyclomalto-heptaose and -octaose derivatives 237

Cyclomaltoheptaose (β-cyclodextrin) heptakis-6triflate

Heptakis[6-S-(2,3-dihydroxypropyl)-6-thio]-cyclomaltoheptaose and its sulfone: water-soluble β -cyclodextrin derivatives having modified polarity 315

Cyclomalto-octaose (γ -cyclodextrin)

Migration of secondary *tert*-butyldimethylsilyl groups in cyclomalto-heptaose and -octaose derivatives 237

Degradation

Degradation of double-stranded xanthan by hydrogen peroxide in the presence of ferrous ions: comparison to acid hydrolysis 85

C-(2-Deoxy- β -D-arabino-hexopyranosyl)arenes

A method for the synthesis of C-(2-deoxy- β -glycosyl)arenes 277

Deoxymannose

Synthesis of the 4-, 6-deoxy, and 4,6-dideoxy derivatives of D-mannose 357

Dextran

Aldo-enol transition in periodate-oxidized dextrans 171

Dicerocaryum zanguebaricum

Structural investigation of the polysaccharide fraction from the mucilage of *Dicerocaryum zanguebaricum* Merr. 111

4,6-Dideoxy-D-lyxo-hexose

Synthesis of the 4-, 6-deoxy, and 4,6-dideoxy derivatives of D-mannose 357

Dimethyl sulfoxide

Vacuum ultraviolet circular dichroism of gellan-family polymer films from water and dimethyl sulfoxide 15

Di-O-isopropylidene-aldehydo-D-arabinose

A method for the synthesis of C-(2-deoxy- β -glycosyl)arenes 277

Disaccharide derivatives

Transglycosylation reactions of permethylated methyl p-glucopyranosides with partially methylated 1,5-anhydroalditols 59

2D NMR heteronucleus-coupled H-H correlation (HETLOC)

Conformation of 4-thio-L-lyxono-1,4-lactone in solution and in the crystalline state 187

Electrophoretic light scattering (ELS)

Aldo-enol transition in periodate-oxidized dextrans 171

Ethoxyethyl ethers

Synthesis of some methyl 6-O-alkyl- α -D-glyco-pyranosides 151

Flocculation

Structure of the phosphopeptidomannans from flocculent and non-flocculent yeast Kluyver-omyces lactis 303

5-Formyl-2-furoic acid

Identification of the acidic degradation products of hexenuronic acid and characterisation of hexenuronic acid-substituted xylooligosaccharides by NMR spectroscopy 197

Fructofuranosides

Alkaline degradation of fructofuranosides 47 Fucosylation

Synthesis of α - and β -L-Fuc p- $(1 \rightarrow 2)$ - α -L-Fuc p- $(1 \rightarrow 3)$ - β -D-Gal pNAc glycosides identified as termini of *Schistosoma mansoni* oligosaccharides 323

Fucosyltransferases

Synthesis of precursors for the dimeric 3-O-SO₃Na Lewis X and Lewis A structures 261

2-Furoic acid

Identification of the acidic degradation products of hexenuronic acid and characterisation of hexenuronic acid-substituted xylooligosaccharides by NMR spectroscopy 197

Ganglioside

Synthesis of N-acetyl-4,8-dideoxyneuraminic acid-containing ganglioside GM₃ 331

Gellan family

Vacuum ultraviolet circular dichroism of gellan-family polymer films from water and dimethyl sulfoxide 15

Glucose

Alkaline degradation of glucose: effect of initial concentration of reactants 27

'Glucositol trisphosphate'

Synthesis of methyl 2-O-allyl-(and 3-O-allyl-)-5-O-benzyl- β -D-ribofuranoside 209

Glucuronomannoglycan

Structural investigation of the polysaccharide fraction from the mucilage of *Dicerocaryum zanguebaricum* Merr. 111

Glycals

Synthesis of partially protected 1,5-anhydroalditols by hydroboration of glycals 351

Glycans, cell-surface

Rationally designed syntheses of high-mannose and complex type undecasaccharides 67

Glycosides 4 1

A one-pot procedure for the quantitative conversion of glycosides into acetylated glycosyl fluorides 345

C-Glycosides

A method for the synthesis of C-(2-deoxy- β -glycosyl)arenes 277

C-Glycosylarenes

A method for the synthesis of C-(2-deoxy- β -glycosyl)arenes 277

Glycosylation

Rationally designed syntheses of high-mannose and complex type undecasaccharides 67 Glycosylation with *N*-Troc-protected glycosyl donors 251

Glycosyl fluoride per-O-acetates

A one-pot procedure for the quantitative conversion of glycosides into acetylated glycosyl fluorides 345

GM₃

Synthesis of N-acetyl-4,8-dideoxyneuraminic acid-containing ganglioside GM₃ 331

Heptakis-6-thiocyclomaltoheptaose derivatives

Heptakis[6-S-(2,3-dihydroxypropyl)-6-thio]-cyclomaltoheptaose and its sulfone: water-soluble β -cyclodextrin derivatives having modified polarity 315

Heteronuclear ¹³C-¹H coupling constants

Conformation of 4-thio-L-lyxono-1,4-lactone in solution and in the crystalline state 187

Hexenuronic acid

Identification of the acidic degradation products of hexenuronic acid and characterisation of hexenuronic acid-substituted xylooligosaccharides by NMR spectroscopy 197

HF solvolysis

A one-pot procedure for the quantitative conversion of glycosides into acetylated glycosyl fluorides 345

¹H NMR

Structure of the phosphopeptidomannans from flocculent and non-flocculent yeast Kluyver-omyces lactis 303

Human mucin

Capillary electrophoresis separation of mucin motif MUC 5AC glycopeptides from in vitro *O*-glycosylation reactions 121

Hydroboration-oxidation

Synthesis of partially protected 1,5-anhydroalditols by hydroboration of glycals 351

Influenza virus

Chemoenzymatic synthesis of neuraminic acid analogs structurally varied at C-5 and C-9 as potential inhibitors of the sialidase from influenza virus 101

Inhibitors

Chemoenzymatic synthesis of neuraminic acid analogs structurally varied at C-5 and C-9 as potential inhibitors of the sialidase from influenza virus 101

Inositol trisphosphate receptor

Synthesis of methyl 2-O-allyl-(and 3-O-allyl-)-5-O-benzyl-β-D-ribofuranoside 209

In vitro O-glycosylation

Capillary electrophoresis separation of mucin motif MUC 5AC glycopeptides from in vitro *O*-glycosylation reactions 121

N-Iodosuccinimide

A method for the synthesis of C-(2-deoxy- β -glycosyl)arenes 277

Isomerization

Structure of the saponin adjuvant QS-21 and its base-catalyzed isomerization product by ¹H and natural abundance ¹³C NMR spectroscopy 1

Isotope-labeled

Synthesis of $[6''-^3H]$ -, $(6''-^2H)$ - and $(2-^2H)$ maltotriose 223

Kinetics

Structure of the saponin adjuvant QS-21 and its base-catalyzed isomerization product by ¹H and natural abundance ¹³C NMR spectroscopy 1

Kraft pulp

Identification of the acidic degradation products of hexenuronic acid and characterisation of hexenuronic acid-substituted xylooligosaccharides by NMR spectroscopy 197

Lectin

Structure of the phosphopeptidomannans from flocculent and non-flocculent yeast Kluyver-omyces lactis 303

Maltooligosaccharides, methylated

Facile preparation of phenyl 1-thioglycosides of partially methylated maltooligosaccharides by restricted thiolysis of fully methylated cyclodextrins 139

Maltotriose

Synthesis of $[6''-^3H]$ -, $(6''-^2H)$ - and $(2-^2H)$ maltotriose 223

Mannose oligosaccharides

Structure of the phosphopeptidomannans from flocculent and non-flocculent yeast Kluyver-omyces lactis 303

Methyl α -D-galactopyranoside derivatives

Thioanhydro sugar derivatives. Action of base on methyl 6-thio- α -D-galactopyranoside derivatives 145

Methyl 2-O-allyl-5-O-benzyl-β-D-ribofuranoside Synthesis of methyl 2-O-allyl-(and 3-O-allyl-)-5-O-benzyl-β-D-ribofuranoside 209

Methyl 3-O-allyl-5-O-benzyl-β-D-ribofuranoside Synthesis of methyl 2-O-allyl-(and 3-O-allyl-)-5-O-benzyl-β-D-ribofuranoside 209

Migration of silvl groups

Migration of secondary *tert*-butyldimethylsilyl groups in cyclomalto-heptaose and -octaose derivatives 237

MUC 5AC

Capillary electrophoresis separation of mucin motif MUC 5AC glycopeptides from in vitro *O*-glycosylation reactions 121

Mucilage

Structural investigation of the polysaccharide fraction from the mucilage of *Dicerocaryum zanguebaricum* Merr. 111

Neu5Ac aldolase

Chemoenzymatic synthesis of neuraminic acid analogs structurally varied at C-5 and C-9 as potential inhibitors of the sialidase from influenza virus 101

Neuraminic acid

Synthesis of N-acetyl-4,8-dideoxyneuraminic acid-containing ganglioside GM₃ 331

Neuraminic acid analogs

Chemoenzymatic synthesis of neuraminic acid analogs structurally varied at C-5 and C-9 as potential inhibitors of the sialidase from influenza virus 101

NMR spectroscopy

Structure of the saponin adjuvant QS-21 and its base-catalyzed isomerization product by ¹H and natural abundance ¹³C NMR spectroscopy 1 Identification of the acidic degradation products of hexenuronic acid and characterisation of hexenuronic acid-substituted xylooligosaccharides by NMR spectroscopy 197

Nuclear magnetic resonance (NMR)

Aldo-enol transition in periodate-oxidized dextrans 171

Nucleophilic substitutions

Synthesis of some methyl 6-O-alkyl- α -D-glyco-pyranosides 151

Oligosaccharides glycocalyx

Synthesis of α - and β -L-Fuc p- $(1 \rightarrow 2)$ - α -L-Fuc p- $(1 \rightarrow 3)$ - β -D-Gal pNAc glycosides identified as termini of *Schistosoma mansoni* oligosaccharides 323

Pedaliaceae

Structural investigation of the polysaccharide fraction from the mucilage of *Dicerocaryum zanguebaricum* Merr. 111

Periodate oxidation

Aldo-enol transition in periodate-oxidized dextrans 171

Phosphopeptidomannan

Structure of the phosphopeptidomannans from flocculent and non-flocculent yeast Kluyver-omyces lactis 303

Primary tosylates

Synthesis of some methyl 6-O-alkyl- α -D-glyco-pyranosides 151

Retrogradation

Effect of *n*-alkyl glucosides on waxy maize and wheat starch retrogradation 157

Saponin adjuvant, QS-21

Structure of the saponin adjuvant QS-21 and its base-catalyzed isomerization product by ¹H and natural abundance ¹³C NMR spectroscopy 1

Schistosomes

Synthesis of α - and β -L-Fuc p- $(1 \rightarrow 2)$ - α -L-Fuc p- $(1 \rightarrow 3)$ - β -D-Gal pNAc glycosides identified as termini of *Schistosoma mansoni* oligosaccharides 323

Selective deoxygenation

Synthesis of the 4-, 6-deoxy, and 4,6-dideoxy derivatives of p-mannose 357

Sialidases

Chemoenzymatic synthesis of neuraminic acid analogs structurally varied at C-5 and C-9 as potential inhibitors of the sialidase from influenza virus 101

3-O-Sialyl Lewisa

Synthesis of precursors for the dimeric 3-O-SO₃Na Lewis X and Lewis A structures 261

3-O-Sialyl Lewisx

Synthesis of precursors for the dimeric 3-O-SO₃Na Lewis X and Lewis A structures 261

Sialyltransferases

Synthesis of precursors for the dimeric 3-O-SO₃Na Lewis X and Lewis A structures 261 Starch gels

staten geis

Effect of *n*-alkyl glucosides on waxy maize and wheat starch retrogradation 157

3-O-Sulfo Lewisa

Synthesis of precursors for the dimeric 3-O-SO₃Na Lewis X and Lewis A structures 261

3-O-Sulfo Lewisx

Synthesis of precursors for the dimeric 3-O-SO₃Na Lewis X and Lewis A structures 261

Sulfotransferases

Synthesis of precursors for the dimeric 3-O-SO₃Na Lewis X and Lewis A structures 261

Surfactants

Effect of *n*-alkyl glucosides on waxy maize and wheat starch retrogradation 157

Synthesis

Synthesis of $[6''-^3H]$ -, $(6''-^2H)$ - and $(2-^2H)$ maltotriose 223

A facile synthesis of 5-thio-L-fucose and 5-thio-D-arabinose from D-arabinose 287

Synthesis of partially protected 1,5-anhydroalditols by hydroboration of glycals 351

4,6-Thioanhydro sugars

Thioanhydro sugar derivatives. Action of base on methyl 6-thio- α -D-galactopyranoside derivatives 145

5-Thio-D-arabinose

A facile synthesis of 5-thio-L-fucose and 5-thiop-arabinose from p-arabinose 287

Thioglycosides

Facile preparation of phenyl 1-thioglycosides of partially methylated maltooligosaccharides by restricted thiolysis of fully methylated cyclodextrins 139

5-Thio-L-fucose

A facile synthesis of 5-thio-L-fucose and 5-thiop-arabinose from p-arabinose 287

Thio sugars

Thioanhydro sugar derivatives. Action of base on methyl 6-thio- α -D-galactopyranoside derivatives 145

Tosylation

Chlorodeoxy derivatives from p-galactochloralose 339

Transglycosylation

Transglycosylation reactions of permethylated methyl D-glucopyranosides with partially methylated 1,5-anhydroalditols 59

N-Troc-protected glycosyl donors

Glycosylation with N-Troc-protected glycosyl donors 251

Undecasaccharide, high-mannose

Rationally designed syntheses of high-mannose and complex type undecasaccharides 67

Wittig reaction

A method for the synthesis of C-(2-deoxy- β -glycosyl)arenes 277

Xanthan

Degradation of double-stranded xanthan by hydrogen peroxide in the presence of ferrous ions: comparison to acid hydrolysis 85

Xylan

Identification of the acidic degradation products of hexenuronic acid and characterisation of hexenuronic acid-substituted xylooligosaccharides by NMR spectroscopy 197

Yeast

Structure of the phosphopeptidomannans from flocculent and non-flocculent yeast *Kluyver-omyces lactis* 303