

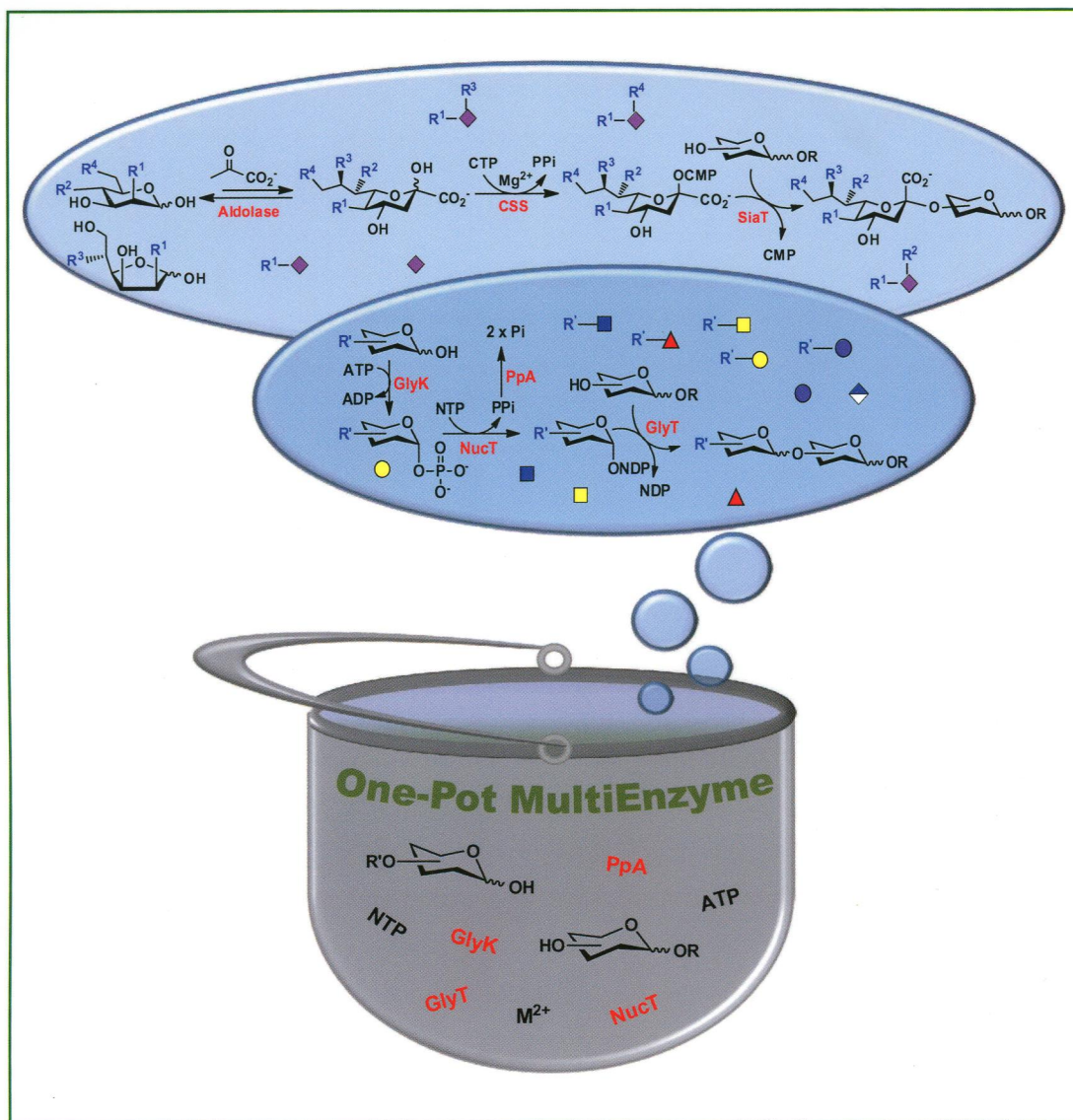
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Carbohydrate RESEARCH

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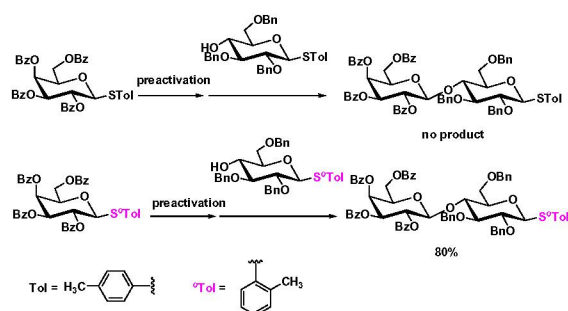
FULL PAPERS

Synthesis

ortho-Methylphenylthioglycosides as glycosyl building blocks for preactivation-based oligosaccharide synthesis

pp 1–8

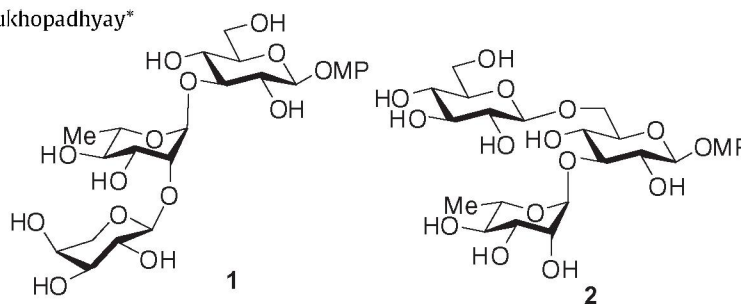
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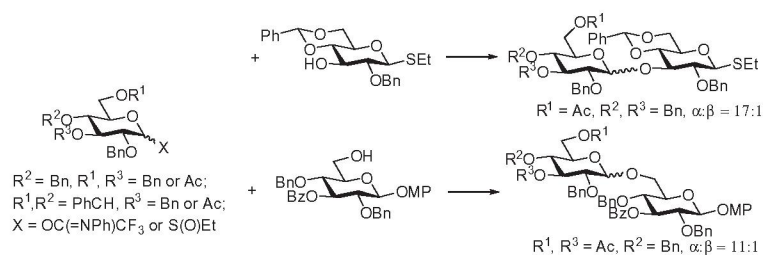
Darshita Budhadev, Balaram Mukhopadhyay*



Is an acyl group at O-3 in glucosyl donors able to control α -stereoselectivity of glycosylation? The role of conformational mobility and the protecting group at O-6

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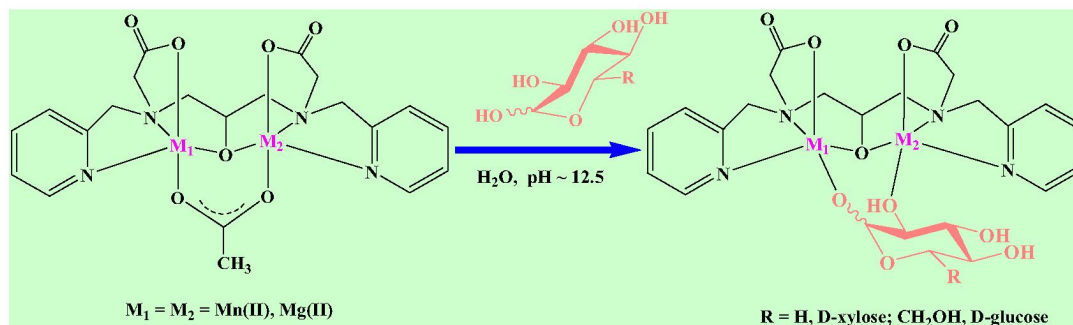
Bozhena S. Komarova, Maria V. Orekhova, Yuri E. Tsvetkov, Nikolay E. Nifantiev*



The effect of the acetyl groups at O-3 and/or O-6 and 4,6-O-benzylidene group in *N*-phenyltrifluoroacetimidoyl and sulfoxide glucosyl donors on stereoselectivity of glycosylation has been studied

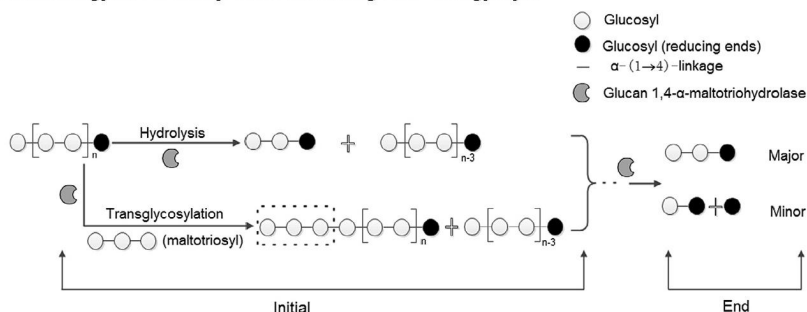
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Fructose compared with glucose is more a potent glycooxidation agent in vitro, but not under carbohydrate-induced stress in vivo: potential role of antioxidant and antiglycation enzymes

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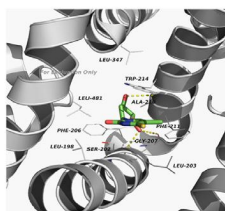
Halyna M. Semchyshyn*, Jacek Miedzobrodzki, Maria M. Bayliak, Liudmyla M. Lozinska, Bohdana V. Homza

	<i>In vitro</i> 100 mM glucose or fructose incubated in 50 mM K-phosphate buffer	<i>In vitro</i> Cell-free extracts prepared from whole yeast cells and incubated in 100 mM carbohydrates	<i>In vivo</i> Intact yeast cells exposed to 10% carbohydrates
Markers of oxidative/ carbonyl stress	fructose > glucose	fructose > glucose	fructose = glucose
Antioxidant enzymes			fructose = glucose
Antiglycation enzymes			fructose > glucose
Associated enzymes			fructose = glucose
Reproductive ability			fructose = glucose

Exploring the binding of 4-thiothymidine with human serum albumin by spectroscopy, atomic force microscopy, and molecular modeling methods

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Juling Zhang, Huaimin Gu*, Xiaohui Zhang*

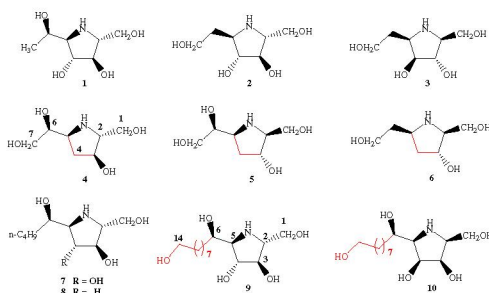
The S⁴TdR–HSA was evaluated by molecular modeling. Their activity and interaction were displayed in modeling calculations.

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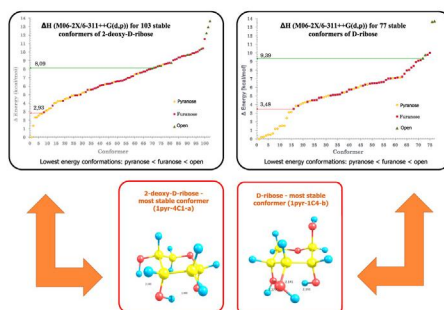
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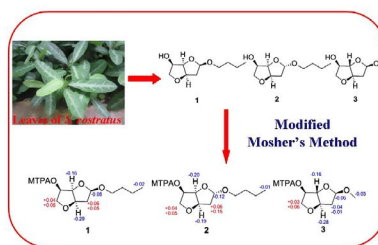
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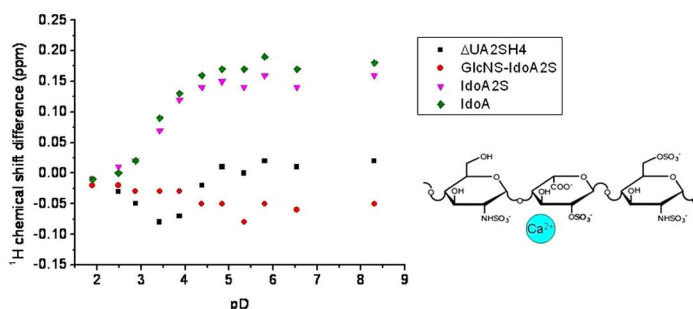


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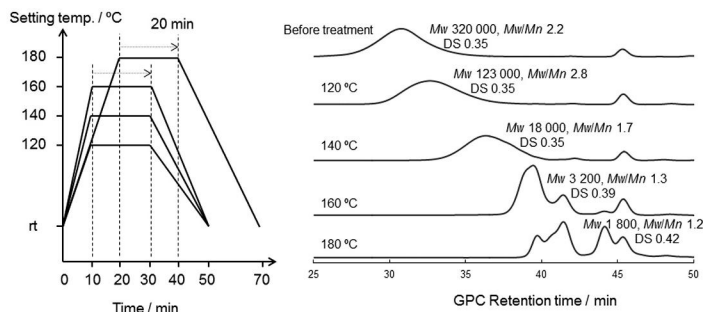
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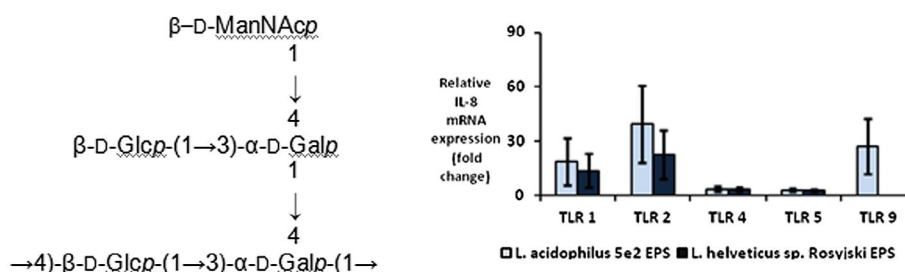
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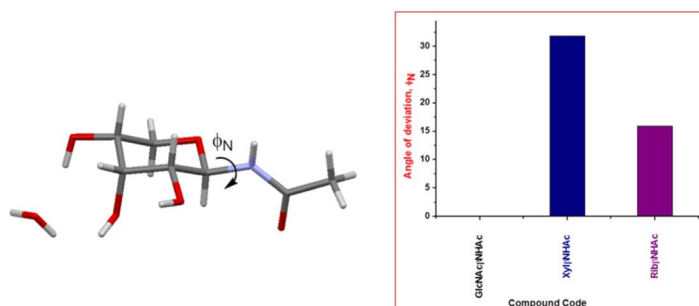


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Amrita Srivastava*, Manoharan Mathiselvam, Babu Varghese, Duraikkannu Loganathan



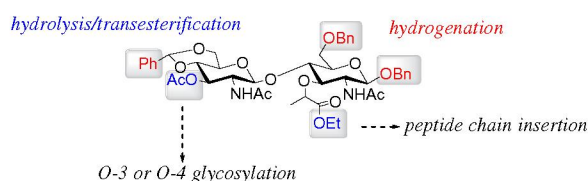
NOTES

Synthesis


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Ramu Enugala, Marina J.D. Pires, M. Manuel B. Marques*



*Corresponding author

 Supplementary data available via ScienceDirect

COVER

Multi-functionalisation of cyclodextrins (CD) has entered a new era thanks to the regioselective chemistry developed by M. Sollogoub's group. As illustrated on the cover, many applications can now be reached using CDs with various functions on specific positions. An example of functionalisation of CDs is given in the first issue of this journal. Image realised by Mickaël Ménand.

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