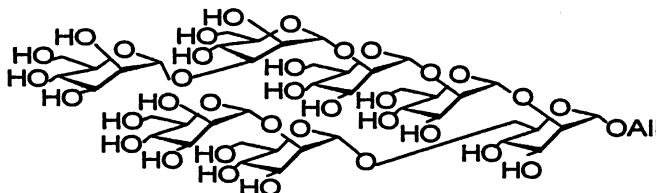


**Synthesis of a mannose heptasaccharide existing in baker's yeast, *Saccharomyces cerevisiae* X2180-1A wild-type strain**

*Carbohydr. Res.* **2003**, 338, 5

Youlin Zeng, Jianjun Zhang, Jun Ning, Fanzuo Kong

Research Center for Eco-Environmental Sciences, Academia Sinica, P.O. Box 2871, Beijing 100085, China



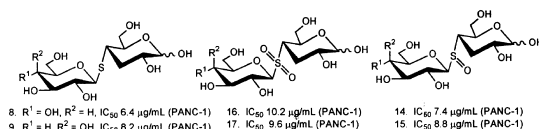
**Thio sugars VII. Effect of 3-deoxy-4-*S*-( $\beta$ -D-glucopyranosyl)-4-thiodisaccharides and their sulfoxides and sulfones on the viability and growth of selected murine and human tumor cell lines**

*Carbohydr. Res.* **2003**, 338, 11

Zbigniew J. Witczak,<sup>a</sup> Peter Kaplon,<sup>b</sup> P. Markus Dey<sup>a</sup>

<sup>a</sup>Department of Pharmaceutical Sciences, Nesbitt School of Pharmacy, Wilkes University, Wilkes-Barre, PA 18766, USA

<sup>b</sup>Department of Pharmaceutical Sciences, School of Pharmacy, University of Connecticut, 372 Fairfield Rd. U-92, Storrs, CT 06269-2092, USA

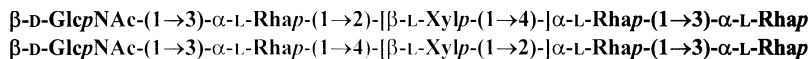


**Synthesis of  $\beta$ -D-GlcpNAc-(1 $\rightarrow$ 3)- $\alpha$ -L-Rhap-(1 $\rightarrow$ 2)-[ $\beta$ -L-Xylp-(1 $\rightarrow$ 4)]- $\alpha$ -L-Rhap-(1 $\rightarrow$ 3)- $\alpha$ -L-Rhap, the repeating unit of the O-antigen produced by *Pseudomonas Solanacearum* ICMP 7942**

*Carbohydr. Res.* **2003**, 338, 19

Jianjun Zhang, Fanzuo Kong

Research Center for Eco-Environmental Sciences, Academia Sinica, Chinese Academy of Sciences, PO Box 2871, Beijing 100085, PR China

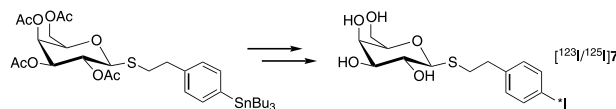


**Synthesis of radioiodine-labeled 2-phenylethyl 1-thio- $\beta$ -D-galactopyranoside for imaging of *LacZ* gene expression**

*Carbohydr. Res.* **2003**, 338, 29

Joon Hun Choi, Yearn Seong Choe, Kyung-Han Lee, Yong Choi, Sang Eun Kim, Byung-Tae Kim

Department of Nuclear Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, 50 Ilwon-dong, Kangnam-ku, Seoul 135-710, Republic of Korea



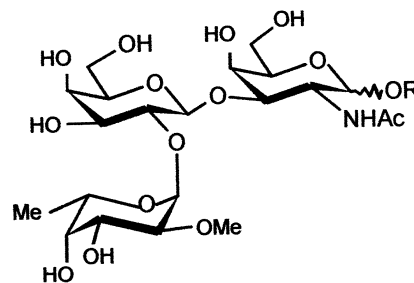
**Synthesis of neoglycoproteins containing O-methylated trisaccharides related to excretory/secretory antigens of *Toxocara* larvae**

*Carbohydr. Res.* **2003**, *338*, 35

Hassan Amer, Andreas Hofinger, Paul Kosma

*Institute of Chemistry, University of Agricultural Sciences, Muthhasse 18, A-1190 Vienna, Austria*

The chemical synthesis of trisaccharide allyl glycosides and subsequent conjugation to bovine serum albumin is described.



**Synthesis of lipid A type carboxymethyl derivatives with ether chains instead of ester chains and their LPS-antagonistic activities**

*Carbohydr. Res.* **2003**, *338*, 47

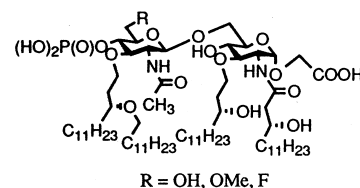
Yukiko Watanabe,<sup>a</sup> Kumiko Miura,<sup>a</sup> Masao Shiozaki,<sup>a</sup> Saori Kanai,<sup>b</sup> Shin-ichi Kurakata,<sup>b</sup> Masahiro Nishijima<sup>c</sup>

<sup>a</sup>Exploratory Chemistry Research Laboratories, Sankyo Co. Ltd., Hiromachi 1-2-58, Shinagawa-ku, Tokyo 140-8710, Japan

<sup>b</sup>Biological Research Laboratories, Sankyo Co. Ltd., Hiromachi 1-2-58, Shinagawa-ku, Tokyo 140-8710, Japan

<sup>c</sup>Department of Biochemistry and Cell Biology, National Institute of Infectious Diseases, Toyama 1-23-1, Shinjuku-ku, Tokyo 162-8640, Japan

Three lipid A type carboxymethyl derivatives having ether chains at both C-3 and C-3' positions were synthesized, and they showed fairly strong LPS-antagonistic activity toward human U937 cells.

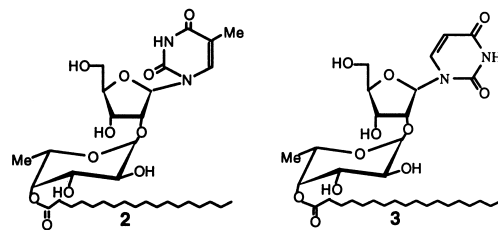


**A new and efficient strategy for the synthesis of shimofuridin analogs: 2'-O-(4-O-stearoyl-α-L-fucopyranosyl)thymidine and -uridine**

*Carbohydr. Res.* **2003**, *338*, 55

Jun Ning, Ying Xing, Fanzuo Kong

*Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, PO Box 2871, Beijing 100085, PR China*



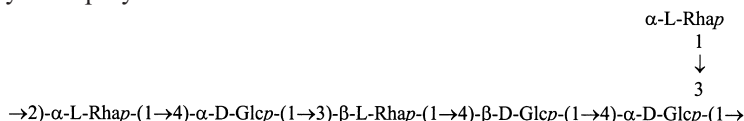
**Structural characterisation of a perdeuteriomethylated exopolysaccharide by NMR spectroscopy: characterisation of the novel exopolysaccharide produced by *Lactobacillus delbrueckii* subsp. *bulgaricus* EU23**

*Carbohydr. Res.* **2003**, *338*, 61

Lindsay P. Harding, Valerie M. Marshall, Mark Elvin, Yucheng Gu, Andrew P. Laws

*School of Applied Sciences, University of Huddersfield, Queensgate, Huddersfield HD1 3DH, UK*

The structure of the novel exopolysaccharide from *Lactobacillus delbrueckii* subsp. *bulgaricus* EU23 was determined from the perdeuteriomethylated polysaccharide.



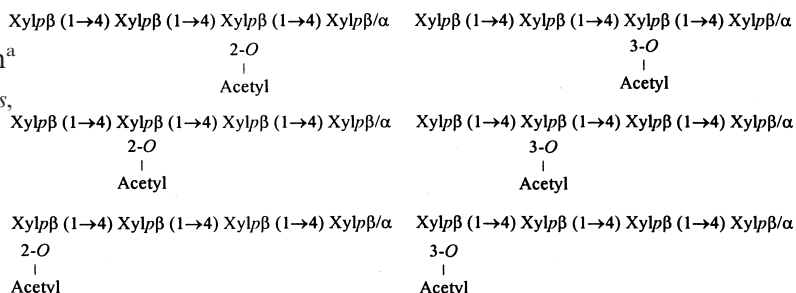
## Location of *O*-acetyl substituents in xylo-oligosaccharides obtained from hydrothermally treated *Eucalyptus* wood

*Carbohydr. Res.* **2003**, *338*, 69

Mirjam A. Kabel,<sup>a</sup> Pieter de Waard,<sup>b</sup>  
Henk A. Schols,<sup>a</sup> Alphons G.J. Voragen<sup>a</sup>

<sup>a</sup>Department of Agrotechnology and Food Sciences,  
Laboratory of Food Chemistry, Wageningen  
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The Netherlands

<sup>b</sup>Wageningen NMR Centre, Laboratory of  
Biophysics, P.O. Box 8128, 6700 ET,  
Wageningen, The Netherlands

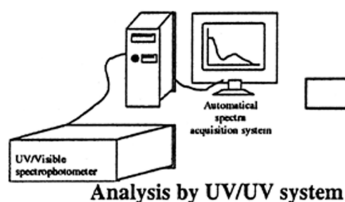


## UV monitoring of sugars during wine making

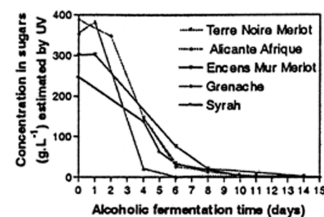
*Carbohydr. Res.* **2003**, *338*, 79

B. Roig, O. Thomas

Laboratoire Génie de l'Environnement Industriel, Ecole des Mines d'Alès, 6 avenue de Clavières, 30319 Alès Cedex, France



Wine making  
monitoring

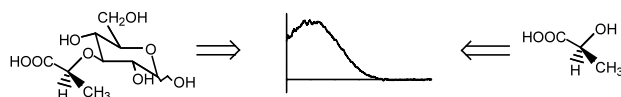


## The absolute configuration of 1-carboxyethyl substituents on common hexoses by circular dichroism

*Carbohydr. Res.* **2003**, *338*, 85

Lars Andersson, Lennart Kenne

Department of Chemistry, Swedish University of Agricultural Sciences, PO Box 7015, SE-750 07 Uppsala, Sweden

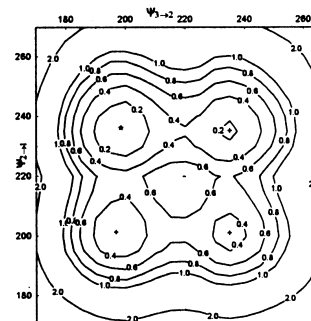


## Depicting the MM3 potential energy surfaces of trisaccharides by single contour maps: application to β-cellobiose and α-maltotriose

*Carbohydr. Res.* **2003**, *338*, 95

Carlos A. Stortz, Alberto S. Cerezo

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