

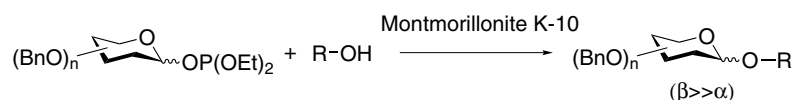
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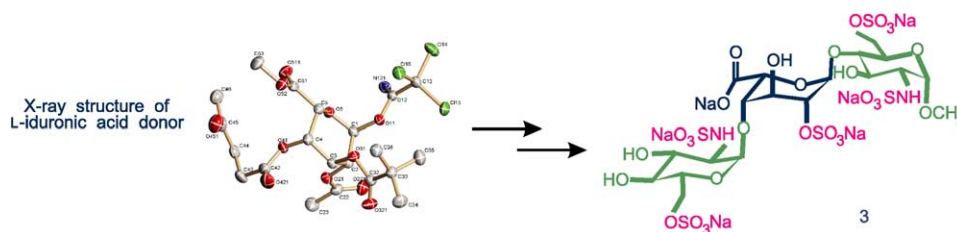
Hideyuki Nagai, Kaname Sasaki, Shuichi Matsumura and Kazunobu Toshima\*



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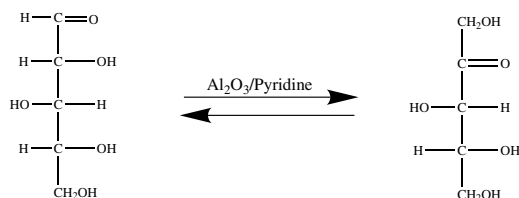
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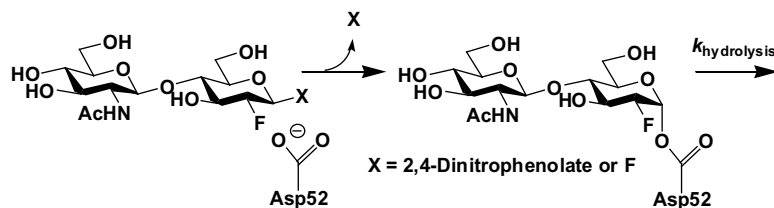


The reaction rate of aldose–ketose transformations in pyridine is strongly increased in the presence of aluminium oxide. Equilibrium is reached after about 90 and 180 min, respectively, for aldopentoses and aldohexoses.

### The chemical synthesis of 2-deoxy-2-fluorodisaccharide probes of the hen egg white lysozyme mechanism

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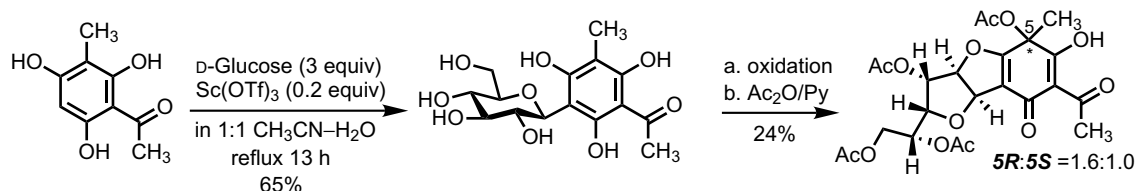
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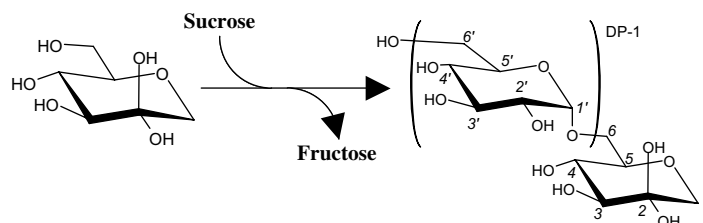
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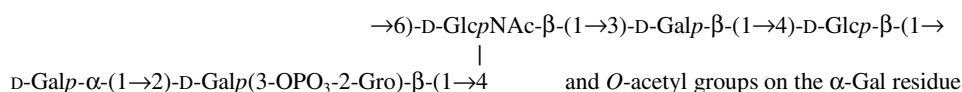
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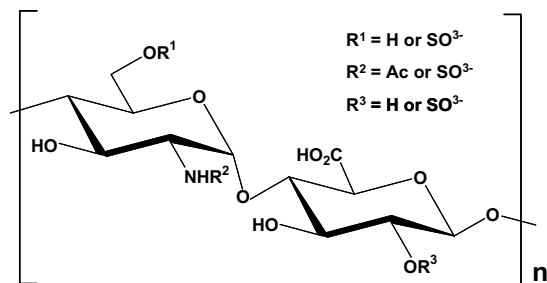
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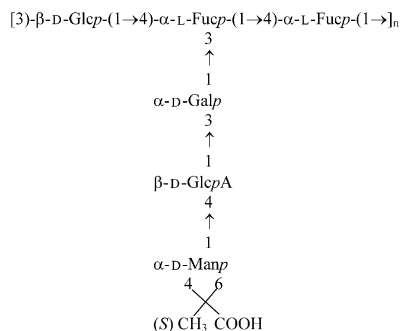
Takao Furuki, Akira Kishi and Minoru Sakurai\*

Dihydrate(Th)  $\rightarrow$  heating  $\rightarrow$  [dry, 105°C] anhydrate(T $\alpha$ )  $\rightarrow$  cooling  $\rightarrow$  low wet gas  $\rightarrow$  Dihydrate(Th)  
 Dihydrate(Th)  $\rightarrow$  heating  $\rightarrow$  [wet, 90°C] anhydrate(T $\beta$ )  $\rightarrow$  cooling  $\rightarrow$  high wet gas  $\rightarrow$  Dihydrate(Th)

**Structure of the exopolysaccharide produced by *Enterobacter amnigenus***

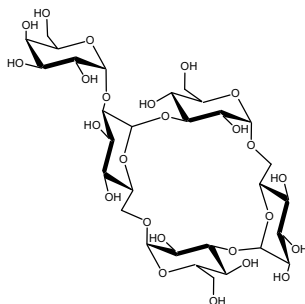
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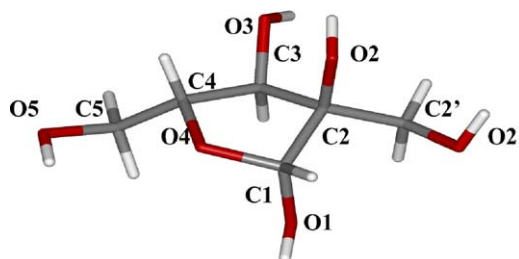
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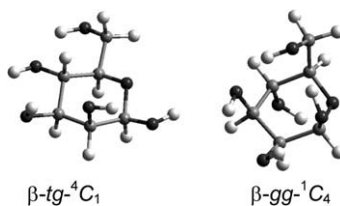
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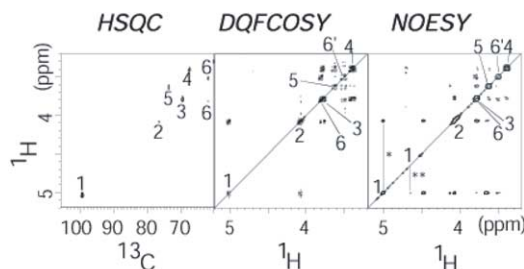
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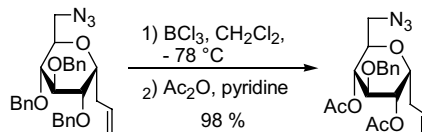


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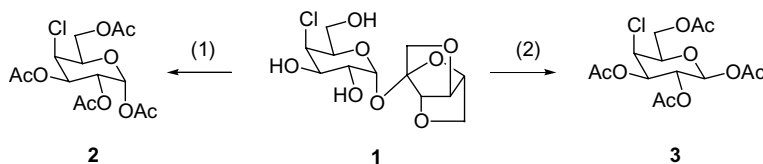
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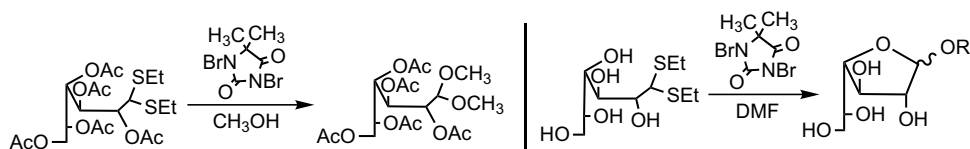
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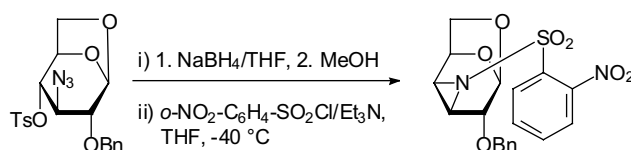
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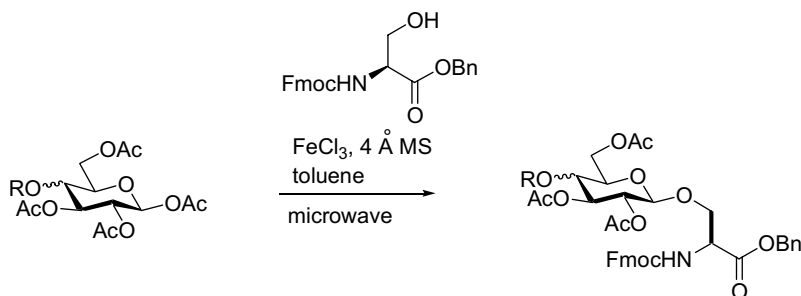
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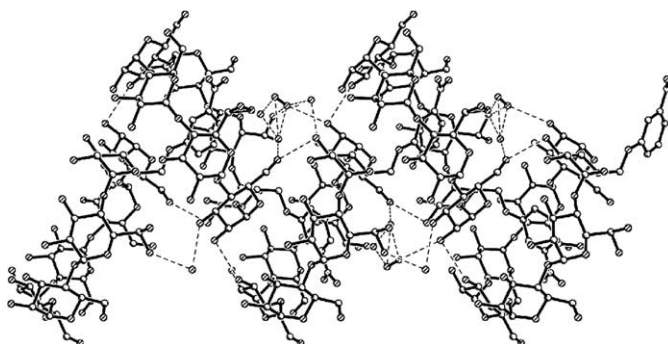
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\*Corresponding author

i+ 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 XXII<sup>nd</sup> International Carbohydrate Symposium (Glasgow, 2004) on the occasion of the Whistler award.

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