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Note

Synthesis of 1,2-*cis*- and 1,2-*trans*-glycosides of 2-acetamido-4,6-*O*-benzylidene-2-deoxy-D-glucopyranose by anomeric O-alkylation

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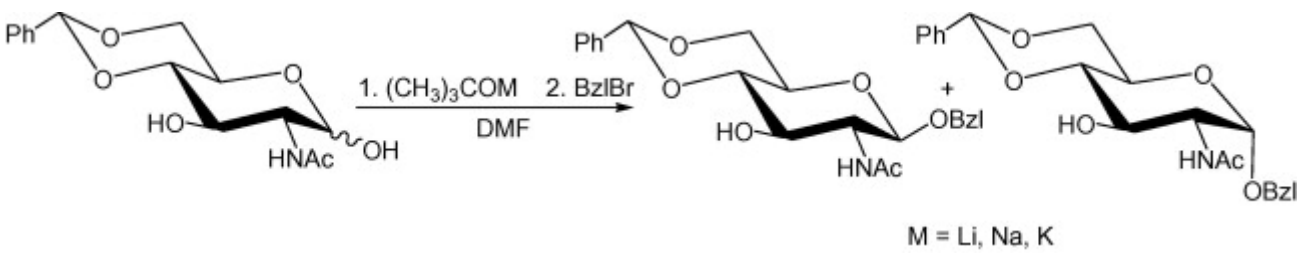
Abstract

The reaction of a partially protected 1-hydroxy derivative of *N*-acetyl-D-glucosamine with benzyl bromide under conditions of anomeric O-alkylation was studied. It was found that the stereoselectivity of the reaction depended on the nature of the alkali metal cation constituent of a transient ion pair. The substitution of the Li^+ cation for K^+ or complexation with a crown ether allowed the steric outcome to be shifted from β- to α-selectivity.

Graphical abstract



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