

ABSTRACTS
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Generation of Novel di-Isoxazolyl-Linked Carbohydrate Dimers

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The synthesis of novel di-isoxazolyl-linked carbohydrate dimers is of great importance because of their potential biological evaluation as antiviral and anticancer candidates [1]. Hence, isoxazol-carbohydrate conjugates, as well as their triazole analogues were tested for galectins-1 and -3 inhibition [2].

Novel stable di-isoxazolyl-linked disaccharides have been prepared by uncatalyzed 1,3-dipolar cycloaddition reaction between diacetone-D-glucose derived nitrile oxide **1a** or **1b** and different 1,n-diyne (Fig.1).

As dipolarophile we used commercially available diynes or 2,2-dipropargyl dimedone, 5,5-dipropargyl Meldrum's acid and 1,2-bis(prop-2-ynyloxy)-ethane.

Cleavage of protecting groups using acetic or trifluoroacetic acid is underway in our laboratory.

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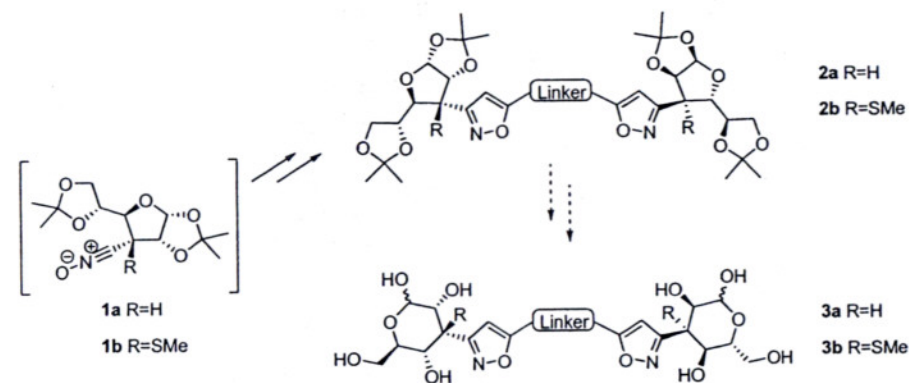


Fig.1 Synthesis of di-isoxazolyl-linked carbohydrate dimers