

**Synthesis of the  $\alpha$ -D-GlcpA-(1  $\rightarrow$  3)- $\alpha$ -L-Rhap-(1  $\rightarrow$  2)-**

**L-Rha trisaccharide isolated from the cell wall hydrolyzate of the green alga, *Chlorella vulgaris***

*Carbohydr. Res.* **2001**, 334, 253

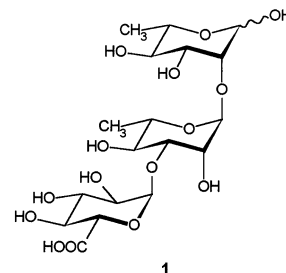
Ferenc Sajtos,<sup>a</sup> János Hajkó,<sup>b</sup> Katalin E. Kövér,<sup>c</sup> András Lipták<sup>a,b</sup>

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Preparation of the title trisaccharide is reported.



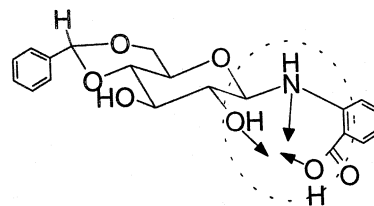
**Synthesis and characterisation of N-glycosyl amines from the reaction between 4,6-O-benzylidene-D-glucopyranose and substituted aromatic amines and also between 2-(o-aminophenyl)benzimidazole and pentoses or hexoses**

*Carbohydr. Res.* **2001**, 334, 261

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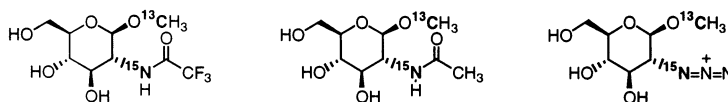


**Stereoselective synthesis of [<sup>13</sup>C]methyl 2-[<sup>15</sup>N]amino-2-deoxy- $\beta$ -D-glucopyranoside derivatives**

*Carbohydr. Res.* **2001**, 334, 271

Fabien P. Boulineau, Alexander Wei

Department of Chemistry, Purdue University, 1393 Brown Building, West Lafayette, IN 47907-1393, USA



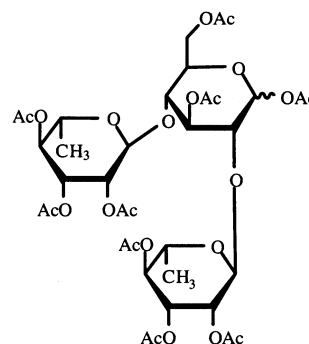
**Synthesis of peracetylated chacotriose**

*Carbohydr. Res.* **2001**, 334, 281

Marielba Morillo,<sup>a</sup> Vincent Lequart,<sup>b</sup> Eric Grand,<sup>b</sup> Gérard Goethals,<sup>b</sup> Alfredo Usubillaga,<sup>a</sup> Pierre Villa,<sup>b</sup> Patrick Martin<sup>b</sup>

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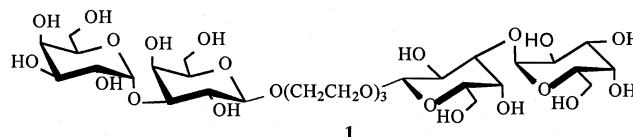
## Synthesis of a divalent glycoside of an $\alpha$ -galactosyl disaccharide epitope involved in the hyperacute rejection of xenotransplantation

*Carbohydr. Res.* **2001**, 334, 289

Yi-Pin Lu, Hui Li, Meng-Shen Cai, Zhong-Jun Li

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National Research Laboratory of Natural and Biomimetic Drugs,  
Peking University, Beijing 100083, China

3,6-Dioxaoct-1,8-diyl di-(3-*O*- $\alpha$ -D-galactopyranosyl- $\beta$ -D-galactopyranoside) (**1**), useful in the research of hyperacute rejection of xenotransplantation, was synthesized.



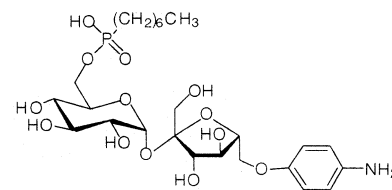
## Binding properties and esterase activity of monoclonal antibodies elicited against sucrose 6-heptylphosphonate

*Carbohydr. Res.* **2001**, 334, 295

Marie-Christine Scherrmann, Aurélie Boutboul, Bernard Estramareix, Anne-Sophie Hoffmann, André Lubineau

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Université de Paris XI, F-91405 Orsay, France

A sucrose 6-heptylphosphonate derivative was prepared and coupled to Keyhole Limpet Hemocyanin. This conjugate was used for the generation of antibodies. Binding properties of these antibodies were screened toward various phosphonates. One of them showed a regioselective esterase activity toward 6-octanoylsucrose compared with 6'-octanoylsucrose.



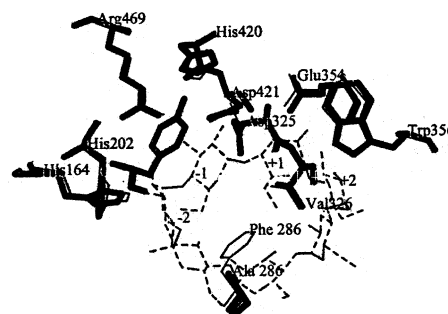
## Role of Phe286 in the recognition mechanism of cyclomaltooligosaccharides (cyclodextrins) by *Thermo-actinomyces vulgaris* R-47 $\alpha$ -amylase 2 (TVaII). X-ray structures of the mutant TVaIIs, F286A and F286Y, and kinetic analyses of the Phe286-replaced mutant TVaIIs

*Carbohydr. Res.* **2001**, 334, 309

Akashi Ohtaki,<sup>a</sup> Shin Kondo,<sup>a</sup> Yoichiro Shimura,<sup>b</sup> Takashi Tonozuka,<sup>b</sup> Yoshiyuki Sakano,<sup>b</sup> Shigehiro Kamitori<sup>a</sup>

<sup>a</sup>Department of Biotechnology and Life Science, Faculty of Technology, Tokyo University of Agriculture and Technology, 2-24-16 Naka-cho, Koganei, Tokyo 184-8588, Japan

<sup>b</sup>Department of Applied Biological Science, Tokyo University of Agriculture and Technology, 3-5-8 Saiwai-cho, Fuchu, Tokyo 183-8509, Japan



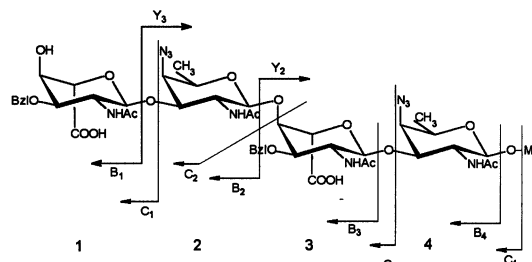
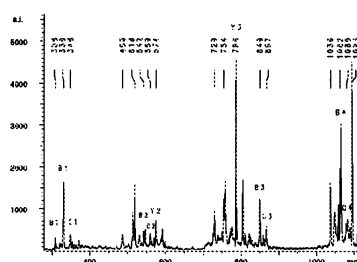
## Identification and structural analysis of synthetic oligosaccharides of *Shigella sonnei* using MALDI-TOF MS

*Carbohydr. Res.* **2001**, 334, 315

Gyöngyi Gyémánt,<sup>a</sup> Anikó Tóth,<sup>b</sup> István Bajza,<sup>b</sup> Lili Kandra,<sup>a</sup> András Lipták<sup>a,b</sup>

<sup>a</sup>Faculty of Sciences, Institute of Biochemistry, University of Debrecen, H-4010 Debrecen, PO Box 55, Hungary

<sup>b</sup>Research Group for Carbohydrates of the Hungarian Academy of Sciences, PO Box 55, H-4010 Debrecen, Hungary



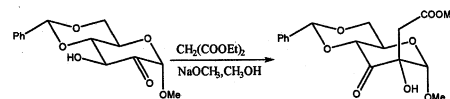
## Stereoselective synthesis of methyl 4,6-*O*-benzylidene-2-*C*-methoxycarbonylmethyl- $\alpha$ -D-*ribo*-hexopyranosid-3-ulose, and its X-ray crystallographic analysis

*Carbohydr. Res.* **2001**, 334, 323

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*Department of Chemistry, Zhengzhou University, Zhengzhou 450052, China*

A new 2-*C*-branched-chain glycosid-3-ulose has been synthesized by reaction of a partially-protected '2-oxoglucopyranoside' with diethyl malonate in NaOCH<sub>3</sub>-CH<sub>3</sub>OH solution, and its structure has been determined by spectroscopic data and X-ray crystallographic analysis.



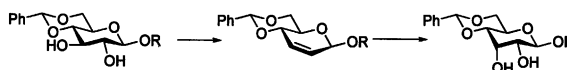
## Stereospecific synthesis of $\beta$ -D-allopyranosides by dihydroxylation of $\beta$ -D-*erythro*-2,3-dideoxyhex-2-enopyranosides

*Carbohydr. Res.* **2001**, 334, 327

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<sup>b</sup>*Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104, USA*



## Improved synthesis and characterization of 1,3,4,6-tetra-*O*-acetyl-2-(*N*-acetylacetamido)-2-deoxy- $\beta$ -D-glucopyranose

*Carbohydr. Res.* **2001**, 334, 337

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The title compound **3** starting from **1** was obtained in nearly quantitative yield using 3 Å molecular sieves and its structure was determined by means of X-ray diffraction.

