

Carbohydrate Research Vol. 344, Issue 11, 2009

Contents

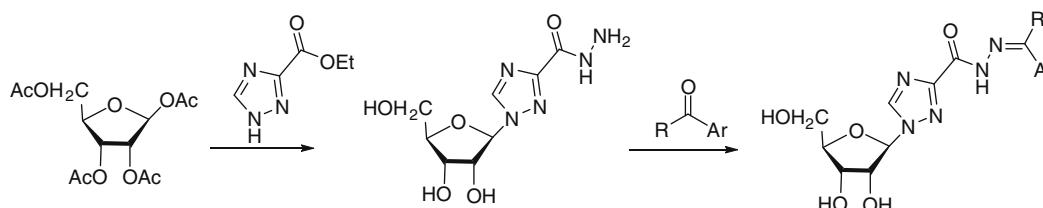
Announcement

p 1269

Full Papers

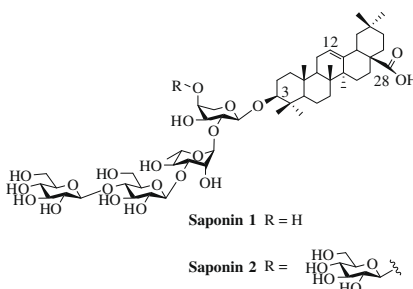
Synthesis of novel ribavirin hydrazone derivatives and anti-proliferative activity against A549 lung cancer cells pp 1270–1275

Wei-Yong Liu, Hai-Ying Li, Bao-Xiang Zhao *, Dong-Soo Shin, Song Lian, Jun-Ying Miao *



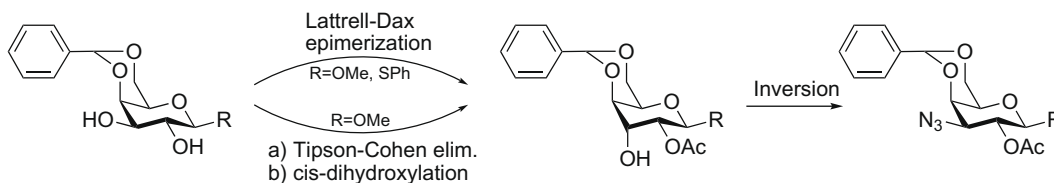
Concise synthesis of two natural triterpenoid saponins, oleanolic acid derivatives isolated from the roots of *Pulsatilla chinensis* pp 1276–1281

Qingchao Liu, Peng Wang, Lei Zhang, Tiantian Guo, Guokai Lv, Yingxia Li *



Synthesis of 3-azido-3-deoxy-β-D-galactopyranosides pp 1282–1284

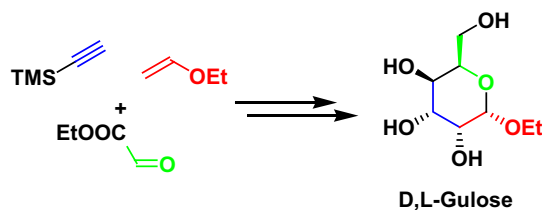
Christopher T. Öberg, Ann-Louise Noresson, Tamara Delaine, Amaia Larumbe, Johan Tejler, Henrik von Wachenfeldt, Ulf J. Nilsson *



Stereoselective protecting group free synthesis of D,L-gulose ethyl glycoside via multicomponent enyne cross metathesis–hetero Diels–Alder reaction

pp 1285–1288

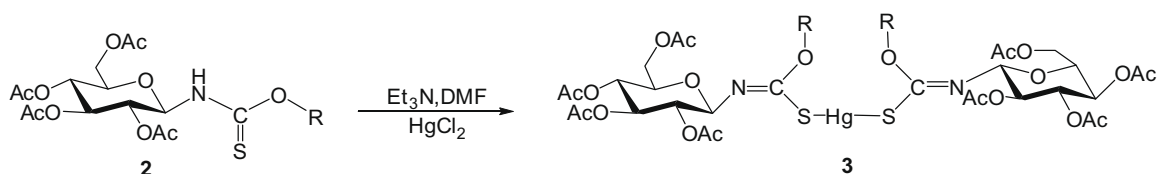
Daniele Castagnolo, Lorenzo Botta, Maurizio Botta *



Synthesis, antifungal activities, and potential detoxification of *N*-(2,3,4,6-tetra-*O*-acetyl-β-*D*-glucopyranosyl)thiocarbamates

pp 1289–1296

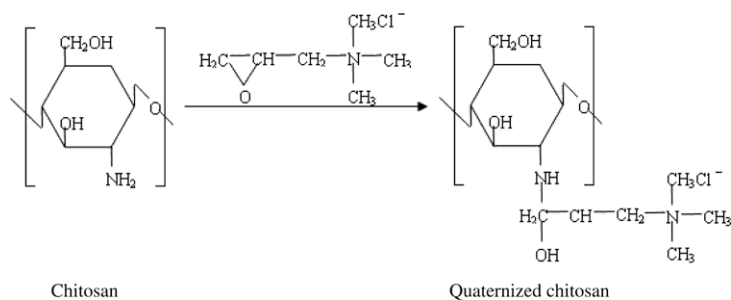
Yaling Zhou, Li Wang, Lixia Han, Fangui Meng, Chunlong Yang *



In vitro evaluation of the biomedical properties of chitosan and quaternized chitosan for dental applications

pp 1297–1302

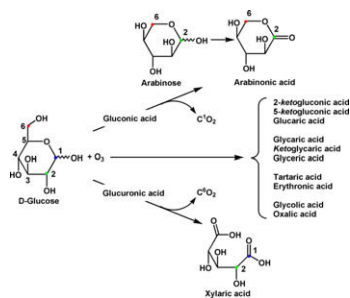
Qiu Xia Ji *, De Yu Zhong, Rui Lü, Wen Qing Zhang, Jing Deng, Xi Guang Chen *



Reaction pathways of glucose oxidation by ozone under acidic conditions

pp 1303–1310

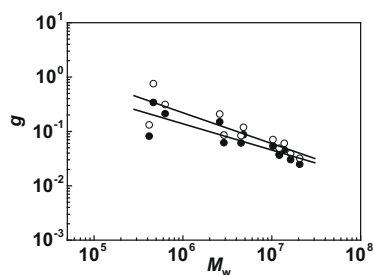
Olivier Marcq, Jean-Michel Barbe, Alain Trichet, Roger Guillard *



Shrinking factors of hyperbranched polysaccharide from fungus

pp 1311–1318

Yongzhen Tao *, Yun Yan, Weilin Xu

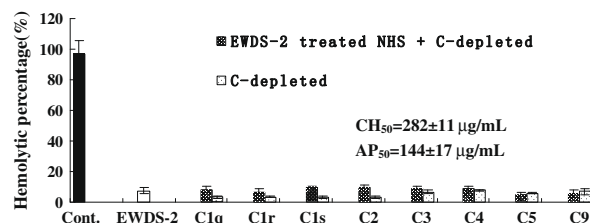


The shrinking factors and Flory factor of the hyperbranched polysaccharides extracted from *Pleurotus tuber-regium* sclerotia were studied by using laser light scattering and viscometry. The branching unit and chain length between two branching point were deduced. It indicated that TM3a and TM3b were attributed to short-chain branching structure.

A protein-bound polysaccharide from the stem bark of *Eucommia ulmoides* and its anti-complementary effect

pp 1319–1324

Hongwei Zhu, Hongye Di, Yunyi Zhang, Jianwen Zhang, Daofeng Chen *

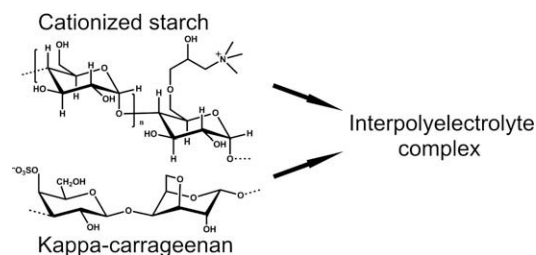


EWDS-2, a protein-bound polysaccharide isolated from the stem bark of *Eucommia ulmoides*, inhibited complement activation on both the classic and alternative pathways with CH_{50} and AP_{50} values of $282 \pm 11 \mu\text{g/mL}$ and $144 \pm 17 \mu\text{g/mL}$, respectively, by interacting with C1q, C1r, C1s, C2, C3, C4, C5, and C9.

Preparation and characterization of a novel starch-based interpolyelectrolyte complex as matrix for controlled drug release

pp 1325–1331

Héctor J. Prado, María C. Matulewicz *, Pablo R. Bonelli, Ana L. Cukierman

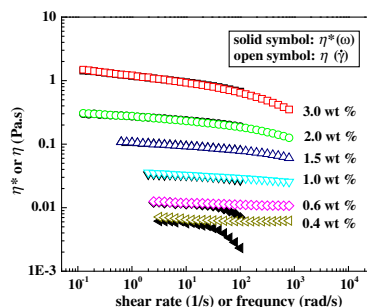


The interpolyelectrolyte complex was characterized and its performance for controlled release was studied.

Solution properties of the acrylamide-modified cellulose polyelectrolytes in aqueous solutions

pp 1332–1339

Yongbo Song, Jinping Zhou *, Qian Li, Ang Lue, Lina Zhang

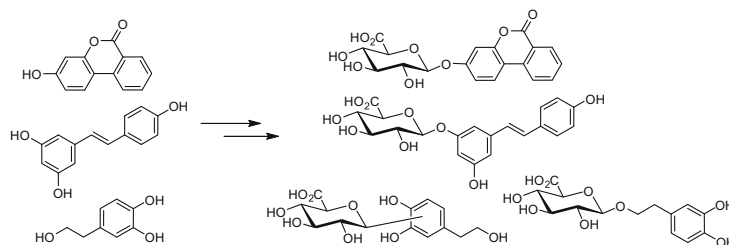


Notes

A concise synthesis of glucuronide metabolites of urolithin-B, resveratrol, and hydroxytyrosol

pp 1340–1346

Ricardo Lucas, David Alcantara, Juan Carlos Morales *

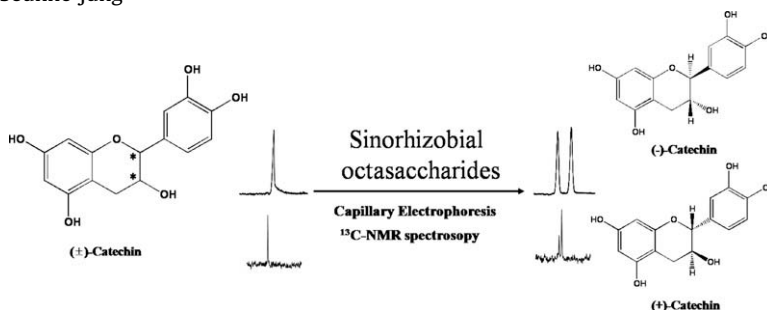


A simple and direct strategy to chemically synthesize O-β-D-glucuronides of biologically relevant dietary bioactive phenolics: urolithin-B, resveratrol, and hydroxytyrosol is described. The critical glycosylation step has been optimized using a structurally simple phenol, urolithin-B, by modification of different reaction parameters.

**Chiral separation and discrimination of catechin by sinorhizobial octasaccharides in capillary electrophoresis and ¹³C NMR spectroscopy**

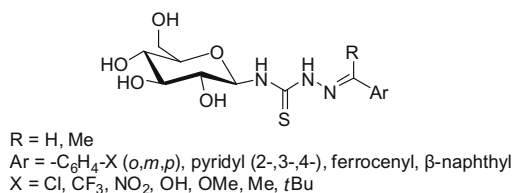
pp 1347–1351

Chanho Kwon, Kyung Mi Yoo, Seunho Jung *

**Synthesis and characterization of new aromatic aldehyde/ketone 4-(β-D-glucopyranosyl)thiosemicarbazones**

pp 1352–1364

Alia-Cristina Tenchiu (Deleanu), Ioannis D. Kostas *, Dimitra Kovala-Demertzi, Aris Terzis

**Structural studies of a heteropolysaccharide (PS-I) isolated from hot water extract of fruits of *Psidium guajava* (Guava)**

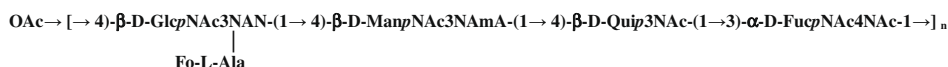
pp 1365–1370

Soumitra Mandal, Ramsankar Sarkar, Pradip Patra, Chanchal K. Nandan, Debsankar Das, Sunil K. Bhanja, Syed S. Islam *




Structural characterization of the lipopolysaccharide O-antigen from atypical isolate of *Vibrio anguillarum* strain 1282**pp 1371–1375**

Zhan Wang, Evgeny Vinogradov, Jianjun Li, Vera Lund, Eleonora Altman *



*Corresponding author

+ Supplementary data available via ScienceDirect**COVER**

High-mannose-type asparagine-linked glycans play critical roles in glycoprotein processing and quality control in the endoplasmic reticulum. However, the analysis of these events has been hindered by the limited availability of glycan substrates. Work by Ito and co-worker's has enabled the systematic synthesis of high mannose-type glycans, which were converted to conjugates with various small molecules and proteins. These probes revealed the substrate specificities of lectins, chaperones, and glycoprotein-processing enzymes.

Available online at www.sciencedirect.com

Abstracted/Indexed in: Chem. Abstr.: Curr. Contents: Phys., Chem. & Earth Sci. Life Sci. Current Awareness in Bio. Sci. (CABS). Science Citation Index. Full texts are incorporated in CJELSEVIER, a file in the Chemical Journals Online database which is available on STN® International. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

**ELSEVIER**

ISSN 0008-6215