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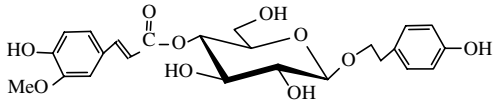
Contents

FULL PAPERS



Syringalide B

A natural phenylpropanoid glycoside syringalide B, 2-(4-hydroxyphenyl)ethyl 4-*O*-[(*E*)-feruloyl]-[β-**D**-glucopyranoside, was synthesized by using the allyloxycarbonyl (Aoc) and allyl groups for the protection of hydroxy groups.

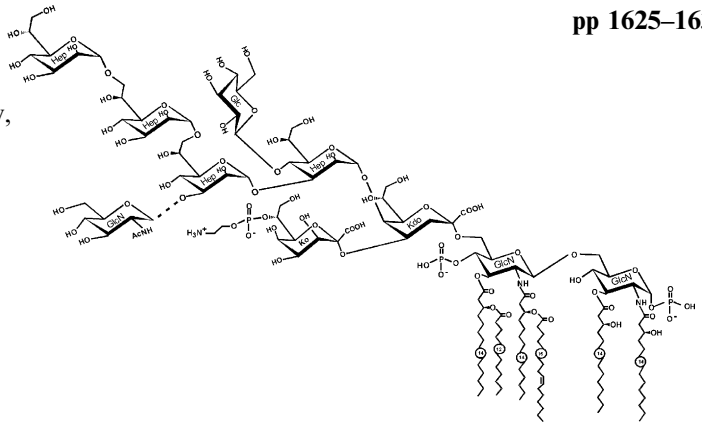
α-D-Glc*p*-(1—[→2)-α-D-Glc*p*-(1→3)-α-D-Glc*p*-(1—]$_n$→Core→Lipid A

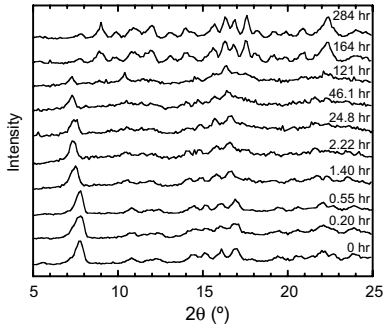
→3)-β-**D**-Glc*p*NAc4(***R***-Lac)-(1→3)-α-**D**-Gal*p*-(1→3)-**D**-Gro-1-***P***-(O→3)-β-**D**-Glc*p*NAc-(1→
where **D**-Glc*p*NAc4(***R***-Lac) stands for 2-acetamido-4-***O***-[(***R***)-1-carboxyethyl]-2-deoxy-**D**-glucose

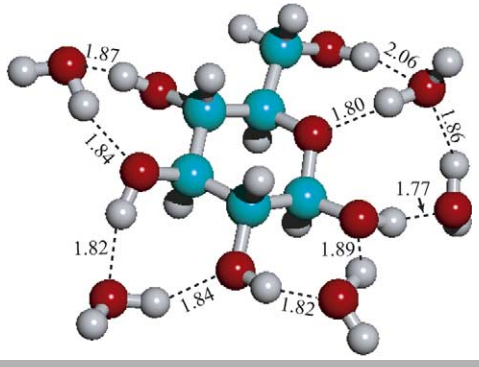
α-D-Man*p*-(1→2)-α-D-Man*p*-(1→2)-α-D-Man*p*-(1→2)-α-D-Man*p*-(1→6)-α-D-Man*p*-(1→6)-α-D-Man*p*-(1→6)-α-D-Man*p*

1
↓
6
myo-Ino 1 - PO_4^- - 1 Gro
2
↑
1
α-D-Man*p*

dPIM-8

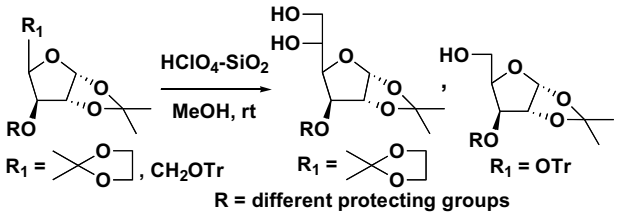






NOTES

The synthesis of a new bis-(D-glucopyranosid-2-yl)oxamides via the key intermediate, *N*-acetyl *N*-(methyl 3,4,6-tri-*O*-acetyl-α-D-glucopyranosid-2-yl) oxamic acid chloride (**2α**) described. Treatment of compound **2α** with methyl 3,4,6-tri-*O*-acetyl-2-amino-2-deoxy-β-D-glucopyranoside afforded *N*-(methyl 3,4,6-tri-*O*-acetyl-α-D-glucopyranosid-2-yl)-*N*′-(methyl 3,4,6-tri-*O*-acetyl-β-D-glucopyranosid-2-yl)-oxamide. Reaction of **2α** with 1,2-diaminoethane afforded 1,2-bis-[*N*,*N*′(methyl 3′,4′,6′-tri-*O*-acetyl-α-D-glucopyranosid-2′-yl)]ethyloxamide as a main product, while 2-*N*-[*N*′ (methyl 3′,4′,6′-tri-*O*-acetyl-α-D-glucopyranosid-2′-yl)oxamid]-ethyl acetamide was formed as a side-product. Reaction of **2α** with 1,3-diamino-2-hydroxypropane gave only 1,3-bis-*N*,*N*-[*N*′-(methyl 3′,4′,6′-tri-*O*-acetyl-2′-deoxy-α-D-glucopyranosid-2′-yl)-oxamido]-2-propanol.



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ⓘ+ Supplementary data available via ScienceDirect

COVER

Model of blood group A trisaccharide in the binding site of the *Dolichos biflorus* lectin as established by a combination of theoretical and experimental approaches. Molecular modeling of the oligosaccharide demonstrated that two different conformations could be adopted by the trisaccharide in the binding site. NMR experiments using transferred nuclear Overhauser effects (TRNOE) displayed intermolecular contacts (blue arrows) corresponding to only one of the two theoretical conformations. This work is a collaboration between Anne Imberty (CERMAV, Grenoble) and Thomas Peters (University of Lübeck) and was presented during the XXIInd International Carbohydrate Symposium (Glasgow, 2004) on the occasion of the Whistler award.

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