

## SUBJECT INDEX

- N*-Acetyl- $\beta$ -D-galactosaminyltransferases from embryonic chicken brain, biosynthesis in vitro of GbOse4Cer and GM2 gangliosides by, 227
- N*-Acetylglucosaminyltransferase-I, synthesis of oligosaccharides as substrate of, 39
- (1  $\rightarrow$  4)-*N*-Acetyl- $\beta$ -D-glucosaminyltransferases, characterization of, 281
- N*-Acetylneuraminic acid, synthesis of deculopyranosonic acid analog, and its 5- and 6-epimers of, 89
- O*-Acylated derivatives of glycosaminoglycans, synthesis of, 107
- Albumin glycans, resolution by poly(acrylamide) electrophoresis and characterization of, 1
- Alkylamine-bonded silica, separation of mucin oligosaccharide-alditols by HPLC on, 9
- Antibodies, monoclonal, against oligosaccharides coupled to protein, production of, 349
- Aspergillus roseus*, purification and properties of  $\beta$ -D-glucosidases from, 267
- Asteria rubens*, starfish, identification of new ganglioside from, 321
- Blood group-type-specific lectin from *Moluccella laevis*, combining site of, A + N, 245
- Bovine lactotransferrin glycans, heterogeneity of, 145
- Candida albicans* VW.32 (serotype A) phosphopeptidomannan, NMR assignments for the D-mannooligosaccharides, 17
- Cation-binding characteristics of chemically-modified heparins, 121
- Cellulose,  $\beta$ -D-glucosidases from *Aspergillus roseus* acting on, 267
- Cell wall from *Fusarium oxysporum*, structure of  $\beta$ -D-glucans from, 345
- Deculopyranosonic acid analog of *N*-acetylneuraminic acid, and its 5- and 6-epimer, synthesis of, 89
- Depolymerization, oxidative-reductive, of heparin, 165
- Dolichol monophosphate in the membrane, monoclonal antibody to amphomycin: A tool to study the topography of, 301
- Escherichia coli* O104 O-specific polysaccharide, sialic acid containing, structure of, 195
- Fluoresceinated glycopeptides, two-dimensional poly(acrylamide) electrophoresis of, 1
- $\alpha$ -L-Fucosidase, patterns in acute myeloid leukemia cells of, 259
- (1  $\rightarrow$  3)- $\alpha$ -L-Fucosyltransferase, synthesis of di- and tri-saccharides as specific acceptors for, 327
- Fusarium oxysporum*, structure of  $\beta$ -D-glucans from, 345
- $\beta$ -D-Galactopyranosyl-(1  $\rightarrow$  4)-linked, 2-*O*-substituted di- and tri-saccharides, synthesis of, 327
- $\beta$ -D-Galactosyltransferase, human, galactosylation of non-natural glycosides on a preparative scale with, 335
- Ganglioside from the starfish *Asteria rubens*, identification of a new, 321
- Gas-liquid chromatography— isotope-ratio mass spectrometry, determination of compounds naturally labeled with stable isotopes by, 29
- GbOse4Cer glycolipid, synthesis by *N*-acetylglucosaminyltransferase of, 227
- $\beta$ -D-Glucans from *Fusarium oxysporum*, structure of, 345
- D-Glucose and *N*-glycans metabolism in HT-29 cells, 97
- $\beta$ -D-Glucosidases from *Aspergillus roseus*, isolation, purification, and properties of, 267
- N*-Glycans and glucose metabolism in HT-29 cells, 97
- Glycopeptides of albumin, fluoresceinated, resolution by poly(acrylamide) electrophoresis of, 1
- Glycoprotein neutral sugars, use of compounds naturally labeled with stable isotopes for the study of the metabolism of, 29

- Glycoprotein synthesis, control of, 281
- N*-Glycoproteins, synthesis of modified oligosaccharides of, 39
- Glycosaminoglycans, synthesis of *O*-acylated derivatives of, 107
- N*-Glycosylproteins, synthesis of trimannosyl core of, 73
- GM2 ganglioside, synthesis by *N*-acetylgalactosaminyltransferase of, 227
- Heparin, oxidative-reductive depolymerization of, 165
- Heparin, synthesis of *O*-acylated derivatives of, 107
- Heparins, chemically-modified, regioselectivity in the sulfation of, 121
- HPLC of mucin oligosaccharide-alditols on alkylamine-bonded silica, 9
- HT-29 cells, *N*-glycans and glucose metabolism in, 97
- Human  $\beta$ -D-galactosyltransferase, galactosylation of non-natural glycosides on a preparative scale with, 335
- Isotopes, stable, use in the study of the metabolism of glycoprotein neutral sugars of compounds naturally labeled, 29
- Klebsiella pneumoniae* O1K2 lipopolysaccharide, structure of the O-specific chain of, 339
- Lactotransferrin, bovine, heterogeneity of glycans of, 145
- Laser photo-CIDNP for an intact glycoprotein, 315
- Lectin specific for A + N blood group type from *Moluccella laevis*, combining site of, 245
- Lectins from seeds of *Robinia pseudoacacia*, structure of the carbohydrate chain of, 181
- Leukemia cells, myeloid, patterns of  $\alpha$ -L-fucosidase in, 259
- Lipopolysaccharide of *Klebsiella pneumoniae* O1K2, structure of the O-specific polysaccharide chain of, 339
- D-Mannooligosaccharides from the phosphopeptidomannan of *Candida albicans* VW.32 (serotype A), NMR, 17
- Mistletoe (*Viscum album*) lectin I, carbohydrate chains of, 135
- Moluccella laevis* lectin, combining site for A + N blood group type of, 245
- Monoclonal antibodies against oligosaccharides coupled to protein, production of, 349
- Monoclonal antibody to amphomycin: A tool to study the topography of dolichol monophosphate in the membrane, 301
- Myeloid leukemia cells, patterns of  $\alpha$ -L-fucosidase in, 259
- Neurotoxin-responsive sodium channel, oligosaccharide composition of, 209
- D-glycero-D-galacto-Non-2-ulopyranose, 5-acetamido-1,3,5-trideoxy-, synthesis of, 89
- Nuclear polarization, dynamic, laser-photochemically-induced, for a glycoprotein, 315
- Oligomannose-type glycans isolated from mistletoe lectin I, 135
- Oligosaccharide-alditols from mucin, separation by HPLC on alkylamine-bonded silica of, 9
- Oligosaccharides coupled to protein, production of monoclonal antibodies against, 349
- Oxidative-reductive depolymerization of heparin, 165
- Phosphopeptidomannan of *Candida albicans* VW.32 (serotype A), NMR assignments for the D-mannooligosaccharides of, 17
- Polarization, dynamic nuclear, laser-photochemically-induced, for a glycoprotein, 315
- Polysaccharide chain of *Klebsiella pneumoniae* O1K2 lipopolysaccharide, O-specific structure of, 339
- Robinia pseudoacacia* seed lectins, structure of the carbohydrate chain of, 181
- Seed lectins of *Robinia pseudoacacia*, structure of the carbohydrate chain of, 181
- Sialic acid, requirement for biological activity of neurotoxin-responsive sodium channel of, 209
- Sialic acid-containing polysaccharide from *Escherichia coli* O104, structure of, 195
- Sodium channel, neurotoxin-responsive, oligosaccharide composition of, 209
- O-Specific, sialic acid containing polysaccharide from *Escherichia coli* O104, structure of, 195
- Starfish *Asteria rubens*, identification of a new ganglioside from, 321
- Sulfation of chemically-modified heparins, 121
- Transferase, (1  $\rightarrow$  3)- $\alpha$ -L-fucosyl-, synthesis of acceptors for, 327
- Transferase-I, *N*-acetylglucosaminyl-, synthesis of oligosaccharides as substrates of, 39
- Transferases, (1  $\rightarrow$  4)-*N*-acetyl- $\beta$ -D-glucosaminyl-, characterization of, 281

Transferrin, lacto-, heterogeneity of glycans of bovine, 145

Tri(4-bromophenyl)ammoniumyl hexachloroantimonate, use in the synthesis of the trimannosyl core of *N*-glycosylproteins of, 73

Trimannosyl core of *N*-glycosylproteins, synthesis of, 73

*Viscum album* lectin I (mistletoe), carbohydrate chains of, 135