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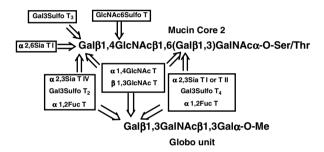
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$$\alpha$$
-D-Glcp

1

4

 \rightarrow 6)- α -D-Gal p -(1 \rightarrow 6)- β -D-Gal p -(1 \rightarrow

2

 \uparrow

1

 β -D-Man p

Sequence determination of oligosaccharides and regular polysaccharides using NMR spectroscopy and a novel Web-based version of the computer program ${\tt CASPER}$

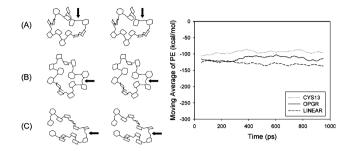
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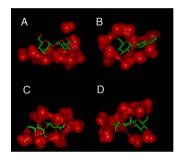
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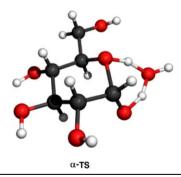


- A. α -D-Glcp-(1 \rightarrow 1)- α -D-Glcp
- B. α -D-Glcp-(1 \rightarrow 2)- α -D-Glcp
- C. α -D-Glcp-(1 \rightarrow 3)- α -D-Glcp
- **D.** α -D-Glcp-(1 \rightarrow 4)- α -D-Glcp

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Alexander M. Silva, Edilson C. da Silva and Clarissa O. da Silva*

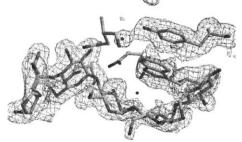
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A simple and mild synthesis of a 4,5-cyclopropanated carbohydrate

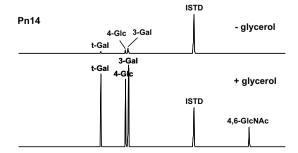
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The signal-to-noise ratio as a measure of HA oligomer concentration: a MALDI-TOF MS study

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Katja Busse, Marco Averbeck, Ulf Anderegg, Klaus Arnold, Jan C. Simon and Jürgen Schiller*

The concentrations of hyaluronan (HA) fragments obtained by enzymatic digestion of high molecular mass HA with testicular hyaluronate lyase were determined by positive and negative ion MALDI-TOF MS (matrix-assisted laser desorption and ionization time-of-flight mass spectrometry). By using the signal-to-noise (S/N) ratio HA fragments in aqueous solutions could be quantified down to about 40 fmol (for the hexasaccharide). Detection limits are primarily determined by the molecular weight of HA with smaller molecules being more sensitively detectable.

*Corresponding author

** Supplementary data available via ScienceDirect

COVER

Image represents a key process of malaria parasites multiplying in, and rupturing from the human blood cell. The parasite surface is coated with glycosylphosphatidylinositols (GPIs), which have been identified as the malaria toxin by a collaborative effort between the research groups headed by Peter Seeberger (Swiss Federal Institute of Technology (ETH) Zürich, Switzerland) and Louis Schofield (Walter and Eliza Hall Institute of Medical Research, Australia). The space filling model represents the native GPI molecule from malaria parasite that has been chemically synthesized by the Seeberger group. Professor Peter Seeberger was presented with the Carbohydrate Research Award at the 13th European Carbohydrate Symposium (Bratislava, 2005).

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