

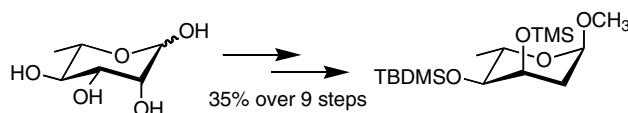
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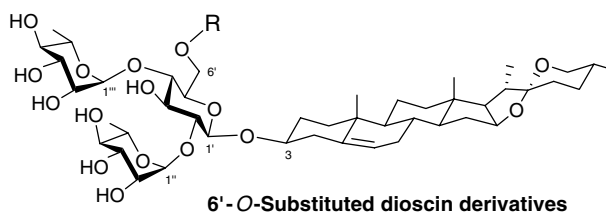
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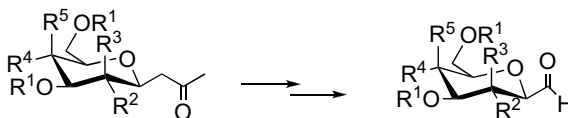
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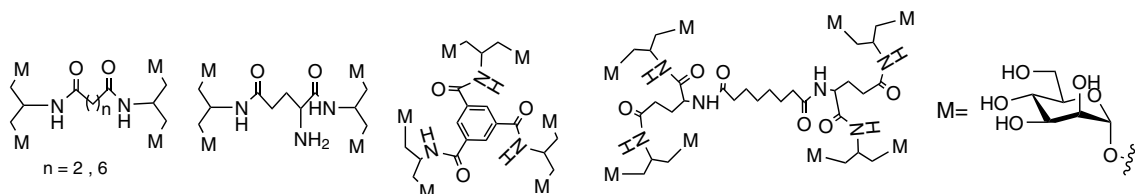
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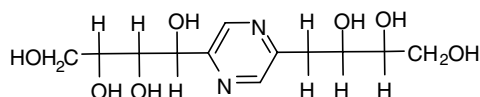
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**High yield production of monomer-free chitosan oligosaccharides by pepsin catalyzed hydrolysis of a high deacetylation degree chitosan**

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Tomás Roncal,* Alberto Oviedo, Iratxe López de Armentia, Laura Fernández and M. Carmen Villarán

Enzyme	Monomers (%)	COS (%)	LMWC (%)
Cellulase	4.6	46.1	49.3
Pepsin	n.d.	52.2	47.8
Lipase A	7.1	42.5	50.4
Chitosanase	9.1	46.3	44.6

pp 2757–2765

O[C@H]1O[C@@H](O[C@H]2[C@@H](O)[C@H](O)[C@@H](O)O[C@H]2O)[C@H](O)[C@H](O)[C@H]1O

$n = 2-8$

pp 2766–2775

[illegible]

pp 2776–2792

Time (h)	10 % WSC (η_{sp}/c Pas)	10 % WSC + L-LysineME (η_{sp}/c Pas)	Ugi reaction (η_{sp}/c Pas)
0	0	0	0
2	10	5	15
4	20	12	22
6	22	13	24
10	21	14	23
15	20	10	22
20	19	5	21
25	18	2	20
30	17	0	19
40	16	-	18
50	15	-	17

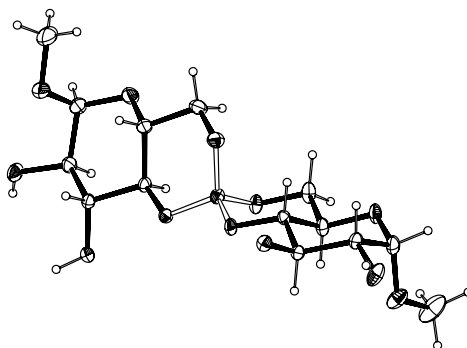
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Diagram illustrating the energy difference between syn and anti conformations of a substituted cyclohexane derivative. The left side shows two Newman-like projections: **SYN** and **ANTI**. The **SYN** projection shows a central carbon (C-2) bonded to H-2 (top), CH₃ (bottom), and two lone pairs (Lp₁, Lp₂) (left and right). The **ANTI** projection shows a central carbon (C-2) bonded to H-2 (top), CH₃ (bottom), and two lone pairs (Lp₁, Lp₂) (left and right). The right side shows two chair conformations: **SYN** and **ANTI**. The **SYN** chair conformation shows a central carbon (C-2) bonded to H-2 (axial up), CH₃ (equatorial up), and two lone pairs (Lp₁, Lp₂) (axial down and equatorial down). The **ANTI** chair conformation shows a central carbon (C-2) bonded to H-2 (axial up), CH₃ (equatorial down), and two lone pairs (Lp₁, Lp₂) (axial down and equatorial down). The energy difference is indicated by a pink triangle with the text $E > 10 \text{ kJ mol}^{-1}$.

Borate esters of the methyl D-glucopyranosides

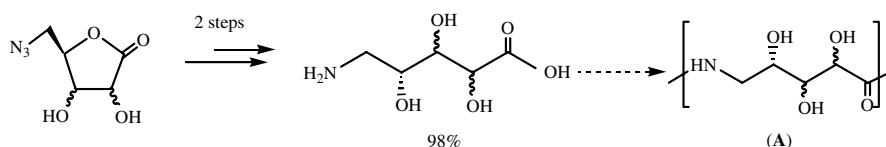
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**NOTES****A concise synthesis of 5-amino-5-deoxyaldonic acids as monomers for the preparation of nylon 5**

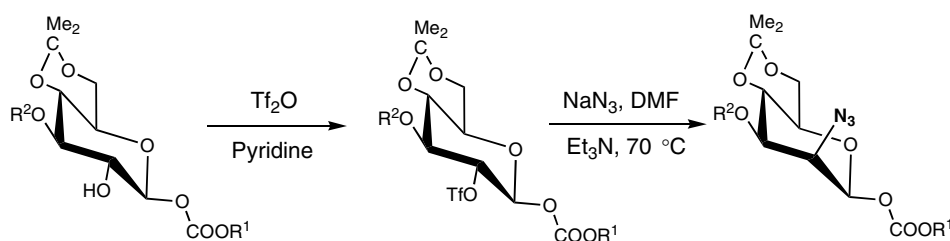
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Céline Falentin, Daniel Beaupère, Gilles Demailly and Imane Stasik*

**Practical preparation of 2-azido-2-deoxy-β-D-mannopyranosyl carbonates and their application in the synthesis of oligosaccharides**

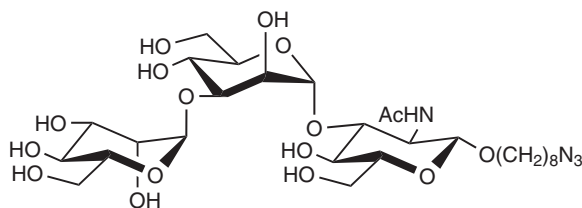
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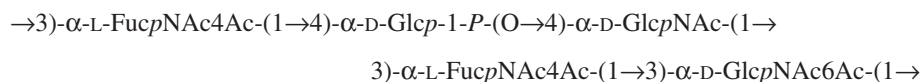
Jianjun Zhang, Shiqiang Yan, Xiaomei Liang, Jingping Wu, Daoquan Wang* and Fanzuo Kong

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Chunjuan Liu, Fredrik Skogman, Ye Cai and Todd L. Lowary*



Structure of a glucosyl phosphate-containing O-polysaccharide of *Proteus vulgaris* O42**pp 2826–2831**Andrei V. Perepelov,* Beata Bartodziejska, Alexander S. Shashkov, Marianna Wykrota,
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*Corresponding author

📄* Supplementary data available via ScienceDirect

COVER

The image shows the ball-and-stick representation of a potent *n*-butyl thiazoline inhibitor of *Q*-GlcNAcase, bound in the active centre of the enzyme. The work is the result of collaboration between the groups of Professors David Vocadlo (Simon Fraser University, British Columbia, Canada) and Gideon Davies (University of York, UK). The image, generated with PYMOL (DeLano Scientific LLC, <http://pymol.sourceforge.net/>), shows the observed electron density as a blue “wire-cage” inside the active centre pocket represented by the smooth surface.

Professor Davies was presented with the Roy L Whistler Award of the International Carbohydrate Organization at the XXIIIrd International Carbohydrate Symposium in Whistler in 2006.

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